Pecyn dogfennau cyhoeddus

Y Pwyllgor Iechyd a Gofal Cymdeithasol

Lleoliad:
Ystafell Bwyllgora 3 - y Senedd

Dyddiad:
Dydd Mercher, 10 Gorffennaf 2013

Amser:
09:15

Cynulliad Cenedlaethol Cymru
National Assembly for Wales

I gael rhagor o wybodaeth, cysylltwch â:

Llinos Madeley
Clerc y Pwyllgor
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Agenda

1 Sesiwn briffio anffurfiol (09:15 - 09:30)

2 Cynnig o dan Reol Sefydlog 17.22 i ethol Cadeirydd dros dro

3 Cyflwyniad, ymddiheuriadau a dirprwyon

4 Ymchwiliad i'r achosion o'r frech goch 2013 - tystiolaeth ar lafar (09:30 - 12:45) (Tudalennau 1 - 31)

Tystiolaeth gan Fyrddau Iechyd Lleol a Chyngor Bwrdeistref Sirol Castell-nedd Port Talbot (09:30 - 10:10) (Tudalennau 32 - 144)
HSC(4)-23-13 papur 1 : Bwrdd Iechyd Lleol Prifysgol Abertawe Bro Morgannwg
HSC(4)-23-13 papur 2 : Bwrdd Iechyd Lleol Prifysgol Betsi Cadwaladr
HSC(4)-23-13 papur 3 : Bwrdd Iechyd Lleol Aneurin Bevan
HSC(4)-23-13 papur 4 : Cyngor Bwrdeistref Sirol Castell-nedd Port Talbot

Dr Sara Hayes, Cyfarwyddwr Iechyd y Cyhoedd, Bwrdd Iechyd Lleol Prifysgol Abertawe Bro Morgannwg
Dr Ian Millington, Ysgrifennydd Meddygol, Pwyllgor Meddygol Lleol Abertawe Bro Morgannwg
Andrew Jones, Cyfarwyddwr Iechyd y Cyhoedd, Bwrdd Iechyd Lleol Prifysgol Betsi
Dr Gillian Richardson, Cyfarwyddwr Iechyd y Cyhoedd, Bwrdd Iechyd Lleol Aneurin Bevan
John Burge, Prif Swyddog Llywodraethu Ysgolion, Cyngor Bwrdeistref Sirol Castell-nedd Port Talbot

Tystiolaeth ar rôl y cyfryngau (10:10 - 10:40) (Tudalennau 145 - 149)
HSC(4)-24-13 papur 5

Dr Andy Williams, Ysgol Newyddiaduraeth Caerdydd

Egwyl (10:40 - 10:45)

Tystiolaeth gan Sense ac UCL Institute of Child Health (10:45 - 11:25
(Tudalennau 150 - 177)
HSC(4)-24-13 papur 6 : Sense

Nick Morris, Swyddog Polisi ac Ymgyrchoedd (Cymru), Sense
Joff McGill, Cyfarwyddwr Gwybodaeth, Cyngor ac Ymchwil a'r arweinydd o ran imiwneiddio a rwbela, Sense

HSC(4)-23-13 papur 7 : UCL Institute of Child Health

Dr Helen Bedford, Uwch-ddarlithydd Iechyd Plant

Tystiolaeth gan Iechyd Cyhoeddus Cymru (11:25 - 12:05) (Tudalennau 178 - 190)
HSC(4)-24-13 papur 8

Dr Marion Lyons, Cyfarwyddwr Diogelu Iechyd
Dr Brendan Mason, Epidemiolegydd Rhanbarthol
Dr Richard Roberts, Pennaeth, Rhaglen Frechu yn erbyn Clefydau Ataliadwy
Dr Quentin Sandifer, Cyfarwyddwr Gweithredol Gwasanaethau Iechyd y Cyhoedd

Tystiolaeth gan Lywodraeth Cymru (12:05 - 12:45) (Tudalennau 191 - 204)
HSC(4)-24-13 papur 9

Mark Drakeford AC, y Gweinidog Iechyd a Gwasanaethau Cymdeithasol
Dr Ruth Hussey, Prif Swyddog Meddygol
Andrew Riley, Uwch-swyddog Meddygol

5 Papurau i'w nodi (Tudalennau 205 - 216)

Cofnodion y cyfarfodydd a gynhaliwyd ar 6, 12, 20 a 26 Mehefin a 1 Gorffennaf

Ymchwiliad i'r achosion o'r frech goch 2013 - Tystiolaeth ysgrifenedig gan BMA Cymru (Tudalennau 217 - 222)
HSC(4)-24-13 papur 10

Ymchwiliad i'r achosion o'r frech goch 2013 – Tystiolaeth ysgrifenedig gan Goleg Nyrsio Brenhinol Cymru (Tudalennau 223 – 226)
HSC(4)-24-13 papur 11

Mae cyfyngiadau ar y ddogfen hon

Health and Social Care Committee

Inquiry into the measles outbreak 2013 – Evidence from Abertawe Bro Morganwwg University Health Board

Introduction

From mid November to date Swansea has been at the centre of the largest measles outbreak in Wales for many years. This report outlines why Swansea was vulnerable and the actions taken by Abertawe Bro Morgannwg University Health Board (ABM), in partnership with Public Health Wales (PHW), our three coterminous local authorities, Swansea, Neath Port Talbot and Bridgend, NHS Direct, Welsh Ambulance Service, National Welsh Information System (NWIS) and our voluntary agency partners to bring the outbreak under control.

At the start of the outbreak it was identified that there were over 14,000 unvaccinated or under-vaccinated children and young people in our area. By the end of May 2013, 60% of 9,000 susceptible children and young people aged 10 to 18 years had been given at least one dose of MMR through a community vaccination programme. The proportion of children and young people who are now fully protected with two doses of MMR has risen from 79.9% to 85.0% and it is estimated that over 95% of all children and young people aged 2 to 18 years have had one dose of MMR.

Independent analysis commissioned by PHW suggests the control measures decreased the number of affected cases twenty fold and brought the outbreak under control many weeks earlier than if no action had been taken.

The following is an account of the measures we took in response to the measles outbreak and the ways we have adapted to improve our response. Copies of interim data reports, Silver and Bronze Team minutes and actions are available on request.

Setting the scene

The reasons for the low uptake in ABM have been reported in detail by PHW elsewhere. They were related to concerns about the safety of MMR voiced ten years previously by local activists in the Swansea and Neath Port Talbot area, and by adverse local press coverage at that time. The result was that MMR uptake fell further than that experienced by other areas in Wales.

The measures to improve MMR uptake taken by successive health services, public health agencies and Welsh Government throughout the last ten years have also been reported elsewhere by PHW.

Actions taken in the Swansea area since 1998

- In 1997/98 there was a 13.5% drop in MMR uptake in the Morgannwg area compared to a 2.2% drop elsewhere in Wales. The Iechyd Morgannwg Health Director of Public Health Annual Report of 1998, Bethan's Story included a chapter on MMR vaccine and the controversy. Comment was made that this drop may be the result of the South Wales Evening Post (J Epidemiol Community Health 2000;54:473-474 doi:10.1136/jech.54.6.473).
  http://jech.bmj.com/content/54/6/473/T1.expansion

  Meetings were held for health visitors, community nurses and practice nurses across the area and they were given detailed fact sheets for parents.

- The Consultant in Communicable Disease Control (CCDC) reported quarterly and annual progress in MMR uptake to the three local Health Boards when they were formed. She briefed voluntary groups and health professionals regularly.

  Actions to enhance the routine MMR programme included agreeing uniform procedures in follow- up of children who had missed doses, including review of immunisation records in health professional immunisation training, and Trust community staff started to review MMR status at primary and secondary school entry. An outbreak Local Enhanced Service (LES) was approved. A catch-up MMR session was run in a comprehensive school where mumps was circulating. MMR sessions were run by public health immunisers, in partnership with the local GP practice, for freshers in University of Swansea and the welcome packs for new students started to include advice on being up-to-date with immunizations before coming to university.

- In the mid 2,000s the Consultant in Communicable Disease (CCDC) and Local Public Health Director (LPHD) mounted a local population community campaign on all three diseases which led to the posters with florid photos designed by Helen Bartlett and Dr Annie Delahunty.

- Strategy to improve uptake was further developed by Swansea Local Health Board in 2008 following research undertaken to identify reasons for poor uptake. Anonymised practice specific data on MMR was used with GPs in Swansea and Neath Port Talbot.

- In 2009 the Chief Executive reported to the Board on the measles outbreak – parents of unprotected children received measles fact sheets and letters.

- Health Social Care and Well Being (HSCWB) needs assessments and strategies have highlighted immunisation uptake as a major issue from 2003 – 2012.

- High profile on immunisation maintained from the creation of Abertawe Bro Morgannwg University Health Board with the formation of a Strategic Immunisation Group, Locality immunisation Groups and the appointment of an Immunisation Coordinator, initially appointed part-time but full time from October 2012. There is a rolling programme of policies being updated as needed. The Cold Chain Policy was updated in February 2013. Immunisation was included in the Director of Public Health 2011 Annual Report.

- The most recent vaccination action plan (Appendix 1) is for the year 2011/12. There has been some progress in the plan but the key objectives remain for this year.

- Following the positive experience of Betsi Cadwaladr UHB in bringing the High School booster dose from Year 10 into Year 9, ABM initiated this change for the school year 2012/13, therefore running two years activity in parallel for this year.

The position in November 2012

In the months leading up to the measles outbreak MMR uptake rates for ABM had been steadily improving but were below the Wales average:

- First dose MMR at second birthday 93.5% (94.2% for Wales)
- Second dose MMR at fifth birthday 86.4% (89.1% for Wales)
- First dose MMR at sixteenth birthday 89.4% (91.4% for Wales)
- Second dose MMR at sixteenth birthday 81.1% (82.7% for Wales).

Source: Vaccine uptake in Children in Wales COVER Report 104 November 2012

By 2012 parents of new babies were far more confident in MMR but there was a large cohort of high school children who were still susceptible to measles, as shown in Table 1. These children had missed out on MMR before starting school. MMR levels were lowest in the Swansea area.

Table 1. Children with second dose MMR by fifteenth birthday

Bridgend	85.1%
Neath Port Talbot	76.3%
Swansea	74.5%
ABM	77.9%
Wales	81.8%

Source: Vaccine uptake in Children in Wales COVER Report 104 November 2012

The Board's Response to the measles outbreak November 2012 onwards

A full description of the progress of the outbreak and the public health actions taken to limit spread, test cases and protect vulnerable contacts is given by Public Health Wales (PHW).

In summary, of the 1202 cases overall in ABM, Hywel Dda and Powys Health Board areas, 906 cases were notified in ABM from mid-November 2012 to mid June 2013, of which 336 were confirmed by laboratory tests. The peak age group affected was 10 to 18 years but there were cases across all age groups from babies under 1 up to 50 years +. There were 66 hospitalisations, often due to severe dehydration. One person aged 25 years died with measles but the cause of death is still to be determined by the coroner. No cases of long-term complication have been identified to date but investigations are ongoing with local clinicians.

Outbreak management was lead locally by the PHW Consultant in Communicable Disease Control (CCDC) and consisted of investigating notified cases, identifying and protecting vulnerable contacts and giving exclusion advice. Un- or under-vaccinated members of the public were encouraged to catch up with MMR vaccination through primary care practitioners.

The first Outbreak Control Meeting was convened on 28 November in response to evidence of transmission in a school setting. On PHW advice ABM agreed to provide a vaccination session for all susceptible pupils in the affected school as an analysis of vaccination uptake rates in the pupils suggested a large number were susceptible. This vaccination session was run the following week using staff drawn from the community, primary and secondary care. PHW officers were present to provide advice and support. Other measures agreed were letters to Primary Care, letters to all schools and tailored letters to schools in which measles cases had been notified. Following the outbreak meeting, it was also agreed that vaccination sessions would be offered to any school with evidence of measles circulation.

In the first weeks of 2013 around 10 to 20 notifications for suspected measles were received per week. The CCDC and Director of Public Health (DPH) liaised and ABM ran vaccination sessions in a further two schools in February.

Following discussions between the CCDC and the central PHW team, a multiagency Senior Response Team was convened by PHW on 18th February 2013 to co-ordinate and strengthen the outbreak response in co-operation with partner organisations. The formal outbreak area was defined by Public Health Wales, based on the numbers of cases, as being Swansea, Neath Port Talbot and Llanelli but they supported ABM's decision to treat the whole of its area, Swansea, Neath Port Talbot and Bridgend, as an outbreak area as cases were occurring in the Bridgend area and there were low rates of Measles Mumps Rubella (MMR) uptake across the whole ABM childhood population. This allowed ABM to design and deliver consistent control measures for the at-risk population wherever they lived within the ABM area.

Discussions over the next weeks covered communications with professionals and the public, advice over exclusions and the arrangements for testing and for offering immunoglobulin to vulnerable contacts. A further school vaccination session was run in early March in ABM. A weekly newsletter for health professionals was started in the first week of March, carrying updates and advice as the outbreak progressed. GPs were encouraged to vaccinate susceptible children who had missed MMR in the routine schedule.

The vaccination sessions in the four ABM schools had demonstrated there was missing data on the child health system and it was agreed that ABM GPs would be asked to review their records and update the Child Health Service. The CCDC and DPH met the LMC to agree these arrangements and also agreed to circulate a letter to parents of all children identified as susceptible to advise them to be vaccinated as quickly as possible. The outbreak LES was also amended to remove the restriction to vaccinate only those of who were aged under 40 years.

At the PHW Senior Response Team meeting on 26 March a high schools vaccination programme was discussed, in recognition that the peak number of cases was occurring in this age group. In response to this advice, ABM, PHW and local authority officials met to plan the required local actions. They decided that community drop-in clinics should be arranged during the Easter holidays, to avoid any delay before the schools returned.

From this point ABM followed emergency planning principles and, in particular, the Pandemic Framework, to deliver an integrated community response, working with healthcare staff drawn from primary, secondary and community care, and with Public Health Wales, Education officers from the three coterminous local authorities, NHS Direct, WAST and voluntary organizations. Where possible, equality and diversity principles were followed to reach as many groups as possible. The Council for Voluntary Services assisted with this wide dissemination.

The subsequent response included:

1. GP vaccination under an updated Outbreak LES. The Child Health Service provided GPs with lists of susceptible children. A range of approaches

was used in general practice to provide vaccination including special MMR clinics, existing child health clinics and also vaccination during routine surgeries and nurse clinics. This component of the MMR campaign is still in place and MMR vaccination of people outside the routine schedules is continuing in general practice.

2. Drop-in clinics run by staff drawn from primary and community care as well as hospital staff in out-patient clinics in Singleton, Morriston, Neath Port Talbot and Princess of Wales Hospitals. These were open for all who wished to have an MMR, regardless of where they lived and no-one was turned away unless MMR was contraindicated. The benefits of using outpatient departments were that they were clinical settings and could accommodate large numbers of people. One of the long-term benefits of this approach was that around 50 people from community and primary care were recruited into a newly established immunisation bank and issued with honorary contracts to cover liability. These experienced staff can be called on in the future to support mass vaccination programmes.

3. School vaccinations, led by school nurses but supported by immunisers drawn from primary care. Vaccinating teams went into all comprehensive schools, special schools and colleges. Primary school children were advised to attend their GP or drop-in clinics. Members of the local public health team and local Healthy Schools Coordinators supported the communications and also helped tailor the clinics. Pharmacy worked closely with local authority transport to manage the logistical challenges of moving large numbers of vaccines around the community while maintaining the cold chain. This entailed supplying secure vaccine fridges to schools and the use of a refrigerated van, which was seen to be very successful. School staff supported the process throughout, including making vaccination areas available, sometimes at very short notice, texting parents to inform them of the programme and prompting parents to return consent forms.

4. Occupational health programmes for ABM and Welsh Ambulance staff to minimize risk of ongoing spread of measles by susceptible healthcare workers in health care settings. The Occupational Health Service provided open-access vaccination clinics in easily-accessed sites and on selected

wards, using their own staff and immunisers drawn from elsewhere. They offered MMR to all healthcare workers who wished to receive it, though it was targeted at those unvaccinated or under-vaccinated born from 1970 onwards working in high risk areas. They excluded 112 healthcare staff who had been exposed to measles with no clear evidence of being immune, and managed their return to work as quickly as possible through testing for immunity and giving MMR to those who were excluded.

5. Vaccine provided to the 2 local prisons for prisoner and staff vaccination. The local Homelessness nurse vaccinated susceptible homeless clients.

6. The Head of Health Visiting asked all health visitors to identify under-vaccinated children on their case loads and to have personal contact with those parents to inform them of the measles outbreak and encourage vaccination for their children.

7. The Head of Midwifery asked all midwives to advise pregnant mums under their care of the risks to themselves and their unborn babies and to encourage them to have any children in their households vaccinated if not already done so.

8. The three ABM localities liaised with long-stay residential and nursing home facilities to encourage any unvaccinated or under-vaccinated care staff, clients and patients born from 1970 onwards to have MMR. This included those in NHS facilities such as psychiatric and learning disability units.

9. The University promoted MMR vaccine and directed students to their GPs or drop-in sessions. The main campus university has an on-campus GP.

Throughout the response the ABM Communication Team made announcements and encouraged discussion with the public through social media. The public used the sites to raise their concerns and supported each other. Numerous press interviews were given and the press were invited to observe the drop-in and school sessions. A full report on the communication campaign is included in Appendix 2.

These actions have resulted in delivering around 30,500 MMR vaccinations to all ages, including 5553 to those aged 10 – 18 years. The main MMR vaccination programmes resulted in the following doses being given:

GP programme	16,500
Outreach clinics	8674
Schools programme	1749
Occupational health clinics	3571

Data collection is ongoing in the prisons. MMR doses for HMP Swansea and HMP Parc are as shown in Tables 2 and 3. There were no cases of measles in these prisons.

Table 2. HMP Swansea

	April 2013	May 2013
Number of 1st dose MMR given	60	53
Number of 2nd dose MMR given	2	13
Number of prisoners declining	44	64

Table 3. HMP Parc

	April 2013	May 2013
Number of 1st dose MMR given	873	91
Number of 2nd dose MMR given	1	10
Number of prisoners declining	118	21

The result of the enhanced vaccination programme

For children and young people aged 4 to 18 years, we estimate that 95.8% have had one dose of MMR and 89.5% have had two doses. Work is continuing to increase these rates further. More young adults are also protected due to open access to the vaccine.

Costs of the outbreak for ABM

Table 4 sets out the costs incurred to date or expected based on the activity undertaken to the end of May 2013.

Table 4. Costs incurred

	£000	
Vaccines	180	Based on numbers administered
Staff Costs	75	Based on actual costs + estimate of outstanding claims
Vehicle/Transport	8	Includes rental of a refrigerated van
Other Equipment	3	Includes Fridges and Bags
Advertising	4	Based on current costs
GMS LES	100	Based on number of unscheduled vaccinations in primary care
Total	370	

Please note that these costs only include direct additional costs to the Health Board and do not include cost of staff members which were not additional costs to the organisation or the impact of work done in managing this outbreak for which staff have not been paid (i.e. time in lieu). This would increase the costs by an estimated £100k.

The costs also do not include the increased vaccine costs associated with the general increase in uptake for scheduled vaccination programme.

Debrief

Though the outbreak has not yet been declared over, and there is more to do to increase MMR coverage, an interim multiagency debrief was held on 17 June 2013 to capture the learning points to date. There was recognition that people across all agencies had demonstrated enthusiasm and commitment in

responding to the outbreak. The report is in preparation but the overall conclusions are:

1. The pandemic framework structure worked well and allowed strong partnership working to develop. This facilitated open discussion of problems and helped realistic solutions to be generated.

2. Increased resilience to deliver mass vaccination programmes was provided by drawing in staff from across community, primary care and hospital services. The approach of using relevant staff to lead vaccination sessions (i.e. school nurses to lead sessions in schools, Occupational Health nurses to lead staff vaccination sessions), supported by immunisation staff drawn from all health sectors was valuable. It was noted that payment to some staff has been slow and arrangements are in place to resolve this.

3. It was helpful that many vaccinators were confident in assessing children's competency to give their own consent for vaccination.

4. The use of hospital outpatient sites was helpful as they were accessible and well-known for the public and were able to accommodate high patient flows.

5. Occupational health found the use of peer vaccinators at Ward level was very effective and needs to be encouraged. A supportive culture from senior clinicians helps immunisation programmes run efficiently and effectively.

6. The infection control requirements to prevent spread of measles were made more difficult when staff were unsure whether they had previously had measles or MMR immunization. Staff exclusions had the potential to threaten business continuity and had to be managed very tightly, using antibody testing to demonstrate whether they were immune and able to return to work.

7. Realistic expectations, timescales and lead names need to be agreed for actions to ensure progress is made at the agreed pace. Progress needs to be recorded to demonstrate how much has been achieved.

8. Data quality is important. Poorly matched data between GP records and the Child Health Service led to many children being written to who had already received 2 MMR doses.

9. Transporting vaccines within the cold chain gave logistical challenges. The transport of bulky refrigerators, supported by local authority colleagues, allowed vaccination in schools and outpatient departments to get underway within days of planning. Hiring a refrigerated van was a great success. It allowed vaccination to proceed at several sites without compromising the temperature control of the vaccine.

10. Though this was a regional outbreak managed by PHW, it was also a local health incident requiring a local health service response. The local communications were vital to inform and advise the public.

Initial recommendations

1. Lessons learnt from dealing with this outbreak will be incorporated into ABM's Pandemic Framework, including the Mass Vaccination plan, and into plans for dealing with other infectious disease incidents. Outpatient departments will be included as possible venues for delivering mass vaccination and mass prophyllaxis.

2. The new bank of immunising staff need to be maintained in readiness for further mass vaccination campaigns.

3. The Occupational Health Department needs to explore how to maximize the value of pre-employment checks and immunisation programmes for existing staff. Mass staff vaccination programmes should include peer vaccination at ward level and immunisation champions.

4. Build on the many examples of improved practice and increased confidence in immunisation to improve vaccination coverage across

the childhood schedule. This would include a review of how to facilitate and enable children to give their own consent for vaccination if they are judged able to understand the risks and benefits of what they are consenting for.

5. In population vaccination programmes, arrangements need to be made for vaccination of people in long-term residential settings, including hospitals, care homes and prisons.

6. Discussion needs to take place over how to improve the child health data system to improve the quality of the data.

7. In the immediate short term, a Wales-wide Mumps and Rubella MMR PR campaign should be launched urgently. It should target teenagers and young people in its design and approach; and capitalise from the publicity surrounding measles to further boost MMR uptake, particularly in the target 10-18 year old age group.

8. A joint strategic Communications approach should be taken between Public Health Wales and Health Boards from the outset, in the event of similar outbreak situations in future.

Further work will be done with local and national colleagues to capture all learning points from the outbreak and to consider opportunities for improving practice.

Appendix 1

Strategic Immunisation and Vaccination Action Plan 2011/2012

Objectives:

- To achieve and maintain uptake rates of 95% for all routine childhood vaccinations in ABM Health Board
- To achieve and maintain an uptake rate of 75% for seasonal flu vaccinations in people aged over 65 years and over and for those younger people in at risk groups outlined by CMO 2011/2012
- To achieve an uptake rate of 50% for seasonal flu vaccinations in frontline staff across ABM Health Board
- To achieve an uptake rate of 90% for routine vaccination of girls aged 12 to 13 years for the HPV Immunisation programme

Key Action points:

- Establish local Immunisation Groups (LIG, one in each locality) that can follow up and lead on Immunisation matters that are identified from the Strategic Immunisation Group (SIG).
    1. Provide an Immunisation lead in their locality to attend SIG
    2. Liaise with Immunisation Coordinator on practice level and Cover reports that are published from PHW on a quarterly basis
    3. Identify practices that are not achieving uptake rates and investigate reasons for this.
- Provide a seasonal flu plan to identify how the locality will help to achieve targets identified by CMO with regard to vaccination of the targeted populations
- Liaise with Immunisation coordinator on the following:
    1. Reviewing cold chain policy for the HB
    2. Developing BCG policy
- Support the school nursing service to deliver the HPV vaccination programme
- Support the improvement of information recording into the Child Health System
- To increase uptake of all immunisations in hard to reach and vulnerable populations of all ages using a consistent approach across the ABM community
- Maximise uptake of joint training programmes for all staff involved in immunisations

Risk Assessment and management

- LIGs unable to support SIG actions
- Immunisation and vaccination coordinator unable to fulfil whole role part time if not supported by the SIG and LIGs
- Unable to address the anomalies across the CHS
- Unable to support immunisation and vaccination coordinator in undertaking and acting on audit findings

Appendix 2 Measles/MMR – ABMU Communications

1) BACKGROUND

Nationally, Public Health Wales (PHW) is responsible for communications about notifiable diseases like measles. Initially PHW managed all outbreak press and media communications, issued all media releases, and provided media interviews with Public Health experts, as per standard practice.

The ABMU Communications team was asked to become pro-actively involved locally in March, 2013, and this paper summarises the ABMU communications work over March, April and May, 2013 when the outbreak was at its peak.

2) BRIEF AND OBJECTIVES

- To help to end the measles outbreak in the ABMU area as soon as possible, by encouraging the urgent uptake of MMR in the measles particularly amongst 10-18 year olds;
- To help increase overall MMR coverage closer to 95% herd immunity.

3) ABMU MEASLES/MMR COMMUNICATIONS STRATEGY

- Engage openly and transparently with the public via social networking; answering questions and offering reliable information to support balanced debate and informed decision-making. This was a new way of working but the ABMU Communications team felt that open dialogue was essential.
- Maximise publicity of vaccinations at MMR clinics to encourage attendance and 'show by example' to undecided parents
- Promote interviews with local doctors and with people whose lives have been affected by measles, to make the issue more personally relevant for people in the ABMU area
- Provide clear, accessible, information for schools/parents
- Develop a dedicated Measles/MMR webpage

4) METHODS USED

a) Social Media

Social networking had been used positively by ABMU previously for other urgent issues, e.g. service changes, and it was a medium which local patients and members of the public routinely use to comment and ask questions on service issues. Early in February questions started being

posted on our two Facebook sites, and also on local newspaper online stories about measles. In short, local people had expectations of social media usage for the measles/MMR issue.

ABMU began proactively posting information about measles/MMR (in addition to links to PHW press releases etc) in March, and endeavoured to provide answers to queries as quickly as possible.

Some ABMU Facebook Q&A sessions lasted throughout the day until as late as 11pm. This real-time access was important to maximise engagement opportunities, and build trust by responding quickly. Parents readily joined in discussions, supporting peer-to-peer dialogue. Over the March-May timescale, the ABMU Facebook reach on measles/MMR topics was over half a million views.

During March-May the two ABMU Facebook sites – 'ABMU Healthboard' and 'ABMU Child and Family Health' – had a total of:

- Measles/MMR posts/stories: **109**
- 'Likes' on individual posts: **1,315**
- Post shares by followers: **4,001**
- Comments: **1,039**
- Total Facebook 'reach' on MMR/measles posts: **541,275**

Source, Facebook analytics

Key posts, and a targeted advert for local teenagers, were also promoted through Facebook advertising, cost: £128.

The post with the largest single reach during the campaign – **133,331** across both our Facebook sites - attracted 1,313 shares by followers, and 351 comments.

The MMR Facebook advert specifically targeting teenagers in the ABMU area only, directly reached **13,163** 13-18 year olds.

Twitter was also used and the **85** ABMU measles/MMR Tweets received **497** re-tweets by range of followers, including GP surgeries and voluntary organisations.

The ABMU Communications team also posted 10 comments on the **South Wales Evening Post** website, on measles/MMR stories.

b) Press and Media

ABMU MMR drop-in clinics and school/colleges clinics in Swansea, Neath Port Talbot and Bridgend attracted widespread national and international media coverage and a great deal of television coverage.

It was vital to welcome media. As well as publicising clinics, the coverage 'showed by example' to parents - who may have been undecided – peer families having their children vaccinated. Interviews with parents and young people explaining why they had made their choice also helped.

This media access - managed by the ABMU team, with key local authority input at school sessions - was essential for television in particular. Without substantial video footage available for broadcasters to illustrate the story, it would wither. Journalists also needed direct access to families for interviews and pictures (with consent). ABMU's Director of Public Health, Sara Hayes, and local GPs were available at clinic sites thus maximising the opportunity for extended coverage.

Approximately 30 sets of TV, radio, press and photographers attended, including BBC, ITV, Sky, Reuters, the Press Association, and national, regional and local press. International media included Al Jazeer, Russia Today, ABC Australia, the Wall Street Journal and Central China TV.

The media access helped keep the story at the top of the news agenda for several weeks, and included a dedicated BBC Newsnight programme on measles and national breakfast TV discussions.

c) Schools pages and ABMU website Measles/MMR webpage

41 individual schools'/college pages were developed on the ABMU website for local comprehensive schools. Each had a message from our Director of Public Health and also the Headteacher, along with key information about the school's MMR sessions, measles and PHW advice.

This approach promoted a local community response to the measles outbreak, demonstrating schools, local authorities and the NHS working together.

Each school page was given an individual URL, and schools used their text-messaging systems to text parents with links to the pages, so they could access the information at a click. During the period of the schools MMR clinics, the 41 schools pages received **8,850** hits.

(The schools' pages infrastructure will now remain on our website to be used for future health promotion campaigns.)

A general Measles/MMR information page was also set up on the ABMU website and received **16,263** visits.

d) Measles/MMR press releases

ABMU generated 19 dedicated measles/MMR press releases including stories of people who had been damaged by measles, which were reported widely by the press and media.

5) EXAMPLES OF ABMU MEASLES/MMR COMMUNICATIONS COVERAGE

Sustained, widespread media cover - TV, press and radio, local, national and international was achieved throughout March, April and May 2013, and is continuing. A '[Measles Swansea]' search on Google news provides **2,800** results (note – many of these results also include Public Health Wales press releases or interviews; or contain a combination of PHW and ABMU information.)

i) Examples of media coverage:

<table>
<tr>
<td> 
10 April 2013 Last updated at 18:16
Measles: Make MMR jab mandatory' c
US expert
Dr Paul Offit said mandatory vaccinations should be considered
As a measles epidemic in south Wales continues to spread at an "alarming rate" an expert has said mandatory vaccinations should be considered.
Dr Paul Offit, a US-based measles expert, told the BBC that mandatory vaccinations in America had prevented similar outbreaks.
His comments came as measles cases in the Swansea area rose to 620.
The Welsh government said it believed the "hard won trust" in MMR would be damaged if vaccination was compulsory.
Related
More MM
precautio
Measles
620 cases
Long sha
MMR sca</td>
<td> 
HOME » HEALTH » HEALTH NEWS
Measles epidemic passes 1,000 cases
The measles epidemic in Wales has passed 1,000 cases as major efforts to vacci
unprotected continue.
The local health board has been carrying out a major vaccination programme for the last month. Photo: Reuters
By Agencies
2:49PM BST 30 Apr 2013
21 Comments
Measles cases in the greater Swansea area, in south Wales, have reached 1,011 with the 10 to 18 age group hardest hit.
An urgent programme to vaccinate children, teenagers and young adults has seen a substantial drop in the numbers unprotected.
Print this art
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<td>This 'Newsnight' story covered on BBC news online is an example of national and international coverage of the story.</td>
<td>A 'Daily Telegraph' story, typical of the national coverage of the issue, and which publicised the drop-in clinics.</td>
</tr>
</table>

Youngsters aged between 10 and 17 are most at risk of measles in the Swansea area

South Wales Evening Post Follow Thursday, April 11, 201

By Liz Perkins

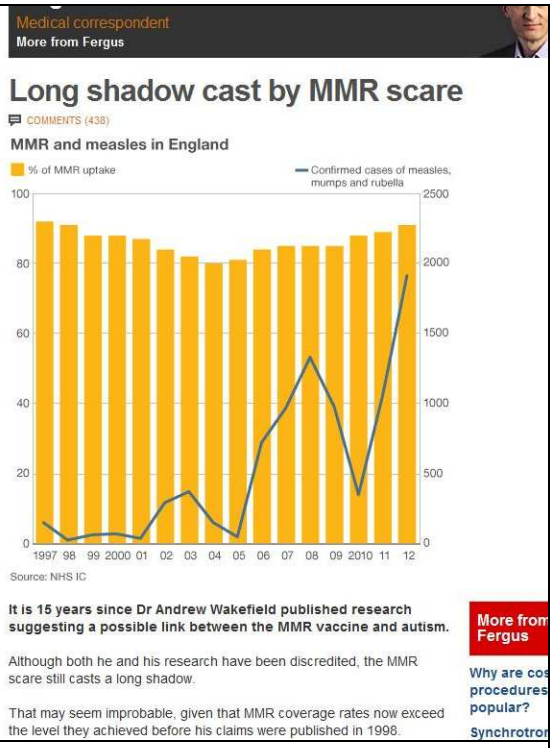
OLDER children in the Swansea area are at greater risk of being diagnosed with measles.

Public health experts revealed a lot of the youngsters with the highly contagious disease were aged between 10 and 17.

vaccination Kieran Elford receives the MMR jab from school nurse Carolyn Rees at Morriston Hospital on the weekend.

Parents are being urged to ensure their children get the vaccine.

So far a total of 620 cases have been reported since the start of the measles outbreak.



Medical correspondent
More from Fergus

Long shadow cast by MMR scare

COMMENTS (438)

MMR and measles in England

% of MMR uptake

Confirmed cases of measles, mumps and rubella

100 80 60 40 20 0

2500 2000 1500 1000 500 0

1997 98 99 2000 01 02 03 04 05 06 07 08 09 2010 11 12

Source: NHS IC

It is 15 years since Dr Andrew Wakefield published research suggesting a possible link between the MMR vaccine and autism.

Although both he and his research have been discredited, the MMR scare still casts a long shadow.

That may seem improbable, given that MMR coverage rates now exceed the level they achieved before his claims were published in 1998.

More from Fergus

Why are cos procedures popular?

Synchrotron

A story from the regional newspaper at the epicentre of the measles outbreak, the 'South Wales Evening Post'. It carried over 100 measles/MMR stories from March-May.	A detailed measles/MMR analysis article on BBC news online by one of the BBC's leading medical reporters.

ii) Examples of Social Media

We used both our ABMU Facebook sites extensively: www.facebook.com/ABM.healthboard and www.facebook.com/ABM.Family.Health to support a transparent and open platform for debate to tackle any doubts parents may still have over MMR safety.

(Left) This is a section of our main ABMU Facebook page, with the campaign logo as its central graphic, and a picture of a local teenager getting her MMR as the second illustration.

On 4th April 2013 we shared the same post (above) on both our Facebook sites giving details of the first hospital drop in MMR clinics, and between them they received over **133,000** views and attracted **351** comments – our biggest single reach of the campaign.

In all, we sent out **109** measles/MMR posts and our total Facebook reach on this subject was **541,275**

(Left) This is the Facebook advert which targeted teenagers (our target audience) in the Swansea measles epicentre area only. It reached over **13,163** youngsters. Cost: £40. Just under £100 was also spent 'sponsoring' key posts to give them an additional boost and supplement organic coverage.

(Right) **Twitter** – we also used our @ABMhealth Twitter account to publicise the issue widely, particularly the MMR clinics (**85** Tweets and **497** re-tweets)

MEASLES: Maesteg Comprehensive School

Trechwch y Frech Goch? Ydy'ch plentyn wedi cael y pigiad MMR?

Let's knock the spots off Measles? Has your child had the MMR?

YSGOL MAESTEG SCHOOL

GIG CYMRU NHS WALES — Bwrdd Iechyd Prifysgol Abertawe Bro Morgannwg University Health Board

Information for parents during the current outbreak

Message from ABMU's Director of Public Health | Message from the Headteacher | Key Information

Dear Parent,

You will be aware that there is a major measles outbreak in Swansea and the surrounding area. To date, there have been over 1,000 cases, with 84 people hospitalised. Measles is a nasty virus, which as well as being very unpleasant, can have complications. Some of these complications can be serious, and in rare cases, fatal.

Our records show that there are **over 120 pupils in Maesteg Comprehensive School** who are at risk from catching measles. This is because they have either not had any MMR vaccinations, or they've only had one MMR instead of two. Measles is very infectious, and children and adolescents who have not had the complete course of MMR are at high risk of becoming ill with measles during this outbreak.

We have a vaccination team at your school on **Wednesday, 8th May.** We would urge that any child who has not had their MMR vaccinations, or who are under-vaccinated, take this important opportunity to get their jabs.

MMR is a simple and safe jab which will protect your child's health, could save their life, and will help protect other children too. It is the only precaution you can take during this measles outbreak. **The MMR jab is recommended by the World Health Organization, UK Department of Health and Public Health Wales as the most effective and safe way to protect children against measles**

We have written individual letters to parents of children who, according to our most recent records, we have identified as being **at risk**. A consent form will be included with the letters, and we ask that you fill the form in, sign it, and return it to the school as soon as you can. Alternatively, if you know your child has not had MMR, you can download and print off a consent form here for you to complete in advance, which your child can take to school immediately.

We apologise for the short timescale, but the size of this measles outbreak makes it imperative that we begin vaccinations as soonas possible.

Dr Sara Hayes

Director of Public Health
ABM University Health Board

A vaccination team from ABMU Health Board is coming to school to offer MMR jabs for pupils who need protection during this major measles outbreak.

The health and well-being of our pupils is one of our top concerns, and we are working in close partnership with the local NHS over their vaccination campaign.

As well as the risks to their health, pupils risk missing important exams if they become ill with measles.

I would urge parents to consider carefully the opportunity of getting their children vaccinated.

Anne Carhart

Headteacher

Key Information

What children should be vaccinated?

Our target group is **school-age children who missed their MMR jabs when they were little.** They may have had only their first MMR jab and missed their second vaccination, or had no MMR at all. **These children should receive MMR.**

If your child has had both MMR jabs (usually given at age 13 months and again at pre-school age, at three years, four months) then they are fully protected and do not need any additional MMR.

When is the vaccination team in school?

Our vaccination team will be in Maesteg on **Wednesday 8th May**. There is no need for parents to attend the sessions.

Will you let me know if my child is at risk?

We have checked our records and written individual letters to parents of children we believe need MMR jabs. With the letter will be a consent form, which we ask you to sign, and then return the to the school straight away.

We know this is short notice, but we need to begin vaccinations urgently, so your cooperation is much appreciated. If you know your child needs MMR, you can also download and print off the consent form here. Please sign it and ask your child to return it to their teacher straight away.

iii) 41 Schools pages

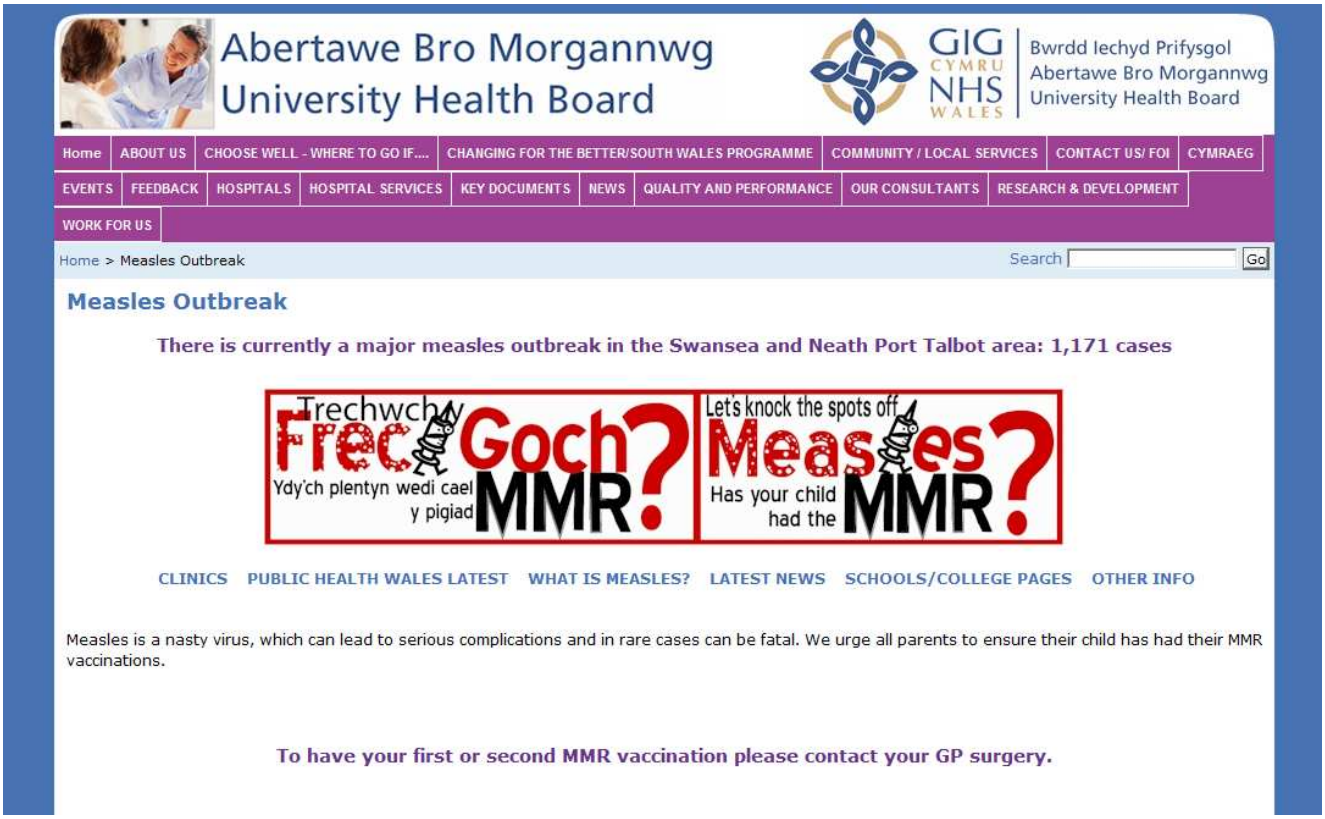
41 individual schools/college pages were developed on the ABMU website.

Here is a screen shot of part of a school page as an indication of content.

The pages were individualised to support a community feel, and encourage schools, parents and the health service to pull together to combat measles.

The schools pages received **8,850** hits during the schools' MMR clinics campaign.

This example school page (above) can also be viewed directly: www.abm.wales.nhs.uk/maestegcomp



iv) General measles/MMR page on ABMU website

Our general ABM website Measles/MMR information page (above) received **16,263** hits March-May 2013. It can also be viewed: http://www.wales.nhs.uk/sitesplus/863/page/66210

v) Media Releases

ABMU produced and released 19 ABMU measles/MMR press releases. Here are a few, mainly 'human interest', examples:

A nurse who lost her hearing because of measles as a child warns about the consequences of the disease:
http://www.wales.nhs.uk/sitesplus/863/news/26849

A retired GP talks about his experiences caring for children with measles, including one who sadly died:
http://www.wales.nhs.uk/sitesplus/863/news/26569

Long queues outside our first MMR drop-in clinic:

http://www.wales.nhs.uk/sitesplus/863/news/26646

A teacher talks about the long term damage to her health from measles: http://www.wales.nhs.uk/sitesplus/863/news/26911

A former Welsh international rugby player reveals he's deaf in one ear following measles: http://www.wales.nhs.uk/sitesplus/863/news/26883

vi) Some feedback examples

Use of Social media:

"The effective use of media and the ABMU Facebook sites gave the population consistent messages highlighting measles and importance of vaccination." – *Swansea GP Charlotte Jones*

"The social media programme provided an opportunity to answer questions in a timely and efficient way and allowed the public to interact openly, which was valuable." *– Dr Sarah Hayes, ABMU Public Health Director*

"Really helpful to have this info!" *– Comment on Facebook MMR post*

Schools' pages:

"The rapid feedback you were able to provide us with … was brilliant. I also thought the dedicated schools web-pages was an excellent idea." – *Neath Port Talbot Local Education Authority lead, John Burge*

"Information sent out was clear and useful and feedback has been positive." – *Alan Rowlands, Headteacher.*

Examples of Social Media feedback for drop-in clinics:

"Well done guys. I turned up at 3.30 and the guys on front reception were ready and waiting, they greeted me and my son with warmth and friendliness. The forms and ticket were waiting and my son was seen in less than 5 mins …. Made the thought of having the injection a lot less daunting for me as the atmosphere was relaxed and not frantic. Thanks guys xx" *– comment on ABMU Facebook site.*

"We went today and all ready for a long wait. We both and the jab and were in and out in half an hour … Glad I got us done, they were great there x" *– comment on ABMU Facebook site*

"Well done ABMU for putting on this invaluable service." –
comment on ABMU Facebook site

6) Recommendations

There are two key Communications recommendations for the future:

i) In the immediate short term, a Wales-wide Mumps and Rubella MMR PR campaign should be launched urgently. It should target teenagers and young people in its design and approach; and capitalise from the publicity surrounding measles to further boost MMR uptake, particularly in the target 10-18 year old age group.

ii) A joint strategic Communications approach should be taken between Public Health Wales and Health Boards from the **outset**, in the event of similar outbreak situations in future.

Susan Bailey,
Head of Communications,
ABM University Health Board

June, 2013

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol
Betsi Cadwaladr
University Health Board

Ysbyty Gwynedd, Bangor,
Gwynedd, LL57 2PW

Gwynedd Hospital, Bangor,
Gwynedd, LL57 2PW

Clerk to the Committee
Health and Social Care Committee
National Assembly for Wales
Cardiff Bay
CARDIFF

Ein cyf / Our ref: AJ/BO/307
Eich cyf / Your ref:
☎: 01248 384217
Ffacs / Fax: 01248 384937
Dyddiad / Date: 28th June 2013

Dear Sir

Health and Social Care Committee Inquiry into Measles

I am writing further to the invitation received by Betsi Cadwaladr University Health Board to provide written and oral evidence to the above inquiry.

Further to the Terms of Reference of the inquiry I am please to enclose the following documents:-

1. A written evidence submission (which includes details of local immunisation plans together with an indication of the cost to the Health Board).

2. Strategy for improving MMR uptake in the Betsi Cadwaladr University Health Board 2013-2014.

3. Betsi Cadwaladr University Health Board Measles Vaccination Plan

4. Measles - North Wales Communications Plan

The written evidence submission contains reference to a number of other documents which are available if the Committee would like to receive copies of these, in addition to the above, I would be very happy to provide them.

I wish to confirm that the Executive Director of Public Health will attend the Committee on the 10th July to provide oral evidence on behalf of the Board.

Yours sincerely

GEOFF LANG
PRIF WEITHREDWR DROS DRO / ACTING CHIEF EXECUTIVE

Enc

Submission to National Assembly for Wales Health and Social Care Committee Inquiry into Measles

Betsi Cadwaladr University Health Board's (BCUHB) Immunisation Programme

EXECUTIVE SUMMARY

Since 2009, BCUHB has taken a planned approach to increasing the uptake of childhood immunisations including Measles, Mumps and Rubella (MMR) vaccine, which has been resulting in improvement in uptake rates.

In 2012, BCUHB, with support of Public Health Wales, managed a local outbreak of measles which resulted in additional lessons being learnt and applied to the local immunisation programme.

During March – May 2013, as part of the overall response to the outbreak in Swansea, BCUHB implemented additional programmes for vaccination to enhance the existing approach.

Current uptake rates have further improved during this period with 95% uptake rates being achieved for 1 dose of MMR vaccine. A further decrease in the susceptible cohort of both the completely unimmunised and under immunised children aged 2-18 in North Wales has also been achieved.

Further review of the programme and lessons learnt are being undertaken to inform the continued commitment of BCUHB and partners to reaching and sustaining 95% uptake rates for 2 doses of MMR vaccine across all age groups.

1. BACKGROUND

1.1 Childhood Immunisation

1.1.1 Childhood immunisation is a strategic priority for BCUHB. Since reconfiguration in October 2009, BCUHB has developed and implemented a range of strategic and operational actions to increase the uptake of all childhood immunisations and specifically the Measles Mumps and Rubella (MMR) vaccine[1,2]. Working in partnership with local primary care contractors and Public Health Wales, the aim is to strengthen resilience of the population to a Vaccine Preventable Disease outbreak by

achieving the uptake targets of 95%, whilst also ensuring each individual child in North Wales has every opportunity to be immunised. This would ensure herd immunity of the population, providing good protection against large community outbreaks of diseases such as measles.

1.1.2 The Children and Young People's Clinical Programme Group holds the responsibility for the delivery of the immunisation programme within the Health Board. There is a BCUHB Immunisation group in place which oversees planning and delivery of all vaccination programmes. MMR is a standing item on the agenda of this group, as is the scrutiny of vaccine uptake data. The Health Board has appointed a Nurse Immunisation Coordinator and a Lead Doctor (paediatrician) for immunisation to coordinate immunisation programmes and provide leadership. These colleagues work very closely with primary care and other partners notably Local Authorities on the co-ordination of immunisation programmes. In BCUHB the routine vaccination programme for school aged children is delivered by the school nursing service, who maintain regular contact with children and their families.

Upon establishment in 2009, BCUHB inherited a positive legacy of work related to immunisation. For example, a MMR Local Enhanced Service (LES) was first put in place in North Wales in 2004 and refreshed in 2006 in line with MMR Welsh Health Circular and national template. Commitment to the immunisation programmes has continued since the formation of BCUHB. The key elements of the immunisation work programme (with particular reference to MMR vaccine) that have been taken forward since 2009 include:

(a) Routine support and advice to primary care. This facilitates the delivery of all childhood and adult routine vaccination programmes.

(b) Continued delivery of a LES for MMR vaccine (further refreshed in 2009) and also the Post Natal MMR policy. These have been very important in supporting primary care to give unscheduled doses of MMR vaccine when necessary.

(c) BCUHB Immunisation training programme. Measles has been covered on all immunisation training since 2009; new information on MMR vaccine is presented to keep staff up to date so they can deal with queries from parents, patients and staff and sign post them to reputable sources of information. It is also an opportunity to get feedback from immunisers on issues they are experiencing with parents, children and to support them. The training is free for all immunisers in North Wales irrespective of where they work; approximately 800 immunisers attend annually.

(d) **MMR Welsh Health Circular (2005)081[3].** Actions have and continue to be taken to ensure the Health Board implements all of the recommendations of the circular. This has included an internal audit undertaken in 2011/12, which is shortly to be repeated.

(e) **Implementation of the BCUHB MMR Strategy[2].** This strategy aims to ensure clear leadership to increase uptake of MMR vaccine and use all opportunities to vaccinate.

(f) **Immunisation Action plan[1].** This includes a range of actions to promote 'Lifelong Protection' which focus on children throughout their childhood. Examples of actions include proactive follow up of those children missing immunisations, conducted every quarter at 1, 2 and 5 years of age.

(g) **Teenage booster.** A three year plan has been developed and delivered by the school nursing service, specifically focusing on increasing uptake of the Teenage Booster and MMR vaccinations by lowering the invitation age from Year 10 to Year 9.

(h) **Home immunisation policy.** There is a BCUHB domiciliary immunisation policy which staff are encouraged to use for those patients who have repeatedly not attended for vaccination and for other hard to reach groups.

(i) **BCUHB Postnatal MMR policy** has recently been revised.

(j) **Ongoing work on data quality and accuracy.**

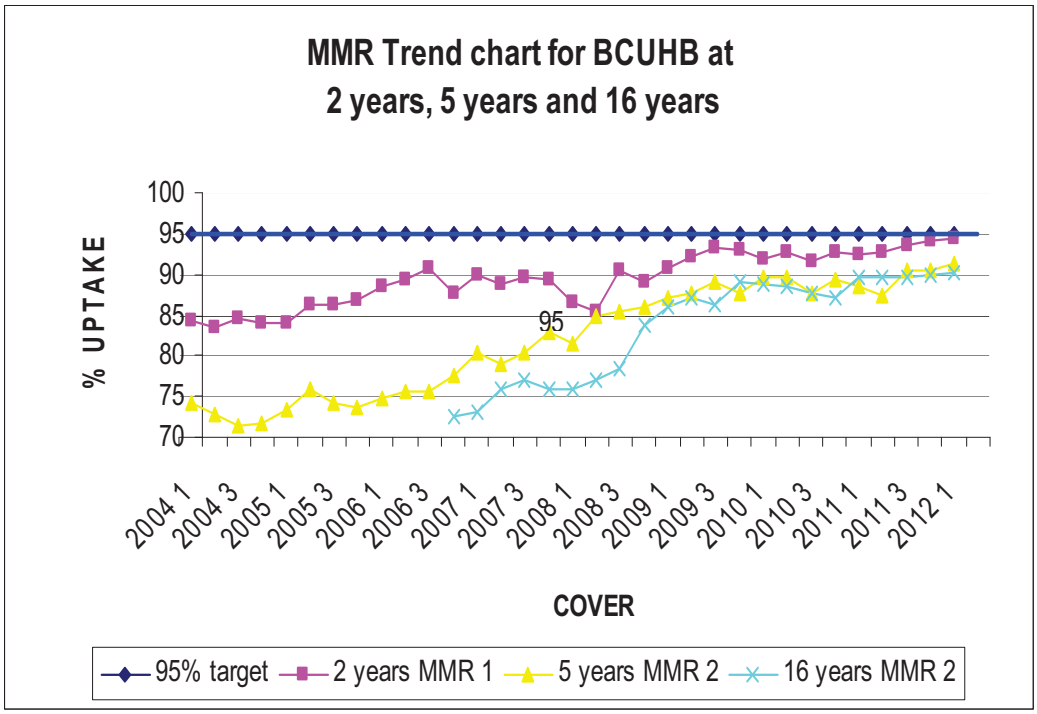
1.1.3 The impact of this ongoing work has been a continued increase in the proportion of children in BCUHB receiving the MMR vaccine. Table 1 below shows the latest MMR vaccine uptake data for BCUHB. Graph 1 illustrates this upward trend over time.

Table 1 BCU HB vaccine uptake data.

Age	% Received 1 Dose MMR vaccine	% Received 2 Doses MMR vaccine
By 2 years	96.2%	N/A
By 5 Years	96.4%	91.9%
By 15 years	96.4%	92%
By 16 Years	95.1%	89%

Source: COVER data Jan 2013 to March 2013[11]

Graph 1 MMR uptake: One dose at 2 years, two doses at 5 years and 16 years correct as of Dec 2011 for Betsi Cadwaladr University Health Board.



Source: Public Health Wales

The recent programme between March and June 2013 has complimented the progress and resulted in a further decrease in the susceptible cohort of both the completely unimmunised and under immunised children aged 2-18 in North Wales.

Despite these improvements, the challenge for the Health Board remains to continue to achieve and sustain the 95% target for both 1 and 2 doses of MMR.

Further consideration is being given as to how to work in partnership to continue to promote vaccination to those that have not yet received MMR vaccine or continue not to wish to receive it.

This continued focus over time at local level, has similarly resulted in positive and sustaining outcomes in the other aspects of the childhood immunisation programmes. For example, the latest annual COVER report 2012/13 reports that all 6 LA areas within BCUHB have reached 95% uptake for vaccinations for 1 year old children for the second year running.

The Health Board is committed to continuing with the work programme to achieve this aim and all other childhood immunisation targets.

1.2 Staff Immunisation

1.2.1 The immunisation of NHS staff is an important aspect of ensuring patient safety. There are a number of core systems and procedures set up within the Health Board to address staff vaccination. This starts on employment with staff having an appointment to attend the Occupational Health & Wellbeing service to assess their vaccination status and provide appropriate vaccination. There is a standard assessment and immunisation provision for TB, Diphtheria/Tetanus/Polio, Hepatitis B, Varicella, and Measles, Mumps & Rubella. Any employees who are unable to conform with standard vaccinations due to pregnancy, underlying health conditions or being allergic to a component are seen for an individual consultation. Advice is given on workplace risk and on measures to mitigate risk for staff and their patients. Any employees that decline vaccination also follow the same process. If employees do not attend for immunisation appointments then on the second occasion of non attendance their manager will be informed to undertake an additional risk assessment to mitigate against infection risks. For MMR vaccine specific focus is also given to staff in contact with paediatric and immunosuppressed patients.

2. OUTBREAKS OF MEASLES AFFECTING NORTH WALES

2.1 Response to a measles outbreak in Gwynedd

2.1.1 In February 2012 an outbreak of measles occurred in the population around the Porthmadog and Lleyn Peninsula area of North Wales. The outbreak was first identified in a secondary school in the area, and later spread to members of the wider community.

BCUHB worked in partnership with Public Health Wales, with outbreak management leadership being provided by the Consultant in Communicable Disease Control (CCDC). A total of 56 confirmed and 8 probable cases of measles were linked to the outbreak, with the majority of these having an incomplete history of vaccination against the disease. No fatalities were reported as part of the outbreak.

The source of the outbreak was not established, despite attempts to discover epidemiological links. The D8 genotype identified in the outbreak was recorded in only one other case in the UK at the time the outbreak occurred.

Control measures to limit the spread of the measles virus consisted of: providing exclusion advice; MMR vaccination in primary care and ongoing communication to inform and educate the public and health professionals. Targeted vaccination sessions were also held in local schools early on in the outbreak

to limit the potential spread and to protect those most at risk of infection. Lessons learned were identified and taken forward by the Health Board.

Additionally, information was circulated to GPs across North Wales to encourage the promotion of MMR vaccine uptake, and an initiative was undertaken by the occupational health department to improve uptake amongst Health Board staff, particularly those working in high-risk areas. Subsequently it was agreed to produce a staff measles management procedure for the organisation, focusing on both vaccination and action to be taken in an outbreak situation. GPs were also encouraged to ensure that all members of the primary care team were vaccinated.

Updates on the outbreak were given to the Health Board, resulting in better knowledge and awareness of the importance of immunisation as a key priority.

A structured debrief was undertaken following the outbreak and a report on the outbreak has been published[4].

2.2 BCUHB actions taken since Gwynedd outbreak in 2012

2.2.1 Following the Gwynedd outbreak a number of additional actions were taken to further strengthen the resilience of the Health Board population against outbreaks of measles, and to take forward some of the learning from the outbreak. Some of these key actions include :

- Information about the Gwynedd outbreak, the use of immunoglobulin and actions required to increase resilience to measles outbreaks has been provided on all Health Board immunisation training in late 2012 and during 2013.

- BCUHB MMR Strategy has been reviewed and ratified by the Infection Prevention and Control Committee to ensure it addresses any new recommendations set out in the Gwynedd Outbreak report.

- Proactive work was commenced in communities where ‘clusters’ of non consent amongst families with 1 year old/ 2 year old children was identified. This is aimed at providing information to address parental queries or concerns.

- A review and strengthening of the approaches taken for vulnerable and hard to reach groups.

- MMR vaccine uptake data per school is reviewed on an ongoing basis.

2.3 Response to other measles outbreaks in neighbouring areas

2.3.1 In addition to the Gwynedd outbreak in 2012, there have been a number of outbreaks in neighbouring boarder areas. From February 2012 to February 2013 there was an ongoing measles outbreak in Merseyside with over 600 confirmed cases. This coincided with the start of the outbreak originating in Porthmadog, although no link was identified. The Public Health Wales Health Protection team liaised and continues to liaise closely with the Cheshire & Merseyside Health Protection team to consider local circumstances and respond as appropriate. Regular communication is made with the Health Board to provide updates. The BCUHB Nurse Immunisation Coordinator attended the 2012 North West Immunisation Conference where lessons from the Merseyside outbreak were shared. Relevant learning was then applied in BCUHB; for example updated training for staff on the use of immunoglobulin.

In March 2013, there was an outbreak of measles affecting Powys and bordering on North Wales. Schools in areas close to the Powys outbreak were identified and vaccination sessions carried out at a local health clinic, with ongoing communication with GPs in the area.

Cases and clusters of measles cases in travelling communities in or near the border of North Wales have also occurred. These have been responded to by a designated health visitor attending the sites and offering MMR immunisation.

3. ADDITIONAL ACTIONS TAKEN BY BCUHB IN RESPONSE TO 2013 SWANSEA OUTBREAK

3.1 Initial Local Response

3.1.1 Awareness of the developing situation in Swansea resulted in a local response being established by the CCDC on behalf of the Health Board towards the end of March 2013 in order to build additional resilience to measles across North Wales. The group (comprising of the Immunisation Co-ordinator, representatives from primary care, occupational health, infection control, pharmacy, communications, health protection and public health) first met in March 2013. This initial group co-ordinated and actioned some early responses including the following:

- Communication of summaries of epidemiology of the Swansea outbreak, and also measles cases locally in North Wales to BCUHB.

- Provision of updates to primary care, including an information pack for GPs and receptionists.

- Provision of information and advice on measles / MMR immunisation to LEAs, schools, universities and colleges in North Wales.

- Co-ordination of the initial media response.

3.2 Response following request for additional National Programme

3.2.1 Following this initial response and receipt of a letter on 27th March 2013 from the Chief Executive of Public Health Wales[6], advising that the measles outbreak had been declared a public health emergency, a formal governance structure was put in place to oversee the Health Board's response and coordinate actions. The need for this formal approach was further strengthened following the receipt of a letter from the Chief Medical Officer on 17th April 2013[7] requesting that Health Boards implement a school-based immunisation programme to target school aged children (with particular emphasis on 10 - 18 year olds) missing one or two doses of MMR vaccine**.** Under the leadership of the Executive Director of Public Health, a system for responding to the measles situation and planning for resilience was established. Three groups met weekly in order to lead, plan and coordinate actions:

- National Public Health Wales Senior Response Team – National team including WG, Senior Public Health Wales staff, Directors of Public Health and CCDCs.

- Local BCUHB/Public Health Wales Senior Response Team – Chaired by BCUHB DPH and included senior representatives from Public Health Wales local public health team, Health Protection, occupational health, pharmacy, primary care, Children & Young People's CPG, immunisation coordinator, Public Health Wales and BCUHB communications team. This group was responsible for overseeing and coordinating all elements of the local response including immunisation (schools, staff and primary care) and communications.

- Local BCUHB Core Team – Chaired by DPH and included senior representatives from Children & Young People's CPG, immunisation coordinator, Public Health Wales local public health team, occupational health, communications and service improvement. The role of this team was to lead, plan and coordinate the schools and staff immunisation programmes.

3.2.2. A BCUHB MMR response plan was developed[9] to take forward this work. Key aspects of this proactive approach to the Swansea outbreak included:

- Implementation of a school-based immunisation programme, delivered by the school nursing service (in partnership with Local Authorities and individual schools). Sessions were arranged in every secondary school in North Wales and primary schools identified as high risk (with uptake <90% or more than 20 pupils unimmunised). Pupils in the remaining primary schools were invited to centralised immunisation sessions, home-immunised or attended the clinic. Data reconciliation was also undertaken.

- Targeted approach to hard to reach and vulnerable groups including children attending pupil referral units, children looked after, special schools and children educated at home, with home immunisations being arranged if necessary.

- Integrated working with primary care staff to increase number of unscheduled doses of MMR vaccine given in the identified at risk groups e.g. children, young people and healthcare staff.

- Support and advice to tertiary colleges and universities, resulting in direct contact with each student with encouragement to attend their local GP for vaccination.

- Support and advocacy through maternity services.

- Data reconciliation between child health departments and primary care to improve accuracy of MMR vaccine uptake data.

- Implementation of a staff immunisation programme which included a strategy for prioritising staff in high risk clinical areas[8], offering drop in sessions for all staff and providing regular communications to staff. Specific actions and communications were also sent to primary care staff to increase staff uptake of MMR vaccine. Continued focus is continuing to be given to general staff vaccination uptake.

- Implementation of a comprehensive communications strategy[13], ensuring regular updates provided to Health Board staff, media, Local Authority Chief Executives, Directors of Education, schools and children and young people. Innovative approaches using social media to reach target groups were also used.

- Further communication by partners e.g. LAs through their own communication channels.

- Timely identification of cases and suspected cases ensuring a coordinated response. Cases in BCUHB have remained low (6 confirmed cases since Jan 2013). At the end of April two cases of measles occurred in children attending a nursery in North Wales. Information was sent to parents, local GPs were encouraged to vaccinate and a special MMR vaccination session was held at the nursery.

- Timely updates and reports to both the Board (including a Patient Safety item in April), the appropriate governance committees and Clinical Programme Group (CPG) Boards[5,14].

3.2.3. The outcomes of this approach have been:

- As of week beginning 10/6/13, 4327 unscheduled doses of MMR vaccine have been given since March 2013. 2592 of these have been given in primary care, 1344 in school sessions and 391 in staff sessions.

- A further decrease in the susceptible cohort of completely unimmunised children aged 2-18 in North Wales from 4.5% on 23rd April to 3.5% on 10th June. There are now currently 4479 children aged 2-18 years in North Wales who have not received their first dose of MMR vaccine.

- There has also been a decrease in the number of children aged 4-18 who are partially immunised (received one dose of MMR vaccine) from 4.6% on 23rd April to 3.8% on 10th June. There are currently 4911 children in North Wales that have only received one dose of MMR vaccine. (These children will have 95% protection against measles, 2 doses confers 99% protection). This means there is a total of 9480 children (7.4%) in North Wales who remain either unimmunised or under immunised. This is a decrease from 11704 on 23rd April at the start of the campaign.

- The social marketing campaign set up to ensure key messages are being received by the 10-18 year old target audience has been successful, with over 100 000 views on Face book.

- Good partnership and communications with Local Education Authorities and Directors of Education in relation to the issue of vaccination have been established.

4. NEXT STEPS

4.1 Further Progress

Further progress has been made to increase immunisation uptake and the success of this can be seen in the data trends. This has built on all the ongoing work prior to the Swansea outbreak which has ensured BCUHB has improving MMR vaccine uptake rates. The challenge remains to achieve and sustain 95% uptake for both 1 and 2 doses of MMR vaccine to ensure herd immunity for the North Wales population, which would maximise protection against community outbreaks and epidemics of measles. A meeting of the core group was held on 11th June 2013 for the purpose of reviewing actions to date, reviewing most recent data on uptake and agreeing actions to be taken to further improve uptake. The BCUHB MMR Strategy[2] will continue to be robustly implemented. This will ensure children in school years 7 and 9 and above will be targeted where immunisations are missing. In addition the following will be key priority areas of work:

- Undertake a structured debrief to learn further lessons including a review of skills and resources available to implement the immunisation programme.

- Undertake a further internal audit against Welsh Health circular MMR (2005) 081

- Continued communication with Directors of Education on levels of uptake in schools, developing new approaches to target schools where uptake remains low.

- Ensuring completion of work on data reconciliation.

- Increasing number of domiciliary immunisations.

- Communicating directly with young people in relation to their own immunisation status and offering opportunities for them to become up to date with immunisations if any doses are missing.

- Refine communications plan and continue with social media approaches to target messages to young people about immunisations.

- Continue to raise awareness of the importance of MMR and other childhood vaccinations e.g. through presentations to LA committees as part of partnership engagement.

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Further information about measles, the immunisation schedule and the outbreak can be found at: http://howis.wales.nhs.uk/sitesplus/888/page/55485

APPENDIX 1 – Costs to BCUHB of actions taken in response to Swansea outbreak 2013

The table below sets out the additional costs that BCUHB have incurred to date or are expecting based on the activity undertaken to the end of May 2013.

	£000	
Vaccines	30	Based on numbers administered
Additional Staff Costs	5.50	Based on actual costs + estimate of outstanding claims
Advertising/ Social Media	0.86	
GMS LES	20	Based on number of unscheduled vaccinations in primary care
Total	56.36	

The costs associated with routine delivery of childhood immunisation programs are currently contained within the budgets for primary care, children's services, occupational health and public health. As such it has not been possible to provide a breakdown of total costs of the routine programme in this written submission.

Delivery of the additional unscheduled vaccinations was undertaken predominantly by the re-prioritisation of the work of existing staff e.g. school nurses, health visitors, child health department and occupational health. As such there is an opportunity cost to the organisation.

As such the costs above only include direct additional costs to the Health Board during the period March – May 2013, and do not include cost of staff members which were not additional costs to the organisation or the impact of work done for which staff have not been paid (i.e. time in lieu). This would increase the costs by an estimated £35 000.

The costs also do not include the increased vaccine costs associated with the general increase in uptake for scheduled vaccination programme.

Strategy for improving MMR uptake in the Betsi Cadwaladr University Health Board 2013-2016

1. Purpose/scope

The purpose of this strategy is to increase uptake of the MMR (Measles, Mumps and Rubella) vaccine across Betsi Cadwaladr University Health Board. Achieving a 95% uptake of both doses of MMR vaccine is important to ensure herd immunity in the population.

This document aims to provide guidance on the key activities necessary to increase the MMR uptake in the Betsi Cadwaladr University Health Board and the geographical area it serves. These activities will reduce the number of young people susceptible to measles, mumps and rubella.

2. Background information

The health board serves a population of 676,000 people of which 149,500 are children under the age of 18 years who should all be offered 2 doses of MMR prior to starting school.

3. Measles, Mumps and Rubella disease information and the MMR vaccine

3.1 Disease information

Measles, mumps and rubella are all notifiable diseases in the UK. Any doctor who suspects that a patient has measles, mumps or rubella is required by law to report it. In North Wales, this is done by contacting the Consultant in Communicable Disease Control at Public Health Wales (PHW).

3.1.1 Measles

Measles is a highly infectious viral illness caught through direct contact with an infected person or through the air via droplets from coughs or sneezes. Symptoms include fever, cold-like symptoms, fatigue, conjunctivitis and a distinctive red-brown rash. Measles mainly affects young children, but can be caught at any age. Having measles usually confers lifelong immunity.

Measles can cause severe, even life-threatening, complications, including meningitis, encephalitis and deafness. In the UK, complications are quite common even in healthy people and approximately 20% of reported measles cases experience one or more complications.

Complications are more common among children under 5 years of age, those with weakened immune systems, children with a poor diet and adults. If acquired during pregnancy measles can cause miscarriage, premature labour or a baby with low birth weight. Before the introduction of measles vaccination in 1968, around 100 children a year in England and Wales died from the disease.

3.1.2 Mumps

Mumps is a systemic infection caused by the mumps virus, usually accompanied by swelling of the parotid salivary glands, which can affect all ages. The organism is spread by respiratory droplets and has an incubation period of 14-25 days. Around a third of people infected with the virus develop no symptoms and in most others the symptoms are fairly mild, but when complications occur they can be serious. Mumps is the commonest cause of viral meningitis.

3.1.3 Rubella

Rubella is a viral infection that used to be common in children. It usually causes a mild illness but becomes a serious concern if acquired during pregnancy. The rubella virus can disrupt the development of the foetus and cause a wide range of birth defects including eye abnormalities, deafness, heart abnormalities and brain damage known as Congenital Rubella Syndrome (CRS). Since the introduction of the MMR vaccine CRS is now very rare in the UK.

3.2 Vaccine

The MMR vaccine protects against three diseases; measles, mumps and rubella. It was introduced into the UK routine childhood immunisation schedule in 1988 as one dose for children aged 15 months. It subsequently became apparent that two doses of vaccine were required for effective long-lasting protection against the three diseases and to this end a two dose schedule was introduced in October 1996.

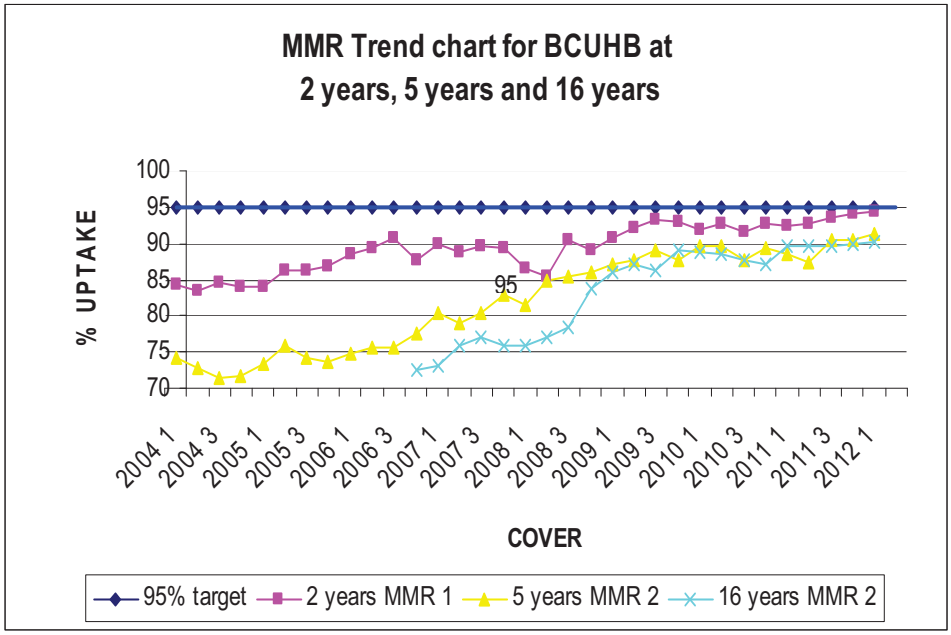
3.3 Uptake

COVER (Cover of Vaccination Evaluated Rapidly) is a national reporting system for immunisation uptake used in all four UK countries. In Wales reports are currently published on a quarterly and annual basis per former LHB area. Percentage uptakes are an indication of how many children resident in each LHB and reaching the ages of one, two, five and sixteen have been vaccinated in accordance with the routine childhood schedule. Statistics are calculated using data extracted from the National Community Child Health Database which is comprised of the records from all the regional child health departments in Wales. Figures for coverage and uptake rely on notifications of immunisations given being returned to local child health offices and entered into their databases.

The most effective method of controlling measles, mumps and rubella is by maintaining high levels of immunisation.

4. MMR coverage in the former six Local Health Board areas

MMR uptake: One dose at 2 years, two doses at 5 years and 16 years correct as of Dec 2011 for Betsi Cadwaladr University Health Board. Source PHW



As this trend chart shows there has been a significant improvement in the percentage uptake of the MMR vaccine at all ages within BCUHB although uptake is still falling short of the required 95% target.

Data relating to the uptake of the first dose of MMR is collected at 24 months of age although the vaccination is offered at 12 months. This allows for illness or deferred treatment, which may result in delayed vaccination.

Uptake of one dose of MMR at age 24 months in the six Health Board areas for the last year according to the annual COVER report 2011-12

LHB area	Number of children	Number received MMR	% received MMR
Anglesey	745	698	93.7
Conwy	1143	1052	92.0
Denbighshire	1040	966	92.9
Flintshire	1731	1638	94.6
Gwynedd	1291	1212	93.9
Wrexham	1668	1568	94
North Wales	**7618**	**7134**	**93.6**
Wales	35053	32482	92.7

No former LHB area achieved the required 95% target in Wales in the annual COVER report for 2011-12; however improvements have been seen in quarterly reports which have been recognised as a notable achievement by the Head of the Vaccine Preventable Disease programme for Wales.

Uptake of one and two doses of MMR at age 5 years in the six Health Board areas for the last year according to the annual COVER report 2011-12

LHB area	Number of children	Number received 1 dose MMR	% received 1 dose MMR	Number received 2 doses MMR	% Received 2 doses MMR
Anglesey	721	687	95.3	644	89.3
Conwy	1156	1089	94.2	1017	88.0
Denbighshire	976	935	95.8	871	89.2
Flintshire	1687	1622	96.1	1535	91.0
Gwynedd	1314	1245	94.7	1171	89.1
Wrexham	1521	1498	95.7	1424	92.8
North Wales	**7419**	**7076**	**95.4**	**6662**	**89.8**
Wales	33645	31835	94.6	29306	87.1

No LA area achieved the required 95% uptake in Wales for two doses at 5 years of age; two North Wales LAs exceeded 90%.

Uptake of one and two doses of MMR at age 16 years in the six Health Board areas for the last year according to the annual COVER report 2011-12

LHB area	Number of girls	% Girls received 1 st dose MMR	% Girls received 2nd dose MMR	Number of boys	% Boys received 1st dose MMR	% Boys received 2nd dose MMR
Anglesey	361	96.1	92.0	400	94.3	86.8
Conwy	586	95.7	90.8	577	95.8	88.7
Denbighshire	555	96.4	90.1	547	94.9	86.1
Flintshire	866	98.2	93.2	883	95.7	88.6
Gwynedd	641	95.9	91.3	661	94.9	89.9
Wrexham	689	97.2	93.6	768	96.1	90.2
North Wales	**3698**	**96.8**	**92.0**	**3836**	**95.4**	**88.6**
Wales	16999	92.8	83.9	18243	91.4	82.9

5. Experience of developing action plans

Each of the former Trusts in North Wales previously developed action plans to increase immunisation uptake in general. They also completed an audit of implementation of the Welsh Health Circular for MMR (2005) 081. Where non-compliance with the WHC was identified, work was undertaken to promote full compliance. Where local action plans to address low MMR vaccine uptake have been implemented, rates have increased so that they compare favourably with areas of high uptake elsewhere in the UK.

6. Reasons for a low MMR immunisation coverage

Multiple factors contribute to low vaccine coverage.

- The child's parent has not given consent for MMR vaccination
- Lack of confidence in the MMR vaccine and concern about possible serious side effects
- The child's parents have difficulty in attending for appointments
- The child has been given single measles, mumps or rubella vaccines via a private clinic
- Previous immunisation data is not transferred when a child moves in from another area or country
- The immunisation has not been notified to the local child health department
- Poor organisation for appointing and recall if appointment missed
- Poor professional knowledge of MMR contraindications, egg allergy, two-dose schedule
- The transient nature of the traveller population in North Wales makes it challenging to offer vaccination to this group. Travelling communities may also be vulnerable to imported cases of measles, mumps and rubella infection which can circulate to susceptible individuals

- Some administrative activities to support follow up of children with outstanding MMR vaccination set out in the CMO MMR letter are not being implemented

7. Strategy to increase MMR uptake

The strategy includes actions at a strategic and local level. These actions are outlined in Appendix 1 and are summarised below:

- Ensuring the accuracy of MMR data
- Ensuring the relevant Health Care Professional (HCP) involved in childhood immunisation is well-informed and up-to-date on MMR issues.
- Investigating 'no consents' across North Wales to identify areas with a high rate of 'no consents'
- Increase general positive awareness about the MMR vaccine in the wider community.

8. Raising awareness of MMR issues:

- Health Care Professionals working with children and families (to include midwives and allied health care professionals e.g. speech therapists, physiotherapists etc).
- Managers have a duty to ensure that staff with direct patient contact are suitable to work in an environment where they might be exposed to vaccine preventable diseases. Staff should be aware of their immune status and can liaise with the occupational health department to ascertain this.
- Other professionals working with children and young people, e.g. social services, schools, nurseries, playgroups and other non-government organisations could sign post to reputable sources of immunisation.
- General awareness raising with the public.
- Ensuring effective communication with staff involved in immunisation and between Primary Care and Child Health departments.
- Ensuring full compliance by BCUHB of the Welsh Health Circular (2005) 081
- Ensuring full compliance by BCUHB with the National Minimum Standards for Childhood Immunisation Data Collection and Administrative procedures

MMR Action plan 2013-16 Betsi Cadwaladr University Health Board.

This action plan has been produced to ensure that Betsi Cadwaladr University Health Board is fully compliant with the actions set out in the Welsh Health Circular (2005)081 and that a strategy to increase the MMR uptake is in place.

Task	Main Action	Specific actions	Lead Person	Contact liaison	Timescale
1	Review current COVER statistics	• Compare vaccination uptake achieved with Welsh Government targets and directives for 2, 5 and 16 year olds and report to BCUHB Immunisation group • NIC to evaluate treatment queue lists for each LA area and clarify situation with GP practices with treatment queues over 20 children • Identify GP practices with low uptake that may need support /advice	Nurse Immunisation Coordinator (NIC)	Child Health GP practices Locality Leads	Ongoing each quarter and evaluate annual COVER report
2	Communication	• Ensure C&YP CPG Board is informed of MMR uptake and actions required • Develop BCUHB intranet and internet sites with positive information about MMR for staff and the public • Produce update letter for all immunisers in BCUHB regarding MMR uptake and number of women susceptible to rubella.	Nurse Immunisation Coordinator in conjunction with BCUHB Communications team	All BCUHB immunisers and Primary Care	April 2013
3	MMR WHC 2005 (081) compliance	• Ensure all staff via training and professional meetings are aware of the requirements of the WHC MMR 2005 (081) and the outcome of the MMR audit in particular these points a. Issue memo to HV at 18 months on all outstanding immunisations including MMR b. Contact with 'no consenters' in secondary school and offer information c. Offer MMR with teenage booster	Nurse Immunisation Coordinator	• Child Health Manager • Community Service Managers • GP Practice Managers	To be completed by December 2013
4	Treatment centre code at school entry should remain as the GP	• Allow invitations to appoint child to GP until 6th birthday and inform GP practices that there will be an increase in the upper age limit at which children may be invited for outstanding pre-school immunisations • Notify GP practices of change which may mean an increase in children being appointed	Nurse Immunisation Coordinator	• Child Health Manager • Immunisers and practice managers	April 2013

5	Maintain positive communication to media regarding MMR	• Develop press release regarding MMR vaccination activity to incorporate PHW outbreak media releases.	Nurse Immunisation Coordinator	Communication team	Ad hoc
6	Communicate positive MMR information to playgroup supervisors, private nurseries, Children and Young People's Framework partnership, Children's outpatients	• Contact CYPFP lead to disseminate information • Attend annual general meetings of childcare providers, etc. • Provide information session to childcare providers and Healthy Pre school information	Nurse Immunisation Coordinator	• CYPFP • National Childminding Association • Pre school Playgroups Association • Homestart • HPSS	April 2014
7	Leadership	• Encourage local leadership in each GP practice to proactively implement the LES for MMR catch up and also LES for postnatal ladies to be offered until further notice. • Encourage GPs to get involved with advising parents who are undecided on MMR	Nurse Immunisation Coordinator	PCSU GP practices	April 2014
8	Improve accuracy of MMR immunisation recorded on Child Health System	• All GP practices to notify child health of all movements into practice up to age 19 years • All GP practices to notify child health of immunisations recorded for the child up to 19 years • Obtain Living In Treated Out data	Nurse Immunisation Coordinator	• GP practices • Former LHB areas	April 2014
9	Offer MMR at Primary Schools with a high number of incompletely immunised children	Target schools with a higher number of incompletely immunised children with MMR 'the spotty scheme' in particular Flying Start areas	Nurse Immunisation Coordinator	Local LHB Immunisation leads	Ongoing
10	Improve uptake and the access for disadvantaged and vulnerable groups	• Flying Start, Sure Start, Vulnerable Groups and LAC teams to liaise with GP surgery of children missing immunisations and offer home immunisation if required • LAC nurse to complete Immunisation Summary Sheet when child is new to caseload • Home Start and Family Friends to be encouraged to support families to attend vaccination session	Nurse Immunisation Coordinator	Team Managers	ongoing

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11	Ensure all maternity units provide MMR vaccination to ladies susceptible to rubella post partum	Ensure this is offered again at GP post natal check if not already given Ensure Health Visitor is aware of non-vaccinated post natal ladies Ensure midwives receive training to vaccinate with MMR following publication of the postnatal MMR clinical protocol	Nurse Immunisation Coordinator	Head of Midwifery	April 2013
12	Ensure lessons learned from Gwynedd measles outbreak in 2012 are implemented	Ensure documentation is ready in the event of a measles outbreak Ensure communication regarding requirement for additional school catch up sessions is robust	Nurse Immunisation Coordinator	Community Services Manager	April 2013
13	Ensure invites for immunisation continue	Zeroise all immunisations including MMR following Failures to attend without reason x 2.	Child Health Manager	Community Services Manager	April 2013
14	Ensure staff are protected against measles	Managers should ensure the suitability of their staff to carry out duties that might expose them to vaccine preventable disease. Staff should be aware of their immunisation status and liaise with the occupational health department where necessary. Managers and staff have a responsibility to ensure that patients are not exposed to vaccine preventable diseases via staff contact.	Managers	All staff members with direct clinical contact	September 2013

Betsi Cadwaladr University Health Board

Measles vaccination plan

Context

A Public Health Emergency has been declared in Wales as a consequence of a large measles outbreak in south Wales.

A letter issued by the Chief Executive of Public Health Wales to all Chief Executives, Medical Directors and Public Health Directors in Health Boards requires immediate and assertive action to prevent further spread of the disease across Wales by all Health Boards.

It is required that all Health Boards:

1. Develop plans to offer parents the opportunity to have their unprotected children immunised
2. Have a plan in place to enable rapid implementation of a school based immunisation in response to cases and outbreaks.

(There are other specific actions which are only for the Health Board in the outbreak area.)In addition, the Chief Medical Officer has instructed Health Boards to ensure there is a plan in place to vaccinate school aged children aged 10-18 years, which must be completed by May 24th with weekly reporting on vaccination campaign activity to the Executive Director of Public Health Wales

The information described below describes BCUHB's work related to measles

Background:

As a result of sustained low MMR uptake in the childhood population since 1998, measles infections have now become endemic in the UK since 2009 which is why small sporadic outbreaks are continuing to occur. The low MMR vaccine uptake is a direct result of the adverse media coverage of a flawed research article in 1998. MMR vaccination is offered as part of the national routine childhood immunisation programme at 12 months and then 3 years 4 months. Two doses are required for reliable protection, which in adults and older children can be given one month apart.

There were 2016 measles cases during 2012 in England and Wales. Most cases were in children and young adults up to the age of 19, but there were 216 cases in infants less than twelve months of age, who were not yet due to be offered MMR vaccination. The outbreak in South Wales began around September 2012 and cases increased at an alarming rate during March 2013.

In the BCU area there are 55 secondary schools and 300+ primary schools, in addition to pupil referral units and special schools, and 126,007 children aged between 2 and 18 years. Despite increasing uptake rates, there are currently 5,873 (4.5%) children in school from reception class to year 11 who are unvaccinated and a further 5831 (4.5%) who have had only one dose (Source: National Community Child Health Database). It should be noted however that data reconciliation will identify some vaccinated children among these numbers.

There are several criteria which must be in place to ensure an effective immunisation service. To this end the Health board follows the measures in the Health Protection Agency document "Quality criteria for an effective immunisation programme[1]" and is revisiting these principles to respond to ensure maximum resilience in light of the current measles outbreak.

Prior to the outbreak - BCU implementation of nationally led activities

- The Health Board has robustly implemented the MMR Welsh Health Circular (081) 2005 which requires a standardisation of procedures if a child has missed a dose of MMR. This policy in effect acts as a safety net prior to the child leaving school.
- Pre-schools who are part of the Healthy and Sustainable Pre-school Scheme have received information on immunisation status when joining as part of a national plan from the Vaccine Preventable Disease Programme and supported by Health Boards.
- The 10 BY 5 campaign was launched in January 2013
- Child Health Process Immunisation Standards have been implemented in 2010 and audited in 2011. A second BCUHB internal audit completed in January 2012 has been completed and BCUHB is now fully compliant with these standards

Prior to the outbreak - BCU specific activities

Since the formation of BCUHB, significant efforts have been made in a coordinated manner to increase the MMR vaccination uptake across the north Wales region to increase resilience to an outbreak. The aim of these measures is to remove barriers to vaccination e.g. lack of clinical knowledge about contraindications or the impact measles infection has on the individual, legal permission to vaccinate in an outbreak, funding mechanism, promoting the MMR vaccine, making it easy to obtain the vaccine, flexible appointments.

- Measles issues are covered on all immunisation training for health care professionals who immunise or advise on immunisation: topics include discussion about the risk measles poses, the activities, strategies and messages that help parents consent to vaccination at the first offer of MMR and also messages that help parents change their minds if they have reservations or concerns about MMR vaccination. Contraindications and new research on egg allergy and anaphylaxis are also addressed together with signposting to reputable sources of information.
- A flexible Local Enhanced Service has been in place in Primary Care for several years to ensure a funding mechanism is in place for those children aged 6 years and above who have missed their MMR when initially appointed at 12 months and 3 year 4 months. During the immunisation training it is stressed that it is always worthwhile from a health gain point of view to continuously chase up missing MMR vaccinations as parents might change their minds, their personal circumstances can change and media reporting outbreaks and research may be the catalyst for a change of opinion. Staff are encouraged to never give up on a child missing immunisations. Maintaining the immunisation uptake for all children is a key priority for the Health Board.
- Active Patient Management is implemented to identify children at 1, 2 and 5 years that are missing immunisations. Their medical records are checked and if unvaccinated efforts are made to vaccinate them as soon as possible.
- Treatment queues are targeted to ensure children are offered their immunisations on time and if necessary catch up sessions at the GP practice are offered to reduce the queue.
- In BCUHB a domiciliary immunisation policy is in place to ensure home immunisations can happen on both a planned or opportunistic basis.
- In BCUHB only, the invitation age for the Teenage booster vaccination for Diphtheria, Tetanus and Polio was lowered from Year 10 to Year 9. During this immunisation session children are offered any outstanding doses of MMR: this had the fortuitous outcome of inviting children a year earlier for missing MMR doses than previous arrangements.
- During the last measles outbreak in 2012, the school nurse managers arranged immediate vaccination sessions in the affected secondary school in an effort to control the outbreak, other local schools both primary and secondary in the affected area also had catch up immunisation sessions. Some data validation also took place.
- The BCU MMR Strategy have has been ratified at the Infection Prevention and Control committee and was launched during European Immunisation Awareness week April 22nd. This strategy seeks to use all opportunities to vaccinate and raise awareness of the importance of MMR vaccination.
- An audit of the BCU Looked After Childrens database is continuing to identify those missing all vaccinations and alert their LAC nurse so early arrangements can be made to vaccinate.
- Support to Vulnerable Groups Health Visitor dealing with gypsy travellers to proactively vaccinate this particularly vulnerable group with a historical low uptake.
- An MMR PGD is in place and is flexible to allow immediate outbreak vaccination.
- Messages have been circulated to Primary Care to consider MMR vaccination for staff

As a result of these activities the north Wales region has steadily increased uptake in children up to the age of 16 years and this has been noted at a national level. However, there are still pockets of low uptake across the region, and many schools where uptake rates of 2 MMR's are under 90%, and these need to be targeted. Despite uptake rates of 95% of 16 year olds having received their 1st dose, two small outbreaks occurred in 2009 and 2012 in children mainly of secondary school age. The BCUHB response to the outbreak in 2012 located in Porthmadog was to vaccinate immediately in the affected school and other local

schools and to encourage GPs to also offer vaccination as the LES was already in place. These actions did increase MMR vaccination activity at the time.

April 2013: New actions in BCU - in response to the current Welsh measles outbreak to increase resilience locally and to proactively offer MMR to unvaccinated children.

These actions listed below follow the principle of multiple immunisers in multiple settings in a targeted approach to address parents concerns, non-consenters or previous decisions to access privately obtained single vaccines for measles, mumps or rubella. All parents are being asked to reconsider their decision.

Actions to target specific population groups:

Target group	**Action**	**Timescale**
Children		
All children	Send a reminder to community staff health visitors, GP practices and school nurses about proactively seeking all opportunities to identify and vaccinate children missing MMR vaccination. Routine screening activities deferred to focus on measles activity. Measles information pack sent to all GP's	Immediately
	General media and PR campaign	Ongoing
Children aged 10-18	Social media campaign using facebook and twitter	Live by 10th May and ongoing
All secondary schools and special schools	All secondary schools and special schools will be visited for additional MMR vaccination sessions (see attached schedule) Focus will be on years 7 and 8 as years 9, 10 and 11 have recently been invited in the spring term. All secondary aged children Y7 and Y8 will be invited for the first time in a school setting and also those in Y9, Y10, Y11, plus Y12 and Y13 in the attached sixth forms for a second/third time in a school	By 24th May

	setting. School nursing staff will go back into schools where necessary to give second doses	
Primary schools with rates <90% or with 20+ pupils unvaccinated	Provide MMR vaccination sessions	By 24th May
Target school aged children in an identified low uptake area of high deprivation (Rhyl)	Drop in session covering 3 schools on local authority premises (Oak Tree Centre)	By 24th May
Children in deprived areas	Community pharmacy counter staff working in areas of deprivation, who have been trained about immunisations in the Early Years Pharmacy Project, to be sent bilingual badges saying “Ask me about Measles!”	By 10th May
	Communities First to be asked to engage in promoting MMR catch-up campaign	By 10th May
Other primary schools	Parents contacted and advised to make appointment at GP where children are identified as under-vaccinated	By 24th May
Pupil referral units and other small settings including youth justice	Work with staff to identify need. Community child health staff will provide site visit or domiciliary visit as appropriate to vaccinate	By 24th May
Girls receiving routine HPV vaccine	Offer MMR vaccine alongside HPV	Ongoing
5 border schools	5 of the primary schools bordering England have the lowest apparent MMR uptake of 70-75% possibly as a result of data loss between England and Wales. The English GP practices and child health department have already been contacted to reconcile any missing information to update our Welsh child health records. This reconciliation will be completed as quickly as possible, and school vaccination sessions will takes place if rates are still	By 24th May

	seen to be low.	
Private schools	Rates are apparently lower. This could be partly due to higher numbers of pupils from abroad and cross-border issues. Data reconciliation is being carried out as above. Private secondary schools will receive scheduled vaccination sessions. Private primary schools and smaller units will receive visits if rates are still seen to be low.	By 24th May
Children on school trips to the south Wales outbreak area	School nurses will check if their schools have trips planned to visit south Wales and if so to identify unvaccinated children in the year group. These include athletic meetings, eisteddfodau, geography trips etc.	Immediately
6th Form and FE colleges	Colleges have sent letters or e-mails to students recommending that they go to their GP if not fully vaccinated. A mechanism to review uptake for this will be identified.	By 24th May
University students studying in North Wales	GP practices involved with Glyndwr University and Bangor University have been contacted and will be promoting and offering MMR to students via drop in clinics.	By 24th May
Gypsy travellers	The Vulnerable Groups Health Visitor dealing with gypsy travellers has visited the sites to proactively vaccinate this particularly vulnerable group. These visits will be repeated as success is slow but progressing.	By 24th May and ongoing
Looked after children	Looked After Children, Home Tutored and Home Educated records are being reconciled and the young person advised accordingly. This reconciliation will be completed and any gaps addressed.	By 24th May
Home tutored children		By 24th May
Home educated children		By 24th May

Parents in contact with alcohol/substance misuse teams	Staff working as part of alcohol and SM Teams have agreed to discuss MMR with parents using their services and offer vaccination to children not up to date with MMR	By 24th May
BCU staff		
GP/Primary Care Staff/ BCU staff: general	An All User email has been sent to BCU staff raising awareness about the measles cases and where they can find information about the disease and benefits of vaccination and measles control measures. This will be followed by a letter recommending MMR vaccine. Information pack sent to GP's to advise on immunisation of practice staff	Started
BCU staff: general communication methods	Poster campaign in hospitals	By 3rd May
	Pop-up banners in hospitals	By 10th May
	Badge campaign: "Ask me about measles", to be worn by key staff and managers	By 10th May
BCU staff in high risk areas: These are Paediatrics, SCBU, ITU, A&E, AMU, GP out of hours, all medical wards (including haematology/rheumatology patients), renal units, oncology, obstetrics and gynaecology, midwifery, health visiting, school nurses and sexual health services.	Identify staff in high risk areas and manually assess the immune status of the staff, cross checking information from our three current databases onto a temporary database • Age (born before 1970) • Blood test • MMR recorded	Started 23.4.13
	Arrange to meet with the operational managers for the high risk areas across the geographical patch to confirm their staff details and identify any other key staff who may be on the wards e.g. physio, domestics etc., highlight susceptible staff and agree vaccinations sessions in the clinical area	91 meetings expected. Started 23.4.13
	Provide a report for the operational managers to indicate who is susceptible	By 31 May

	and who is immune	
	Agree additional MMR vaccination session dates and times for the clinical areas with the operational managers and announce session dates and times	30.4.13
Other BCU front line staff	Provide drop in vaccination sessions for staff, also including Welsh Ambulance service and General Practitioners from primary care	From 30.4.13 for 5 weeks
Unvaccinated BCU staff in front line areas	Managers to be asked to recommend the vaccine and ask staff to sign a form if they decline	
Strategic work		
	Strategic response team and core group will review progress against plan at least weekly	Weekly
	Strategic response team to fundamentally review plan in week commencing May 13th	w/c May 13th

GIG CYMRU NHS WALES

Iechyd Cyhoeddus Cymru
Public Health Wales

GIG CYMRU NHS WALES

Bwrdd Iechyd Prifysgol Betsi Cadwaladr University Health Board

Measles - North Wales Communications Plan

Author: Sioned Humphreys Communications Officer, Public Health Wales & Andy Scotson, Head of Communications, BCUHB

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Publication/ Distribution:

Purpose and Summary of Document:
The purpose of this document is detail the communications plan for promoting the MMR vaccination in North Wales due to the South Wales measles outbreak

1. Introduction & Background

The aim of this communications strategy is to ensure BCU staff, Local Authority key partners and parents/children and the wider community are aware and understand the key messages surrounding measles. At present there are 149,000 children under the age of 18 living in the BCUHB region. Of those, 6000 are unvaccinated and 6000 are partially vaccinated (having received one of the 2 MMR injections)

Nearly 10% of the under 18 population is therefore at risk in North Wales.

2. Aim

Building resilience to measles in North Wales. All unvaccinated and partially vaccinated children in the BCU area are given the MMR vaccine.

3. Objectives

The following objectives have been developed for the communications part of the campaign:-

- That the issue is communicated clearly and positively in a way that stakeholders, fellow professionals, teachers, children, parents, press and wider community all understand the dangers of Measles and the way of preventing it.

- Activity & key messages are fully integrated with other initiatives happening in Wales.

4. Audiences

There are a number of audience groups identified

- Internal audience – secondary care - Health staff within BCUHB

- Internal audience - Primary care - GP practices, community midwives, school nurses and health visitors.

- External/Involved stakeholders - teachers and Local Authority staff, nursery care providers, councillors, 3rd sector organisations

- Key influencers including parents of school children and school governors

- Children of school age

5. Key messages

Measles is an acute highly infectious viral illness caught through direct contact with an infected person or through the air *via* droplets from coughs or sneezes.

Symptoms include fever, cold-like symptoms, fatigue, conjunctivitis and a distinctive red-brown rash.

Measles is one of a number of notifiable diseases in the UK. Any doctor who suspects that a patient has measles is required by law to report it.

Getting the MMR vaccination is the only way to stop catching measles and Public Health Wales and the health boards are working hard to promote the vaccination.

There are approximately 12,000 children who are unvaccinated in the BCUHB area and therefore susceptible to contracting measles. The disease can spread quickly, this was seen in the 2012 measles outbreak in the Porthmadog area when 42 children contracted the disease.

We are keen to promote the MMR message across the health board area to increase the number of vaccinations and stop the outbreak spreading any further.

Those not vaccinated are highly likely to catch the disease and it is just a matter of time before a child is left with serious and permanent complications such as eye disorders, deafness or brain damage, or dies.

To prevent the spread of the illness, Public Health Wales has issued the following advice to the public:

- If your child is unvaccinated make immediate arrangements with your **GP** for them to receive the MMR jab. This is even more important if your child has had contact with someone with measles.
- If your child is unwell and you suspect it is measles you should contact your GP. Your child should not attend school or nursery for four days after the rash starts.
- Telephone your GP surgery to inform them you or your child has a rash illness before attending, so that arrangements can be made in advance for minimising contact with other vulnerable patients.

- Avoid going to A&E unless you are seriously ill, and if you do attend, telephone ahead to let them know you or your child may have measles.
- Avoid contact with pregnant women, people with weak immune systems and babies who are too young to be vaccinated, as they are more vulnerable to infection and there are very few treatments available to help them if they do catch measles.
- If any family members are pregnant, receiving chemotherapy, or aged under one, it is vital to ensure that all other family members are up to date with their MMR vaccination.
- Maternity wards, midwives and health visitors are being asked to share information with parents to encourage them to check the vaccination status of all children in the family to avoid further household spread amongst vulnerable groups.

6. Strategy

Nationally

Public Health Wales Communications team is the lead responder in this outbreak. Their team will issue National PR and update on the National situation.

Public Health Wales Communications team will provide the DPH with a report each week to send out to all stakeholders.

Public Health Wales communications team will send out a weekly briefing to all L.A press officers to send to their council officials and staff

BCUHB will be able to update local press about numbers of unvaccinated children in area, incidence and immunisation uptake rates.

For all audiences in section 4.

BCU's website and intranet page will carry up to date and accurate information about Measles including Q and A, advice, images and contact information. A unique URL has been created to promote proactively using other channels and communications.

http://www.wales.nhs.uk/sitesplus/861/page/66476

BCU's social media including Twitter and both BCU and Choose Well Facebook site will promote the uptake of MMR

Internal Audience – secondary care - Health staff within BCUHB

A guide to identifying Measles and signposting to resources will be produced for staff on the intranet

Information to include policy and procedures from outbreak control team - dealing with a suspected case, staff contact procedure etc

The following communications methods will be deployed to promote resources

- Intranet stories and forum posts.
- E-mail to all users raising awareness of the issue promoting web resources & key messages outlined above.
- '*Health Matters'* staff health and wellbeing monthly Newsletter.
- Posters and pop up banners in staffrooms and staff dining areas.
- Briefings to staff meetings (coordinated through the Associated Chiefs of Staff and Clinical Programme Group leads)
- Patient safety item brief

Primary care including GP practices, school nurses and health visitors.

- Regular e-mail to all users from Locality lead GP raising awareness of the issue promoting web resources & key messages outlined.

  This communication should include a guide to identifying Measles, a guide to having the conversation with parents about the MMR, a guide for counter staff & where to find posters/leaflet resources.

Involved stakeholders - teachers and Local Authority staff, nursery care providers, councillors, 3rd sector organisations

- LA communications teams are receiving regular briefings via Public Health Wales' communications team. To ensure that we take advantage of our local contacts the briefing should be re-sent via Health protection database
- DPH's briefing should also be circulated to all contacts.
- LA teams should also be encouraged to re-tweet and like BCUHB's social media content & to link their internal and external pages to ours.

Key stakeholders including parents of school children and school governors

LA's are currently sending key information to schools to send out to parents.

Regular updates on the situation will be sent to the local press reinforcing the key messages outlined above. All press messages will be checked by the Public health Wales communications team

We will proactively offer interviews/articles by North Wales Public Health consultants subject to agreement by the Public Health Wales communications team

Work will be done using Twitter/Facebook to promote key messages throughout North Wales using existing networks. Paid for advertising on social marketing networks to reach parents to be trailed

Children of school age

Preschool/ and primary school children need to be reached through their parents, schools and playgroups and GP surgery contact.

Secondary school children will also be targeted using the above but also proactive working directly with LA youth services, leisure. Promotion of getting the MMR jab using social media advertising via facebook. We'll undertake a focus group with this key audience group to test messages for advertising.

Health and Social Care Committee Inquiry: Measles Outbreak

Submission from the Aneurin Bevan Health Board, June 2013

1. Executive summary

Aneurin Bevan Health Board responded swiftly to the threat of the spread of measles from the Swansea outbreak, working together across the divisions and public health team, diverting necessary resources and prioritising the response, given the declared public health emergency. Similarly, there has been a very supportive and collaborative response from Local Authority and Education partners.

The initial outcomes of this proactive work for Aneurin Bevan Health Board are:

- As of 17th June 2013, **14,432 unscheduled doses of MMR have been given since March 2013** in the Aneurin Bevan Health Board area. Of these, 8926 were administered in General Practice, 2940 in Saturday Drop-in Clinics, 2094 in secondary schools/college sessions and 472 to healthcare staff.

- **96.3% of primary school aged children** (Reception to Year 6) **have received one dose of MMR vaccine**, with coverage ranging from 97.4% in Torfaen to 94.6% in Monmouthshire (as of 19th June 2013, Child Health System). 91.5% have had two doses of MMR vaccine.

- **94.8% of primary and secondary school aged children** (aged 4 to 18 years) **have received their first dose of MMR vaccine**, with coverage ranging from 96.9% in Torfaen to 91.2% in Monmouthshire (as of 19th June 2013, Child Health System). These children will have 90-95% protection against measles. 88.8% have had two doses of MMR vaccine

- **93.5% of secondary school aged children** (Years 7 to 13) **have received their first dose of MMR vaccine**, with coverage ranging from 96.4% in Torfaen to 88.5% in Monmouthshire (as of 19th June 2013, Child Health System). 86.4% have had two doses of MMR vaccine.

- **95.7% of children reaching the age of two years have received their first dose of MMR vaccine**, with all Local Authority areas within the Health Board reaching the target uptake of 95% (COVER report Jan 2013 to March 2013).

- **89.6% of children reaching the age of five have received their second dose of MMR**. Whilst the uptake of the second dose has been of concern in Monmouthshire, in this quarter it reached 91.8% (COVER report Jan 2013 to March 2013).

Aneurin Bevan Health Board is committed to continuing to build on the successful work undertaken with the aim of achieving the 95% target for two doses of MMR vaccine.

The report outlines:

Section 2: Background - factors that led to the current measles outbreak

Section 3: Aneurin Bevan Health Board area: actions taken in response to the measles outbreak in the Swansea outbreak

Section 4: Routine childhood vaccination MMR activity and work undertaken over the last 10 years

Section 5: Lessons learned.

2. Background - factors that led to the current outbreak

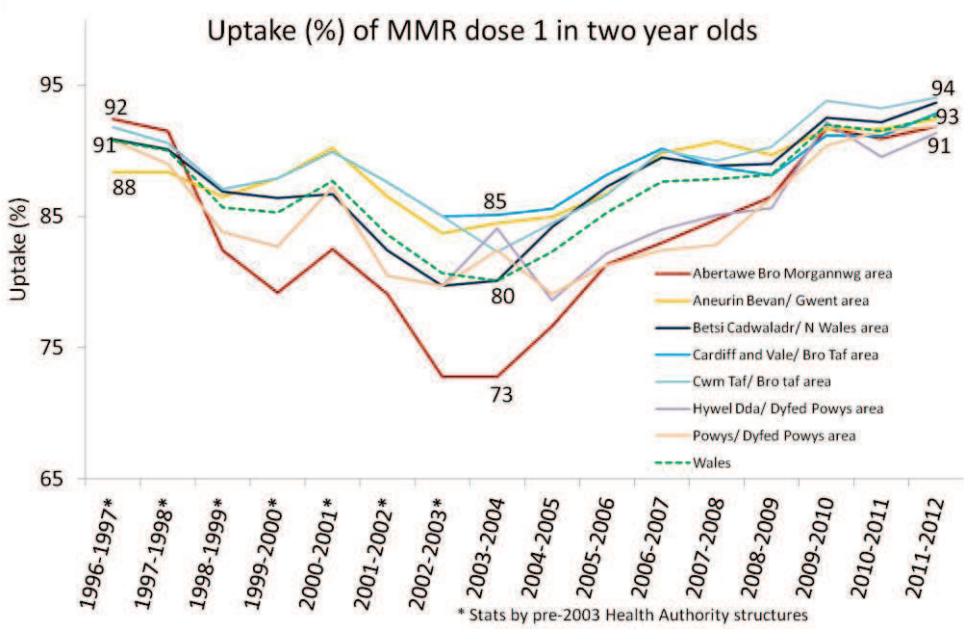
In the late 1990's, in response to extensive media coverage of a paper published in *The Lancet* in 1998 and the claims of a few researchers that MMR, autism and bowel disease were linked, uptake of MMR vaccine fell in the UK. In two year old children in Wales uptake fell from a quarterly peak of 94% in 1995 to 78% by 2003. It is notable that across the Aneurin Bevan Health Board area as a whole, the decline in the first dose of MMR (which conveys 90-95% protection against measles) was less marked than in some area of Wales (see Figure 1). *The Lancet* paper has since been formally withdrawn, and the research thoroughly discredited, with independent research overwhelmingly supporting the safety of MMR.

However, the consequences of the scare would be apparent for years to come as the minority of children, who were not routinely vaccinated over the years of the controversy, many of secondary school age, therefore had no protection against measles, mumps, and rubella infection.

In spite of ongoing work, it was estimated that as at 1st November 2012, (in the Aneurin Bevan Health Board area), there were 17,492 individuals aged 2 years to 18 years at risk from measles. Of these, 8,837 children aged 2 years to 18 years were unvaccinated as had not received their first dose of MMR and 8,655 children aged 4 to 18 years were partially vaccinated (had received one dose of MMR vaccine).

This was of concern, given the close proximity of Aneurin Bevan Health Board to Abertawe Bro Morgannwg University Health Board area and the highly infectious nature of measles.

Figure 1: Annual uptake of first dose of MMR (all Health Boards), 1996-2012 (April – March years)



Uptake figures represent percentages of resident children reaching their second birthday between April 1st and March 31st who were immunised by their second birthday.

Note: Pre-2003 health authority structures:

- Iechyd Morgannwg covered current Abertawe Bro Morgannwg University Health Board area.
- Gwent covered current Aneurin Bevan Health Board.
- Bro Taf covered current Cardiff & Vale University Health Board and Cwm Taf Health Board areas.
- Dyfed Powys covered current Hywel Dda Health Board and Powys Teaching Health Board areas.

Source: Public Health Wales

3. Aneurin Bevan Health Board area: actions taken in response to the measles outbreak in the Swansea area

The following section details the actions taken by public health professionals, in partnership with other agencies, in response to the outbreak in the Swansea area.

3.1 Strategic leadership and co-ordination of the response

Aneurin Bevan Health Board convened a Measles Emergency Group on 5th April 2013, with representatives from Emergency Planning, Primary Care, Public Health Wales (including Consultant in Communicable Disease Control and Team), School Nursing, Health Visitors, Family and Therapies clinical lead, Immunising Coordinator, Communications and Local Public Health Team. The Group was responsible for leading and co-ordinating a response to

prevent a possible measles outbreak similar to that experienced in the Swansea area and respond should this be necessary in the future.

The Director of Public Health chaired the Measles Emergency Group which met on a weekly basis even before the letter to Health Boards, from the Chief Medical Officer for Wales was received on 17th April 2013, to activate their school based plans to vaccinate all unprotected school aged children, as part of a Wales-wide campaign, with the aim of completing the task by 24th May 2013.

3.2 Priorities for action

The priorities for action agreed by the Measles Emergency Group were to:

- Increase the availability of MMR vaccination within Gwent and delivering a school-aged MMR programme/campaign
- Promote awareness of the need for MMR vaccination
- Develop contingency plans for possible increased numbers of cases and potential local outbreaks.

An implementation plan was produced to address the agreed priorities (see Appendix A). This was agreed by Executive Team on 16th April 2013 and an update paper was approved by the Aneurin Bevan Health Board on 22nd May 2013.

3.3 Progress in implementing priorities for action

3.3.1 Increasing the availability of MMR vaccination within Gwent and delivering a school-aged MMR programme/campaign

A three-pronged approach was implemented to actively offer parents the opportunity to have their unprotected children/young people immunised through:

- Schools and further education college based MMR catch-up programme/campaign targeting young people aged 11 to 21 years
- Primary Care clinics for primary school children
- Increasing availability of MMR vaccine including drop-in MMR clinics.

3.3.1a Schools and further education colleges based catch-up programme /campaign

2094 children and young people aged between 10 and 18 years of age were vaccinated through the schools and colleges campaign (see Appendix B).

MMR Clinics were promoted, held and delivered in all:

- 42 secondary schools (including 4 independent schools)
- 5 special schools
- 6 colleges of further education
- 1 University.

The delivery plan commenced in the further education colleges on Wednesday 24th April 2013, Comprehensive Schools on Monday 29th April 2013 and the campaign delivery plan was completed on 24th May 2013. Schools were prioritised according to the highest number of children/young people who had not been protected by having two MMR vaccines. The planning utilised 58 staff per week (nurse immunisers and support staff).

3.3.1b Primary Care clinics for primary school aged children

General Practice has been extremely busy with 8,926 unscheduled MMR vaccinations given between March 2013 and 17th June 2013 in Primary Care. Of these 2,357 vaccines were to individuals aged 10 to 18 years of age (see Appendix B).

Under the leadership of the Assistant Medical Director, MMR vaccination was prioritised by General Practice with the aim of proactively offering all under immunised primary school aged children the MMR vaccine by 24th May 2013. A MMR Local Enhanced Service (LES) was agreed to support the implementation of the plan, prioritising primary schools aged children, and young people who would not have been reached by the schools programme (young people not in education or unable to attend the school sessions).

All GP practices were issued with a patient list extracted from the Child Health System which identified all patients aged 19 years and below registered with the practice who had not completed a full course of the MMR vaccine. Practices were asked to reconcile this data against the immunisation status recorded on the GP system and return to the Primary Care Team. The Primary Care Nursing Team nurse lead designated for immunisations developed web pages for practices staff specifically on vaccinations. General Practices together with Health Visitors, collaborating via Neighbourhood Care Networks, co-ordinated additional clinic activity to accommodate the demand for the MMR vaccine.

3.3.1c Increasing availability of MMR vaccine including drop-in MMR clinics

A proactive approach was undertaken to offer increased and easy access to MMR vaccine through drop-in clinics, and also a targeted approach to check immunisation status and offer vaccine to vulnerable groups who may have missed out in the past for whatever reason.

- **Saturday MMR Drop-in Clinics**

2,940 individuals were vaccinated at eight Saturday MMR drop-in clinics (see Table 1).

These were extremely well attended with 20% of all individuals vaccinated for MMR during this period in the Aneurin Bevan Health Board area at these clinics; a testament to the flexibility and enthusiasm of all immunisers and support staff. The clinics reflect the integrated nature of the Health Board as they were organised by Primary Care and planning, run in hospital settings and involved primary care nurses and clinical leads working alongside paediatric hospital, community nursing and public health staff.

- **Vulnerable Groups**

Vulnerable Groups were targeted and MMR vaccine offered to those under the age of 25 years, who were under vaccinated (see Table 2). Individuals living on traveller's sites were offered vaccinations and information/materials were disseminated in 12 different languages to target different population groups in the Newport area.

Table 1: Activity at Saturday MMR Drop-in Clinics

Date	Aneurin Bevan Health Board area: Drop-in MMR Clinic	Number vaccinated
13th April 2013	Ysbyty Ystrad Fawr, Ystrad Mynach	563
	Bellvue Surgery, Newport	252
20th April 2013	Ysbyty Ystrad Fawr, Ystrad Mynach	596
	Royal Gwent Hospital, Newport	514
	Nevill Hall Hospital, Abergavenny	493
27th April 2013	Ysbyty Aneurin Bevan, Ebbw Vale	338
18th May 2013	Royal Gwent Hospital, Newport	168
	Chepstow Community Hospital, Chepstow	16
	Total	**2,940**

Table 2: Targeting MMR vaccination for Vulnerable Groups

Week commencing	Vulnerable Group	Action
15th April 2013	HM Prison Usk	185 vaccinations given at prisons
	HM Prison Prescoed	
13th May 2013	Gypsy and traveller community	Vaccinations administered on site
13th May 2013	Ethnic minority communities	Materials/information on MMR cascaded via networks in 12 different languages
22nd April 2013	Gwent Specialist Substance Misuse Service (GSSMS)	MMR vaccination offered by the service to service users
	Kaleidoscope (voluntary sector substance misuse provider)	
April – May 2013	Looked After Children	Immunisation status checked and offered MMR if needed

- **Healthcare staff**

472 healthcare staff received MMR immunisation during the campaign (see Appendix B).

Despite Aneurin Bevan Health Board Occupational Health Department proactively promoting and offering under vaccinated healthcare staff the opportunity to have their MMR vaccine in line with the Staff Action Plan, uptake amongst healthcare staff was disappointing. Actions implemented by the Occupational Health Department included (see Appendix C for Action Plan):

- Offering staff who request MMR vaccination an Occupational health appointment within 48 hours
- Organising two drop-in clinics for staff in Royal Gwent Hospital on 15th April 2013 and Ysbyty Ystrad Fawr on 16th April 2013
- Attending higher risk workplaces (e.g. Accident and Emergency Department) to vaccinate staff on site
- Enabling staff in certain areas, where they have the competencies, to vaccinate their own teams e.g. midwifery, school nurses, and certain district nursing sites.

3.3.2 Promoting awareness of the need for MMR vaccination

3.3.2a Communications plan

A comprehensive Aneurin Bevan Health Board communications plan for health, local authorities, educational settings and wider partners was developed and implemented. The plan dovetailed into the national press/media engagement activity led by Public Health Wales. Social media was extensively utilised by Aneurin Bevan Health Board to raise awareness and reach the prioritised aged group including targeted advertising on Facebook and messages via Twitter.

The drop-in clinics and need for MMR vaccine were widely promoted through networks targeting parents of school aged children (e.g. Family Information Services, local colleges, ethnic community networks, youth services, education system etc.), local press, radio adverts and through social networks.

3.3.2b Engagement with local authorities, further education colleges and wider partners

The Chief Executives and Directors of Education of the five local authorities in the Gwent area were informed of the Measles Emergency Group and its priorities on 5th April 2013. The Health Board secured full support from all five local authorities and Principals of further education colleges to implement the MMR Emergency Plan. Relationships were established with nominated key individuals to work with Aneurin Bevan Health Board Measles Emergency Response Group to actively implement plans. Chief Executives and Directors of Education were updated regularly on progress with the implementation of the plan, as well as the Gwent Local Resilience Forum. Other organisations which were actively engaged to support the MMR Plan included local housing associations and the voluntary sector.

A copy of the Communications Action Plan can be seen in Appendix D.

3.3.3 Develop contingency plans for possible increased numbers of cases and potential local outbreaks.

A draft Measles Outbreak Response Plan was produced to respond to a potential outbreak (see Appendix E).

Plans were developed to respond to an outbreak of measles in the Aneurin Bevan Health Board area in settings such a nursery, school, college or workplace. This included an outbreak response team to co-ordinate visits to the venue to deliver vaccines to the contacts. Action included timely identification of cases and swift action to identify contacts to prevent spread.

Extra staff were identified and trained in order to increase the capacity of staff that is able to immunise in an event of an outbreak. This training was delivered to Paediatricians, nurses

and Public Heath Staff by the Immunisation Co-ordinator, supported by the Public Health Wales Vaccine Preventable Disease Programme staff.

As of 17th June 2013, 120 cases were notified in the Aneurin Bevan Health Board area since 1st March 2013, all of whom have been followed up by the Health Protection Team. Of these, 29 were microbiologically confirmed cases and eight of these positive cases required hospitalisation for between one day and five days.

3.4 Data

The outcomes of this proactive work for Aneurin Bevan Health Board are:

- As of 17th June 2013, **14,432 unscheduled doses of MMR have been given since March 2013** in the Aneurin Bevan Health Board area. Of these, 8926 were administered in General Practice, 2940 in Saturday Drop-in Clinics, 2094 in secondary schools/college sessions and 472 to healthcare staff.

Initial analysis of the local Child Health System indicates that, as of 19th June 2013:

- **96.3% of primary school aged children** (Reception to Year 6) **have received one dose of MMR vaccine**, with coverage ranging from 97.4% in Torfaen to 94.6% in Monmouthshire. 91.5% have had two doses of MMR vaccine.

  94.8% of primary and secondary school aged children (aged 4 to 18 years) **have received their first dose of MMR vaccine**, with coverage ranging from 96.9% in Torfaen to 91.2% in Monmouthshire. 88.8% have had two doses of MMR vaccine.

- **93.5% of secondary school aged children** (Years 7 to 13) **have received their first dose of MMR vaccine**, with coverage ranging from 96.4% in Torfaen to 88.5% in Monmouthshire. 86.4% have had two doses of MMR vaccine.

The latest published COVER report (January – March 2013) illustrates a continued improvement in MMR uptake rates for Aneurin Bevan Health Board, with:

- **95.7% of children reaching the age of two years having received their first dose of MMR vaccine**.

- **All five Local Authority areas within the Health Board area achieved the target of 95% uptake of first dose of MMR for children reaching their second birthday.**

- **89.6% of children reaching the age of five have received their second dose of MMR.** Whilst the uptake of the second dose has been of concern in Monmouthshire, in this quarter it reached 91.8%.

3.5 Finance

Table 3 outlines the estimated costs that Aneurin Bevan Health Board has incurred based on the activity undertaken to the end of May 2013. The majority of costs for the schools programme were opportunity costs whereby the secondary school MMR catch-up programme was prioritised and staffs were redeployed to implement the Measles Emergency Plan. For example, the school health nurses were utilised to deliver the schools programme, the implication of this was that the current work programme (which included child measurement programme) ceased to enable the MMR programme to be delivered.

Please note that the costs outlined in Table 3 are an estimate only and that the following factors will increase the costs substantially. The costs only include direct additional costs to the Health Board. They do not include staffing costs which were not additional costs to the organisation, or the impact of work done to prevent a possible measles outbreak for which staff have not been paid (i.e. time in lieu). The costs also do not include the increased vaccine costs associated with the general increase in uptake for scheduled vaccination programme. As the General Medical Services MMR Local Enhanced Service is currently being implemented, these costs have not been included as yet.

Table 3: Estimated costs to the end of May of implementing Measles Emergency Plan

Item	£	Additional detail
Vaccines	39,157	Based on numbers administered excluding Primary Care
Staff Costs*	13,250	Based on actual costs
Vehicle/Transport	5,782	Includes transportation of vaccine in schools programme
Other Equipment	796	Includes sundries, stationary for schools programme
Advertising	1,330	Based on current costs
GMS MMR LES**	tbc	Based on number of unscheduled vaccinations in primary care
Total	60,324	

*Claims for some drop-in clinics need to be accounted for

**As MMR General Medical Services Local Enhanced Services is still being implemented, it is too early to give indication of the costs incurred

4.0 Routine Childhood Vaccination MMR activity across Aneurin Bevan Health Board

4.1 Existing Gwent immunisation structures and roles

The Gwent Immunisation Group is responsible for overseeing the immunisation programme in Aneurin Bevan Health Board area. The objectives of the Group are to:

(a) Promote and support an effective immunisation service to protect the population of Gwent from vaccine-preventable diseases and to achieve targets for immunisation uptake rates

(b) Make recommendations on immunisation policy in Gwent, in line with Welsh Government policy, and the recommendations of the Joint Committee on Vaccination and Immunisation

(c) Recommend measures to improve the uptake of scheduled childhood and adult immunisation in Aneurin Bevan Health Board area.

The multi-disciplinary group is jointly chaired by the Consultant in Communicable Disease Control and Director of Public Health, and reports to Aneurin Bevan Health Board Public Health and Partnership committee.

4.2 Strategic direction

Aneurin Bevan Health Board and partner organisations regularly receive information regarding the importance of immunisation and uptake rates of childhood vaccinations. A number of strategic documents, Board and Partnership papers which refer to MMR uptake have been received in recent years. These include:

- Aneurin Bevan Health Board's Public Health Strategic Framework 2011-15
- The associated work plans for the Aneurin Bevan Gwent Public Health Team for 2011-12, 2012-13 and 2013-14 include actions to increase the uptake for childhood immunisations, giving priority to preschool and teenage vaccinations. Action of increase uptake of the second dose of MMR as per schedule and catch up programme in teenagers are included in the plan. Progress in relation to the ABHB Public Health Strategic Framework is reported in the Director of Public Health's Annual Report
- Aneurin Bevan Health Board paper - Childhood Immunisations in Aneurin Bevan Health Board (January 2010)
- Children and Young People's Partnership (CYPP) paper 'Get Protected' Immunisation Health Promotion Campaign in February 2010 presented at the five CYPPs across Gwent

- Aneurin Bevan Health Board paper - Measles outbreaks across Europe; a risk to young people in Monmouthshire due to low Measles, Mumps and Rubella Vaccination uptake June 2011. This paper was also taken to the 5 ABHB Locality Management Team meetings and amended copies to each Children and Young People's Partnership across Gwent.

4.3 Routine childhood vaccination programme

The childhood scheduled programme continues to be delivered as normal throughout Gwent with children being called for their first MMR vaccination at the age of 12-13 months and their second MMR vaccination at 3 years and 4 months. Immunisers and their administrative support staff adhere to the All Wales Minimum Standards for Childhood Immunisation Administrative Procedures and Data Collection (PHW 2010), as described in the ABHB Immunisation Governance Framework agreed by Aneurin Bevan Health Board in 2012.

Key aspects of the proactive approach to promoting childhood vaccination programme to reach 95% uptake include:

- All new parents are given information on vaccinations by health visitors and practice nurses, i.e. literature to support vaccinations and directed to web pages Public Health Wales/ NHS Choices where they can find further information if required.
- The Child Health Department operate a call-recall appointments system for scheduled childhood immunisation programme. Children are sent appointments for MMR1 at 12-13 months and MMR2 at 3 years and 4 months of age.
- The Immunisation Coordinator monitors vaccination clinic waiting lists quarterly using the data stored on the Child Health Computer System. Any lists which contain 50 children or more are investigated, and support to vaccinate negotiated if required to reduce the waiting list.
- Where children miss their appointments for scheduled MMR, a number of checks and reminders are in place, including an automatic second appointment being sent to recall the child.
- Parents of pre-school children who do not attend for appointments are followed up by the health visiting service with home visits if necessary. Parents who refuse to consent are asked to sign 'a refusal of consent form' and are reminded that they can change their mind at any time. These families are be sign-posted to further information which they may find helpful.
- In extenuating circumstances domiciliary immunisations may be offered.
- Immunisation status of children is assessed at school entry by running reports on Child Health System. The school nurses then communicate with parents to encourage vaccination.

- All pre-school children who move into Aneurin Bevan Health Board catchment area and register with a GP are visited at home by the health visiting service. Immunisation status is elicited and vaccinations discussed and offered if applicable.
- The Asylum Seeker nurse is involved in assessing the immunisation status for children of families who are seeking asylum in the catchment area. These children are then referred into the appropriate agencies i.e. health visiting, respiratory services for BCG or practice nurse.
- Looked After Children (LAC) children have an annual health review performed by LAC nurses. Their immunisation status is assessed and referrals made to appropriate agencies.
- As part of their public health role, the school nurses are offering outstanding vaccinations to young people who are referred to them on a domiciliary basis, if appropriate.
- Children who attend pupil referral units (PRU) within the educational system are often difficult to reach. Information on teenage vaccinations is sent to the Senior Educational Welfare Office for each Borough every year. This information is for cascade via the PRU signposting/reminding pupils about the importance of immunisation.
- Continuing Professional Development sessions are routinely delivered on immunisations for staff, including practice nurses and practice managers.

4.4 Work over the past 10 years in response to the ongoing threat of a measles outbreak, given MMR uptake over time

Over the past 10 years there has been a gradual but steady upward trend in the uptake rates of MMR, as illustrated in Figure 1.

During this period there has been ongoing actions advocating the importance of immunisations across Aneurin Bevan Health Board area. Each of the five Local Health Boards which covered the area prior to the formation of Aneurin Bevan Health Board, acted independently in response to the need to increase uptake of MMR; examples of some of the actions undertaken can be found in Appendix F.

Since the formation of Aneurin Bevan Health Board, a Gwent wide approach to the promotion of vaccinations has been adopted:

- In 2009, the Gwent Immunisation Group established a task and finish group named STRIVE (**Strategy To Raise Immunisation and Vaccination for Everyone**), it aimed to plan and implement a programme of activities to increase the public's awareness of teenage vaccination, and increase awareness amongst vulnerable people including minority ethnic groups, which it has done for example, in partnership with the South East Wales Regional Equality Council.

- In 2010, a targeted bilingual campaign 'Get Protected' was implemented aimed at young people, it used posters and leaflets, radio adverts, competitions and educational sessions with young people to promote teenage vaccination including MMR. Materials were designed and piloted involving young people and distributed via school health nurses to all those in years 10, 11, 12 and 13. The campaign addressed teenagers themselves and their own responsibility for ensuring their immunisation status as they grow into adulthood as well as parents. This was because in the past promotional efforts were focused more at parents.
- As part of the 2010 Tetanus, Diphtheria and Polio vaccination programme targeting school aged children in Year 10, the Health Board promoted to parents the importance of MMR and advised they check their child's vaccination status and to make an appointment with their GP if their child was under vaccinated.
- Further examples of Gwent wide initiatives to promote the update of vaccination since 2009 can be found in Appendix G.

5.0 Lessons learned

Aneurin Bevan Health Board held a preliminary debrief to reflect on the programme of work at the Gwent Immunisation Group, on 12th June 2013, to discuss initial thoughts regarding lessons learned and emerging themes which will form a framework for the formal debriefing session which is scheduled for 23rd July 2013.

Three areas were thought to be important to explore at the preliminary debrief; these were data, communications and operational surge planning to ensure the Health Board is able to mount a sufficient response in a timely fashion, to any future health threats, such as a communicable disease outbreak.

Data/Systems

The prioritisation for this programme of work has been informed predominantly by a data system, which is informed by a paper based system relying on information being returned from various sources to the child health department on vaccinations given. This current system meant that data on the vaccination status of individuals were not necessarily up-to-date. There are a number of contributing factors and the group discussed a need to focus on the system at the formal debrief to plan how the system can be improved to give timely and up-to-date data.

To address this challenge during the campaign, GPs reconciled their practice data with that of the Child Health System data which then improved the accuracy and completeness of the data held on the Child Health System. This worked extremely well. It was recognised that to maintain this level of accuracy, records regarding changes of address and school, and /or change in registration with General Practice need to be undertaken on a regular basis. For school aged children, class records are not currently requested from schools unless

required, for example, to invite consent from parents for girls in year 8 to receive HPV vaccination and all young people to receive their teenage booster for Tetanus, Diphtheria and Polio in Year 10. It is proposed that class records for all classes should be received annually, to update the Child Health System on a regular basis.

There was a strong view that a shift from paper processes to more accessible electronic processes would be efficient and facilitate greater accuracy, particularly when current paper processes such as 'unscheduled vaccination' forms are time consuming to complete and in the current system required the attention of more than one individual. It was proposed that GPs should be able to input data directly (on to the Child Health System) for patients registered to their practice.

Similarly, the use of social media and school websites to promote the schools campaign directly to parents worked extremely well. It was proposed that for future school base campaigns that this was replicated to include, for example, parental consent forms for vaccinations given in schools electronically, emailed directly to the majority of parents, and that they could include a section to enable parents to input the dates of the vaccinations if previously received elsewhere, so they could then be used to update the system.

On a national basis, cross border issues are challenging and complex. The processes for neighbouring health board's Child Health Systems to exchange data regarding individuals who move out of county, are educated out of county, or cross the border from England need to be further developed and strengthened. These factors appear to contribute significantly to data for the Monmouthshire population, where the Child Health System identified school aged children to be under-vaccinated with MMR, who were subsequently found to be fully protected.

A further challenge to the Health Board is the system by which data are held regarding the vaccination status of frontline health and social care staff. At present each ward or department have been asked to collate vaccination status of their own staff. However, there is no central database holding this information and since this is personal health information, there is no obligation for a member of staff to share it with their manager. There was acknowledgement that whilst MMR vaccination could not be made compulsory, there needs to be stronger communication and a shift in emphasis that as an occupational vaccination, the organisation's expectation is that frontline health care workers have a duty of care to protect patients where possible and therefore to received the recommended vaccinations (including MMR and flu vaccinations).

Communication

The group felt that internal and external communications on the whole had been clear with effective use of social media, in particular Facebook and Twitter.

There was some initial public confusion because Aneurin Bevan Health Board was not an outbreak area and the majority of the national press releases and subsequent media coverage centred on the Swansea outbreak area. Whilst this caused demand from parents wishing to have their children vaccinated before they were due to receive either first or second dose of MMR, the Saturday Drop-in Clinics enabled prompt access for members of the public to discuss any concerns with health care staff.

There was effective and strong working relationship and support from all five local authorities to the MMR Campaign. A key factor contributing to this was an agreement that activity between the Local Public Health Team, the Health Protection Team and each Local Authority relating to measles and MMR campaign would be communicated by and to nominated individuals only. Using local authorities, and in particular schools, to cascade information proved to be an effective way of communicating and achieving clarity in the key messages.

All five local authorities were immensely supportive of the campaign and widely distributed materials that were prepared by the Local Public Health Team and Health Board on a regular basis.

The Health Board used social media such as Facebook and Twitter on a regular basis to provide information about local services across Aneurin Bevan Health Board area. The benefit was that unquestionably, these methods have great reach and are the means that most young people access information. The use of social media necessitated staff to monitor Twitter and Facebook on a constant basis to ensure that the Health Board responded quickly to queries as necessary.

Operational surge planning

The group's initial views are that as an organisation, the Aneurin Bevan Health Board health community were able to mount a rapid and effective response to the declared public health emergency with efficient cross-divisional working. Staff from all divisions were mobilised and were fully committed to respond to the public health emergency. For example, members of the Local Public Health Team were deployed to support school health nurses delivering the schools catch up MMR vaccinations; staff from Primary Care, Family and Therapies Division, Occupational Health Department and the Local Public Health Team organised and delivered the Saturday drop-in clinics at short notice with great enthusiasm and professionalism. It is testament to the commitment and enthusiasm of staff that nearly 3,000 individuals were vaccinated at eight drop-in clinics.

The group felt the drop-in clinic was a successful model that could be utilised in any potential future outbreaks. Emergency contingency plans would be updated to include 'template' scripts, plans regarding estates and venues suitable for mass clinics, 'off the shelf

check lists' and communications plans which can be tailored to any given 'emergency' scenario. This will be explored in greater detail at the formal debriefing session.

The Board is committed to continuing to build on the successful work undertaken with the aim of achieving the 95% target for two doses of MMR vaccine.

Appendix A

ANEURIN BEVAN HEALTH BOARD

Measles Emergency Response Implementation Plan

(School Age Children & Young People component)

Updated: 26th April 2013

Submitted to Public Health Wales 26th April 2013

1.0 Governance

1.1 Measles Emergency Group

A Measles Emergency Group was convened on 5th April 2013, jointly between ABHB and PHW, to co-ordinate a response to prevent a possible measles outbreak similar to that experienced in the Swansea area. The Director of Public Health chairs this group which meets on a weekly basis.

The priorities for action agreed by the group are to target school aged children and young people by:

- Promoting awareness of the need for MMR vaccination
- Increasing the availability of MMR vaccination within Gwent and delivering a school-aged MMR programme/campaign
- Developing contingency plans for possible increased numbers of cases and potential local outbreaks.

A draft Measles Outbreak Response Plan has also been produced.

1.2 Reporting

The Director of Public Health reports on progress to the Executive Team and the Public Health and Partnership Committee of the Board.

2.0 Promoting awareness of the need for MMR vaccination

2.1 Communications plan

A local ABHB communications plan for health, local authorities, educational settings and wider partners has been developed and is currently being implemented. The Communications Officer works with the local press to raise awareness of activity. The plan dovetails to the press/media engagement activity which is led by Public Health Wales and the Public Health Wales Communications link to ABHB, is copied in to local correspondence.

2.2 Engagement with Local Authorities, Further Education Colleges and wider partners

The Chief Executives and Directors of Education of the 5 Local Authorities in the Gwent area were informed of the Measles Emergency Group and its priorities on 5th April 2013. The Health Board has secured full support from all 5 Local Authorities and Principals of Further Education Colleges to implement the MMR Plan. Relationships have been established with nominated key individuals to work with ABHB to actively implement

plans. Chief Executives and Directors of Education are updated on a weekly basis on the work of the Group. Update reports to Gwent Local Resilience Forum are also to be submitted.

Other organisations which are actively engaged to support the MMR Plan include local housing associations and the voluntary sectors.

Actions implemented to date across the 5 Local Authorities and partner agencies include:

- Letters sent to parents/guardians of school aged children (primary, secondary & pupil referral units) regarding the risk of measles and the need to ensure children are vaccinated (10th April)
- Letters to Directors of Education informing them of the school based campaign (16th April)
- Information produced for Family Information Services and cascaded via their social media networks to organisations which work with children and young people (e.g. scouts, play groups, nurseries, colleges, child minders, clubs etc.)

Further details on actions can be seen in the Communications Plan.

3.0 Increasing the availability of MMR vaccination within Gwent and delivering a school-aged MMR programme/campaign

3.1 Targeting children and young people

Whilst individuals born after 1970 are being encouraged to get vaccinated against measles, the plan focuses on children and young people of school age who missed out on MMR vaccine for whatever reason in the past so that they are offered catch up vaccinations to provide maximum protection to the community as a whole.

Target group: Under immunised school aged population (no or one MMR in past) with special focus on 10-18 year group who have had no MMR immunisation in past.

3.2 Population at risk of measles

It is estimated that 17,492 individuals aged between 2 and 18years are at risk from measles, (in the Aneurin Bevan Health Board area), as they have not received one or two doses of MMR vaccine (see table 1).

Table 1: Numbers of children aged 2-18 years under-immunised (unvaccinated or partly vaccinated) in Welsh Health Boards, April 2013 (from PHW data)

Health Board	Total numbers	Numbers under-immunised	Rate of imms per weekday necessary to immunise all susceptible beginning 22/4 to complete by 24/5 (25 days)
Abertawe Bro Morganwg	90360	14176	567 (567.04)
Aneurin Bevan	114718	17492	700 (699.68)
Betsi Cadwaladr	126007	12551	502 (502.04)
Cardiff and Vale	92072	12777	511 (511.08)
Cwm Taf	56092	6511	260 (260.44)
Hywel Dda	65959	10184	407 (407.36)
Powys	22978	4510	180 (180.40)

The summary data supplied by Public Health Wales on Thursday 11th April has been crossed checked using more up-to-date reports from the Child Health System to identify the susceptible population. This list has been used to inform prioritisation of schools to commence vaccination.

A three-pronged approach is planned to actively offer parents the opportunity to have their unprotected children/young people immunised through:

- Implementing a schools and further education college based MMR catch-up programme/campaign targeting young people aged 11 to 21 years, and children of primary school age
- Primary Care clinics for Primary School children
- Increasing availability of MMR vaccine including drop-in MMR clinics

3.3 Schools and further education colleges based catch-up programme/campaign

Implementing a schools and further education college based catch-up programme/campaign targeting young people aged 11 to 21 years, and children of primary school age.

We advocate a proactive approach targeting school-aged children who are either unvaccinated or partially vaccinated across the ABHB area. Some areas in Gwent such as Blaenau Gwent Local Authority do not have 6th forms within their comprehensive schools and instead pupils study for their A 'Levels at colleges of further education. There are 2 Colleges of Further Education operating from 6 different sites across Gwent, and all of these have been included within the delivery plan, along with the 5 special schools and 4 Independent schools.

MMR Clinics will be held and delivered in all:

- 6 colleges of further education
- 5 special schools
- 42 secondary schools (including 4 Independent schools)
- Primary Schools identified with 50 or more children unvaccinated or partly vaccinated. (Remaining primary schools will be immunised via Neighbourhood Care Networks).

The delivery plan is commencing in Further Education College on Wednesday 24th April, Comprehensive Schools on Monday 29th April and aim to complete the campaign delivery plan by 24th May 2013. Schools have been prioritised according to the highest number of children/young people who have not been protected by having two MMR vaccines. The planning is based on a 50% uptake rate (with consent granted), with two schools per day being completed, utilising 58 staff per week (nurse immunisers and support staff).

The schools delivery plan lists the diary of scheduled school sessions.

The immunisation status of all Looked After Children will be checked and MMR offered to those at risk. This will be completed by 24th May 2013.

- **Primary Care clinics for Primary School aged children**

Plans are well underway in Primary Care to proactively target all those under-immunised children who attend primary school, and young adults who would not be reached by the schools programme, again striving to achieve this by 24th May 2013 working through Health Visitors and General Practices collaborating via Neighbourhood Care Networks.

The Child Health System department has made available list of patients whose vaccination status is incomplete (by General Practice). These lists have been given to General Practices

to enable them to proactively contact parents and invite them to bring their children for MMR vaccines. General Practices together with Health Visitors are currently contacting families with unimmunised children on their lists to offer the vaccine within Primary Care. Both GP's and HV's are co-ordinating additional clinical activity to accommodate the demand for the vaccine.

Plans are also in place to 'run' lists of children who are either unvaccinated or partially vaccinated by primary schools. A personal letter will be sent to the parents/guardians to invite them to attend a primary care MMR clinic for their vaccination.

In the 7 day period ending 21st April 2013 there were 1291 doses of MMR given to patients at non-routine ages in General Practice in Aneurin Bevan Health Board, which accounts for 22% of those given in General Practice for that period across Wales.

The childhood scheduled programme continues to be delivered as normal throughout Gwent in the present situation with children being called for their first MMR vaccination at the age of 12-13 months and their second MMR vaccination at 3 years and 4 months.

3.4 Drop-in MMR clinics

- **Saturday MMR Drop-in Clinics**

Special drop-in MMR Clinics have been organised on Saturdays to increase the availability of MMR vaccine. These were promoted through networks targeting parents of schools aged children (e.g. Family Information Services, local colleges, ethnic community networks, youth services, education system, local press etc.).

The following clinics have been held:

- Saturday April 13th 2013 (11am to 3pm)

The first special drop-in MMR clinics were held by Aneurin Bevan Health Board on Saturday 13th April, at Ysbyty Ystrad Fawr and Bellevue Surgery, Newport, between the hours of 11a.m and 3p.m. Both clinics were successful with a total of 815 individuals vaccinated, 563 in Ysbyty Ystrad Fawr and 252 at Bellevue Surgery.

- Saturday April 20th 2013 (10am to 4pm)

Three MMR drop-in clinics were held on Saturday 20th April at Main Outpatients Departments of the following hospitals: Ysbyty Ystrad Fawr, Royal Gwent and Nevill Hall. A total of 1615 individuals were vaccinated.

The plan is to continue to hold special drop-in MMR and review on a weekly basis at the Measles Emergency Group.

Prisons (vulnerable population)

There are 2 HMP Prisons within the geographical area that Aneurin Bevan Health Board serves, Usk and Prescoed. MMR vaccinations will be offered at the prison for inmates.

Substance misuse Services (vulnerable population)

Gwent Specialist Substance Misuse Service (GSSMS) and Kaleidoscope have immunisers working within their services. It has been agreed that the services will offer and administer MMR vaccine to service users, under the age of 25 years, who are under vaccinated, in line with the Immunisation Governance Framework.

- **Gypsy and traveller community (vulnerable population)**

Staff linked to gypsy and traveller community sites are promoting uptake of the vaccine and will be offering vaccination on sites.

- **OH staff**

A plan for staff has been developed.

3.5 Contingency planning for increased numbers of cases and potential local outbreaks

In the event of an outbreak of measles in the Aneurin Bevan Health Board area in a setting such a nursery, school, college or workplace there will be a requirement to provide an outbreak response to the area. The Health Board will co-ordinate a team to visit the venue and deliver vaccines to the contacts in that area. Dependent on the area this will be a resource from School Nursing, Health Visiting, Primary Care, Secondary Care. Extra staffs are currently being identified and training arranged to increase capacity of staff able to immunise.

Appendix B

Extract from : Update on MMR vaccinations given to children and teenagers aged 10-18 years. Draft Report.

Table 1: Headline data for MMR immunisations given during the outbreak up to 17th June 2013:
All ages, apart from those at which MMR is routinely given.

All ages					
	GP*	Drop in	School	Occupational Health	Total
Abertawe Bro Morgannwg UHB	16500	8674	1749	2600	29523
Aneurin Bevan HB	8926	2940	2094	472	14432
Betsi Cadwaladr UHB	2974	0	1344	548	4866
Cardiff and Vale UHB	4310	214	1283	1108	6915
Cwm Taf HB	3299	0	1640	466	5405
Hywel Dda HB	5374	570	1204	386	7534
Powys Teaching HB	2440	29	330	59	2858
Wales	**43823**	**12427**	**9644**	**5639**	**71533**

* Based on data submitted each week by approximately 90% of practices

Table 2: Headline data for MMR immunisations given during the outbreak up to 17th June 2013:
10 – 18 year olds

10 to 18 year olds				
	GP*	Drop in	School	Total
Abertawe Bro Morgannwg UHB**	2787	1017	1749	5553
Aneurin Bevan HB***	2357	374	2094	4825
Betsi Cadwaladr UHB	837	0	869	1706
Cardiff and Vale UHB***	1354	24	1277	2655
Cwm Taf HB	1066	0	1374	2440
Hywel Dda HB***	1026	68	1204	2298
Powys Teaching HB	662	11	330	1003
Wales	**10089**	**1494**	**8897**	**20480**

Total given in prisons	**1629**

Grand total	**73162**

** Based on data submitted each week by approximately 90% of practices
** Drop-in clinic data for 10 - 17 year olds
*** Drop in clinic data estimated for 10 - 18 year olds based on 12% of total for all ages

Source: Public Health Wales Health Protection Division, 17 June 2013.

ANEURIN BEVAN HEALTH BOARD STAFF MMR VACCINATION STATUS

1.0 Purpose

The purpose of this paper is to provide information for Welsh Government on the MMR status of Aneurin Bevan Health Board (ABHB) staff and the programme that is in place to achieve full vaccination.

2.0 Current Measles Situation in ABHB Area

There has been a rise in the number of notified and confirmed cases of measles in the Aneurin Bevan Health Board (ABHB) area but there is not an outbreak of measles in the ABHB area.

Measles is highly infectious and can be a very severe illness which can cause serious and permanent complications such as eye disorders, deafness or brain damage, including death.

An individual who has not been immunised, or hasn't had measles before, has a 90% chance of catching measles if they come into contact with a case. The only way to gain protected from measles is by vaccination. Two doses of MMR are required to give protection

3.0 ABHB Staff MMR vaccination programme

Healthcare workers have a key role to play in minimising the effects of any outbreak by making sure that they are immunised. This will ensure as far as possible that they do not contract the disease or act as a vector to infect colleagues, patients and others

in the community. This is particularly important as measles is communicable from about 4 days before the rash onset.

The MMR vaccine is particularly important for staff who may transmit measles to vulnerable groups, especially those patients who are immunocompromised. While healthcare workers need the vaccination for their own benefit, ideally they should also be immune to measles to protect patients.

All new employees undergo a pre-placement health assessment, which includes a review of immunisation needs. If staff are assessed and considered to be at risk of exposure to measles, mumps and/or rubella they are offered routine pre-exposure immunisation as appropriate.

As an employer ABHB can demonstrate through its occupational health service that the practical principles for an effective staff immunisation programme are in place to offer employees vaccination but it is not compulsory for staff to accept the offer uptake of MMR vaccination.

Staff who have regular clinical contact with patients and who are directly involved in patient care include doctors, dentists, midwives, nurses, ancillary staff, occupational therapists, physiotherapists, radiographers, students and trainees in these disciplines. Volunteers who are working with patients are also included.

According to the ABHB workforce information approximately 8900 of the 13200 employees are involved in direct patient contact.

Although individuals born before 1970 are likely to have had measles and are therefore less likely to be susceptible to the disease, occupational health do offer the MMR vaccine to this group.

4.0 Plan for increasing ABHB staff MMR uptake

- Promoting awareness of the need for MMR vaccination
- Increasing the availability of MMR vaccination

3.1 Promoting awareness of the need for MMR vaccination

- Senior managers in the highest risk areas were contacted on 04/04/13 to raise awareness around the need to improve vaccination uptake
- Information for staff is on the intranet

- Clinical areas across ABHB have been visited/sent information.
- Importance of vaccination covered at corporate induction.
- Staff who do not attend for their second dose of MMR are sent two reminder letters.

3.2 Increasing the availability of MMR vaccination

The plan is to actively offer staff the opportunity to have their MMR vaccination by:

- Occupational Health resources have been re-directed to deliver more MMR vaccinations in the three occupational health departments and in high risk clinical areas.
- Staff who request MMR vaccination are being offered an Occupational health appointment within 48 hours. 2 drop in clinics have been held (Royal Gwent Hospital 15/04/13 and Ysbyty Ystrad Fawr 16/04/13).
- Occupational Health staff are attending higher risk workplaces to vaccinate staff on site
- Staff in certain areas, where they have the competencies, are vaccinating their own teams e.g. midwifery, school nurses, and certain district nursing sites.
- Occupational health usually administer 20 -25 doses of MMR vaccine each month. So far 119 doses have been administered in April 2013 (91 first doses, 28 second doses).
- In the number of measles cases rises significantly in the ABHB area the occupational health nursing team will stop routine clinical work and further divert resources into further increasing the MMR uptake amongst ABHB staff.

25th April 2013

Appendix D

Aneurin Bevan Health Board Communications Action Plan for Local Authority and wider partners to promote awareness of the need for MMR vaccination

Setting/Service/Network	Target audience reached	Resources required	Dissemination mechanism	By whom	Target date	Progress
Early Years Development & Childcare Partnership* • Baby & Toddler Groups • Toy Library • Playgroups and Cylch Meithrin (Sessional Day Care) • Nurseries (Full Day Care) • Childminders • Afterschool Clubs • Holiday Play Schemes • Open Access Play	Parents with children aged 0-5 years	General information Poster 10 by 5 materials PHW website link	Email cascade via LA link	ABGPHT	12/4/2013	Completed
Family Information Service • Integrated Children Centres • Play Service • Parenting • Sports Clubs/Associations • Uniformed Groups • Young People's Outdoor Activity Groups • Families First Community Hubs	Parents of children and young people aged 0 to 18 years Families	Letter to parents General information Poster 10 by 5 materials Information regarding extra vaccination clinics	Email where possible, mail otherwise Twitter and Facebook Agreement with FIS to distribute on our behalf	ABGPHT ABHB Comms	12/4/2013	Completed
Schools • Nurseries • Primary Schools • Secondary Schools • Pupil Referral Units	Parents of children aged 3 to 18 years and	Pupil letter via LA Education Dept	Distribute via LA Director of Education via usual schools communication	ABGPHT	09/4/2013	Completed

• Special Needs School	teenage pupils Staff	Information regarding extra vaccination clinics General information for websites and link to PHW website	routes Daily twitter and Facebook messages promoting school vaccination clinics	ABGPHT / Comms Team	10/4/2013	
Youth Support Services • Statutory • Detached • Voluntary Sector • Youth Forums	Young people aged 12-25 years	General information and promotional materials Posters	Distribute materials via LA links	ABGPHT	11/4/2013	Completed
Leisure & Cultural Services • Active Living Centres • Play Centres • Sports Clubs • Libraries • Community Centres • Art Centres & Theatres	0-25years	General information and promotional materials Posters	Distribute materials via LA links		24/05/13	Completed
Social Services • Adult Social Care • Looked After Children • Fostering & Adoption		Liaise with LAC nurses asking they check MMR status of LAC and facilitate vaccination as necessary		Via Linda Brown ABGPHT	15/05/13	Completed
Further & Higher Education • Coleg Gwent o City of Newport o Crosskeys	Young people aged 16 years +	Student letter General information Poster Twitter	Email distribution For website and 'blackboard/ intranet'	ABGPHT	12/4/2013	Completed

○ Blaenau Gwent Learning Zone (Ebbw Vale) ○ Pontypool ○ Usk ○ Ystrad Mynach • University of Wales Institute Newport	Staff	Promotional materials/consent forms and letters Notification of extra 'clinics'				
Third Sector • Gwent Association of Voluntary Organisations (GAVO) • Torfaen Voluntary Alliance (TVA) • Communities First	0-45 years	General information Promotional materials Posters PHW Website link	Email cascade directly and via LA link	ABGPHT	18/4/2013	Completed
Work places	16-45years	Letter for employers / employees (where there is a confirmed case within the workplace) Letter to all LA staff General Information to cascade via South Wales Chamber of commerce Poster PHW Website link	Email via HP team Email to cascade via South Wales Chamber of commerce Cascade for use by LA and ABHB	ABGPHT	11/4/2013 18/4/2013	Completed Completed South Wales Chamber not pursued due to associated costs.

Welfare & Advice • Job Centre Plus • Citizens Advice Bureau • Council One Stop Shop/Call Centres • Benefits Advice Centres		General information Promotional materials Posters	Information cascaded via LAs	ABGPHT	15/05/13	Completed
Prisons	16-25	Promotional information linked to vaccination clinics	Prisons Health care Manager Agenda item for forthcoming Prisons Partnership meeting	ABGPHT/ Primary Care Lead	30/4/2013	Completed
ABHB Primary care and community	1-25	General information for targeted groups of low uptake Posters PHW website link	Cascade to Practice Managers	Primary Care Lead / ABGPHT	April/May	Completed
Exec level update	Corporate	Updates	To LA contacts, LA Heads of Public Protection, GAVO and TAVO	ABGPHT/ Health Protection	Regular communication	Completed

*Membership of the Early Years Development & Childcare Partnership typically includes Local authority representation from Education and Social Services, maintained nursery schools, National Childminding Association (NCMA), Wales Pre-school Playgroups Association (WPPA), Clybiau Plant Cymru Kid's Clubs (CPCKC), Mudiad Ysgolion Meithrin (MYM), Private sector nurseries, Flying Start, Satellite Family Support Services and Family Information Service (FIS)

Appendix E

Aneurin Bevan Health Board
Measles Outbreak Response Plan
April 2013

Draft for ratification

Introduction

The current outbreak of measles in Swansea and further cases emerging across Wales is a Public Health Emergency. Measles is a highly contagious illness and the epidemic has begun in that area due to low uptake of the MMR vaccine. In the ABHB area, despite better vaccine uptake there are over 9000 children in school from reception class to year 11 who have not received any MMR vaccines and a further 2,300 who have missed their second dose. The MMR vaccine is recommended by the World Health organisation, UK Department of health and Public Health Wales as the most effective and safe way to protect children against measles.

Within the Gwent area the Health Board working with General Practitioners (GP's) and Public Health Wales have developed a response to proactively meet the immunisation needs of the local population, manage any individual patients presenting with measles and respond to outbreaks should they occur.

It is important that a local response is able to support the Gwent population and prevent spread of the disease.

Delivery of MMR immunisation

Public Health Wales have identified the most effective way to control the outbreak of measles in Wales is by assertive action to ensure all children have been fully immunised with MMR. The Health Board have information available of vaccination uptake across Gwent by Borough, and this can be broken down to information by GP practice using the CHS records. Therefore the following actions will in undertaken in the Gwent area;

Immunisation in response to enquiries

A number of families have already been in contact with the Health Board requesting MMR vaccinations for children who have not had any vaccines or just one dose. GP's and Health Visiting Teams (HV's) will ensure that those families who contact them will have access to the vaccines within 48 hours following request.

To assist those receiving calls within GP practices and HV teams a script will be developed with questions to ask to ensure that the vaccination is required, and giving appropriate sign posting to where the vaccine can be accessed.

Proactive approach to promote vaccine uptake

Across Gwent there will a proactive approach to support uptake of those who have not received MMR vaccinations or who have had one and not attended for the second. GP's together with HV's will contact families with unimmunised children on their lists to offer the vaccine. Both GP's and HV's will co-ordinate additional clinical activity to accommodate the expected demand for the vaccine. Additional clinics need to be in place to include evenings and Saturdays.

To enable GP's to have the accurate information they require to contact patients and families the vaccination data from Child Health System has been made available by practice.

Additional vaccines will need to be available for practitioners to deliver and clinical sites accessible for administration.

Outbreak response

Should there be a confirmed case of measles in a setting such a nursery, school, college or workplace there will be a requirement to provide an outbreak response to the area. The Health Board will co-ordinate a team to visit the venue and deliver vaccines to the contacts in that area. Dependent on the area this will be a resource from School Nursing, HV or nursing teams. The immunisation co-ordinator will support the development of this resource, ensuring training is up to date and individuals are aware of and signed off on the PGD.

Occupational Health

ABHB Occupational Health Team has put in place provision to vaccinate any staff not already protected against measles. The PGD allows staff of any age to be vaccinated and should be particularly directed at staff providing direct patient care to patients in at risk areas.

Clinical Directors have been advised of this resource and should ensure all staff within Divisions are made aware of this provision.

Supply and provision of vaccine

The Health Board hold a stock of MMR vaccines, quantities have been issued out to GP practices (week commencing 1st April) A further 5000 doses have been ordered with delivery expected on Wednesday 10th April. Pharmacy will liaise with the transport department to ensure delivery systems are in place, maintaining the cold chain.

The vaccine is a single dose and is in a syringe presentation requiring reconstitution.

Patient management

Effective diagnosis of measles is important to ensure patient management and accurate reporting.

The clinical diagnosis of measles includes the following features….

- Fever (>38°C if measured); plus
- Rash (on the third to seventh day, which usually starts on the face); plus one of
- Conjunctivitis, cough, coryza

The experience from Swansea is that true measles cases are consistently following this case definition.

There are a number of other conditions that may be confused with measles (eg. Scarlet fever, Roseola, other virus infections with rash). If there is any doubt clinicians should seek advice from experienced colleagues.

Primary Care settings

If Patients contact practices concerned that they or a family member have measles they should be offered a home visit if required rather than presenting at the practice due to the highly infective nature of the illness. If they present at practice they should be supported to wait attention away from the general waiting room wherever possible to avoid spread.

Secondary Care settings

Individuals may present at secondary care settings with the symptoms of measles. A flow chart for the management of patients presenting at secondary care settings will be in place to ensure a

consistent approach to management. Infection control procedures should be in place to ensure that individuals do not wait to be seen in general waiting rooms to prevent spread of infection. Individuals would not normally be admitted with measles however should they present with complications they may require admission. If children present with a confirmed case of measles Paediatric teams will provide MMR vaccines to patient's contacts presenting should they require it.

Confirmation of Diagnosis

Confirmation of diagnosis should be sought in individual suspected cases. In the context of an outbreak of clear measles cases this may not always be necessary.

For cases managed at home Public health would usually send a saliva test out to the families concerned. This is sent by post to Colindale and can take 7 days for results. This method has proved to have a good uptake and return rate. In hospital settings, with severe cases, when an urgent result is required specimens for PCR, or blood IgM analysis can be sent to Cardiff, with results usually within 24 hours.

Vulnerable contacts of measles cases (Immunocompromised patients, pregnant women and very young patients)

The Public Health Wales Health Protection Team will do a risk assessment on the need for HNIG and advise accordingly, and make the necessary arrangements.

Reporting cases

Measles is a notifiable disease and all cases must be reported to the Public Health Wales Health Protection Team.

Communications

Public Health Wales have already produced information for the press and public in the Swansea area, this can be drawn upon to provide consistent messages locally.

GP's and HV's need to contact patients to actively encourage the uptake of vaccine by those children not protected.

Public Health Wales have also made contact with Local Authorities to advise them of the extent of the local issues the need for an increased uptake of the MMR vaccine and the school intervention process should an outbreak occur.

The Health Board should also optimise all the current modes of communication (including the facebook and tweets) to share information and promote vaccine uptake.

Dr Nehaul will also contact partner members of the LRF Infectious Diseases group to make them aware of the local planning processes.

Appendix F

Examples of Work to promote and increase the uptake of MMR and other childhood vaccinations in two areas of Gwent prior to the reorganisation of Health Boards in 2009

- The uptake of childhood vaccination and the associated risk of disease due to low uptake of MMR have been identified across Gwent in Health Social Care and wellbeing Health Needs Assessments (2003-2012) in Gwent and assessment of needs in relation to children and young people since 2004.
- In Monmouthshire in response to the Welsh Health Circular, Monmouthshire Health Board had a Local Enhance Service in place for the vaccination of those under vaccinated, up to the age of 25 years
- Childhood vaccination uptake rates were fed back 6 monthly at the Practice Managers forum in Monmouthshire which provided a forum to promote good practice and raise related problems
- From 2008, Monmouthshire Local Public Health Team chaired a multidisciplinary immunisation group, which reported to Monmouthshire LHB Management Team, as well as associated Children and Young People's Partnerships
- Monmouthshire Local Public Health Team regularly provided materials promoting MMR to Primary care
- Promotional materials for childhood vaccinations were regularly provided for Local Authority Publications such as the Council Tax publication in Monmouthshire and Community Spirit both free to all Monmouthshire household
- Promotional materials for childhood vaccinations were produced for parenting network newsletters in Monmouthshire
- As a result of collaboration with the Healthy School's Officer, there is a section promoting childhood immunisation for the 'School Starters' book, that goes to all parents of new starters across Monmouthshire each year
- In 2008, the Public Health Team presented health information including that relating to low MMR rate and the risk of measles at the Head Teacher's conference in Monmouthshire
- Presentation on the importance of Teenage Vaccinations to Head Teachers conference in Monmouthshire 2008
- Increasing childhood immunisation uptake rates is a specific action in the Monmouthshire and Caerphilly's Children and young people's strategy 2008-11
- In 2006, Caerphilly LHB implemented a MMR catch up campaign targeting young people aged 11-25 years of age. The Campaign was undertaken in secondary schools, with those not in education or unable to attend the school sessions offered immunisation in primary care.

- Promotional materials for the above campaign were widely distributed in local colleges, business, libraries, job centres etc

Appendix G

Examples of Aneurin Bevan Health Board wide actions to increase uptake of MMR

2009 onwards

- 'Get Protected' campaign was a targeted bilingual campaign aimed at young people, which used posters and leaflets, radio adverts, competitions and educational sessions with young people to promote teenage vaccination including MMR. Materials were designed and piloted involving young people. Leaflets were distributed via school health nurses to all those in years 10, 11, 12 and 13 across Gwent, including those 'not in education, employment or training'. Materials were also produced to put of schools websites. The campaign addressed teenagers themselves and their own responsibility for ensuring their immunisation status as they grow into adulthood, as well as parents. This was because in the past promotional efforts were focused more at parents. This required work with all secondary and private schools in Gwent and liaison with primary care, since young people were directed to their GP to catch up on missed vaccinations (Feb- Jun 2010).

- In 2011, Director of Public Health Annual Report presentation to Caerphilly Local Authority: Health Social Care and Wellbeing Partnership, Scrutiny Committee and to Council included importance of promoting and improving childhood immunisation uptake to meet targets.

- Presence and materials promoting vaccination at the Fresher's Fairs at Coleg Gwent campuses in 2011 and 2012.

- As part of European Immunisation Week, information was sent out to all GPs across Gwent in relation to how to raise and structure a conversation with parents reluctant to get their children vaccinated

- In 2012, materials regarding measles outbreaks across Europe and the recommendation for MMR to young people under vaccinated prior to holiday travel were drafted and sent to all primary and secondary schools in across Gwent. The Head teachers were asked to post materials on their website. Many schools forwarded this information to individual parents via text or email messages.

- The immunisation component of the Healthy Pre-Schools scheme has been promoted and used in all 5 Local Authority areas, which encourages pre-school

establishments to ask vaccination status of both children and their staff and recommend staff access 2 doses of MMR (2012).

- Materials prepared in relation to the routine childhood vaccination schedule and how to access vaccination services, for South East Wales Regional Equity Council for translation into different languages, for their website.
- Wide distribution of the ‘10 by 5’ Vaccine Preventable Disease Programme (Public Health Wales) campaign 2013 across Gwent.

Y Pwyllgor Iechyd a Gofal Cymdeithasol

Ymchwiliad i'r achosion o'r Frech Goch : Tystiolaeth Ysgrifenedig o Gyngor Bwrdeistref Sirol Castell-nedd Port Talbot

Cefndir

Ar ddydd Mercher, 27 Mawrth, 2013, derbyniodd yr Awdurdod, yn ogystal â Chynghorau Abertawe a Phen-y-bont ar Ogwr, wahoddiad brys i anfon cynrychiolwyr i gyfarfod asiantaeth ar y cyd gan fod pryder yn codi ynglŷn â nifer yr achosion o'r Frech Goch yr adroddwyd amdanynt yn ardaloedd Abertawe, Castell-nedd a Phort Talbot.

Cymerodd Cyfarwyddwr Addysg Cyngor Castell-nedd Port Talbot y penderfyniad fod angen i gynrychiolwr fynychu'r cyfarfod o ganlyniad i'r pryder a fynegwyd gan weithwyr iechyd proffesiynol. Fe fynychais yr holl gyfarfodydd yn ystod yr ymgyrch i gynrychioli'r Cyngor Bwrdeistref Sirol.

Rhoddwyd statws Grŵp Arian i'r cyfarfod fel rhan o weithdrefnau cynllunio ar gyfer/ymateb i argyfyngau PABM. Daeth difrifoldeb y broblem a oedd yn wynebu'r gweithwyr iechyd i'r amlwg yn fuan iawn.

Roedd y ffigurau a gyflwynwyd yn amlinellu fod 7,500 o blant mewn perygl o gael yr afiechyd yn ardal iechyd PABM, 139 o ysgolion yn adrodd am o leiaf un achos, cadarnhad bod 500 o bobl eisoes â'r Frech Goch a 51 o bobl yn yr ysbyty. Hysbyswyd aelodau'r Grŵp Arian, er bod y cyfryngau yn adrodd am y cynnydd yn yr achosion o'r Frech Goch, nid oedd yn cael effaith ddigon arwyddocaol ar bobl i dderbyn brechiad.

Rhannwyd pryder ymhlith y grŵp ynglŷn â Gwyliau'r Pasg lle byddai plant o un ysgol/cymuned yn cymysgu â phlant o rai eraill ac roedd hyn yn fygythiad mawr lle gallai'r afiechyd ymledu ymhellach.

Dyma'r gweithrediadau y cytunwyd arnynt yn y Cyfarfod Grŵp Arian cyntaf:

1. Creu tri thîm ardal pwrpasol i ymdrin â phrif ardaloedd daearyddol PABM, a'u rôl byddai cyd-drefnu ymateb ar gyfer pob ardal;
2. Lansio ymgyrch gyhoeddusrwydd newydd gan ddefnyddio pob dull posib o gyfathrebu gan amlygu'r neges i rieni a phlant am beryglon yr afiechyd a'r angen am frechiad.
3. Sefydlu sesiynau galw heibio ar benwythnosau ym mhedair prif ysbyty'r rhanbarth;
4. Trefnu rhaglen imiwneiddio ddwys mewn ysgolion i dargedu pob disgybl mewn ysgol uwchradd ac ysgol arbennig ar unwaith ar ôl Gwyliau'r Pasg.

O ystyried pwyntiau 1-3, rwy'n siŵr y byddai'r rhain wedi'u cynnwys mewn man arall yn yr ymchwiliad gan weithwyr iechyd PABM, felly, byddaf yn canolbwyntio fy nhystiolaeth ar bwynt 4: Y Rhaglen Imiwneiddio mewn Ysgolion.

Ffactorau a arweiniodd at yr achosion presennol o'r frech goch

Mae'n well bod gweithwyr PABM yn darparu'r wybodaeth ynglŷn â'r materion a arweiniodd at yr achosion o'r frech goch; fodd bynnag, mae'n bosib mai'r ffactorau a greodd y broblem ar y pryd oedd diffyg dealltwriaeth gyffredinol y cyhoedd o ddifrifoldeb y Frech Goch, neu hyd yn oed diffyg cydnabod hyd a lled y broblem (neu'r ddau). Cefnogir y syniad personol gor-syml hwn gan sgwrs gyda Phennaeth ysgol a gymerodd ran mewn rownd flaenorol o'r rhaglen imiwneiddio a gynhaliwyd cyn y Pasg, a chyn i'r ymgyrch gyfryngau gynyddu ymwybyddiaeth pellach. Ysgrifennwyd at rieni yr ysgol honno i amlygu'r nifer cynyddol o achosion o'r Frech Goch yn yr ardal ac i gynnig brechiadau yn yr ysgol, fodd bynnag, roedd y nifer a gafodd y brechiadau'n isel iawn. Esboniodd y Pennaeth, pan y gofynnwyd i'r rhieni pam y gwnaeth nifer mor isel dderbyn y brechiad, mai difaterwch y rhieni oedd y prif achos. Y gyfradd ragdueddiad ar ôl y sesiwn frechu hon oedd 80% o ddisgyblion yn unig; roedd hyn yn llawer is na chanlyniadau ysgolion uwchradd eraill yng Nghastell-nedd Port Talbot a gymerodd ran yn y Rhaglen Imiwneiddio mewn Ysgolion a gyflawnodd 95% a mwy. Mae cyfathrebu a gwaith pellach gyda

rhieni'r ysgol uwchradd hon, erbyn hyn, wedi codi'r gyfradd ragdueddiad bellach i ychydig dros 90%.

Camau a gymerwyd gan weithwyr iechyd cyhoeddus proffesiynol, mewn partneriaeth ag asiantaethau eraill, mewn ymateb i'r achosion
Yn syth ar ôl sefydlu'r Grŵp Ymateb Arian, roedd hi'n amlwg bod gwir ystyr i ymagwedd bartneriaeth ac nid "gwasanaeth trafod" yn unig, o ganlyniad i gyfranogiad asiantaethau eraill. Roedd ymrwymiad a chyfranogiad awdurdodau lleol a chynrychiolwyr y trydydd sector yn hanfodol er mwyn i'r cyfarwyddyd cytunedig gyrraedd cynulleidfa darged eang. Roedd gan bob un rôl a gwnaeth pob un gyfrannu'n effeithiol gan ddod â'u profiadau proffesiynol i'r bwrdd.

Dr Sara Hayes, Cyfarwyddwr Iechyd Cyhoeddus PABM, oedd cadeirydd y grŵp gyda chefnogaeth Mrs Karen Jones, Swyddog Cynllunio ar gyfer Argyfyngau PABM. Roedd eitemau cyfredol wedi'u cynnwys ar bob agenda a oedd yn ymwneud â rhaglen yr ysgolion ac ymateb yr awdurdod lleol. Rhoddwyd llais cyfartal i'r awdurdod lleol ac roedd ymdeimlad o barch y naill at y llall. Anfonwyd copïau o'r cofnodion, adroddiadau, diweddariadau a ffeithlenni yn electronig i'r holl bartneriaid ar yr un pryd ag yr oeddent yn cael eu dosbarthu i swyddogion mewnol PABM. Roedd hyn yn sicrhau, er bod angen i weithwyr proffesiynol, nad ydynt yn ymwneud ag iechyd, ddysgu'n gyflym iawn, roedd pob cyfranogwr y Grŵp Arian yn ymwybodol o'r prif faterion a'r ymateb wrth iddo ddatblygu mewn amser go iawn.

Datblygodd ymagwedd "gallu gwneud" drwy gael y bobl gywir yn eu lle o fewn y Grŵp Arian, heb unrhyw gyfeiriad at strwythurau, hierarchaeth na gwthio am safle. Roedd pob sefydliad yn y grŵp yn gyfartal o ran gwerth a safle. Gweithiodd partneriaid/asiantaethau o gefndiroedd gwahanol yn dda iawn gyda'i gilydd ar gyfer yr un nod.

Gweithiodd Tîm Cyfathrebu Cyngor Castell-nedd Port Talbot ar y cyd â Thîm Cyfathrebu PABM i hyrwyddo'r sesiynau galw heibio yn yr ysbyty ar y penwythnosau, y rhaglenni imiwneiddio unigol mewn ysgolion a'r neges gyffredinol yn annog dinasyddion Castell-nedd Port Talbot i dderbyn brechiad yr MMR. Sicrhaodd y ddau dîm bod cyflenwad

parhaol o ddatganiadau i'r wasg yn rhoi'r newyddion diweddaraf ac i hyrwyddo'r angen am frechiadau yn gyson yn y wasg er mwyn cadw'r broblem ym meddyliau pobl.

Rôl Cyngor Castell-nedd Port Talbot

Roedd Arweinyddiaeth a Phrif Weithredwr y Cyngor ac Uwch Reolwyr yr Adran Addysg yn derbyn y newyddion diweddaraf yn gyson trwy gydol y cyfnod dwys hwn. Roedd y gefnogaeth gan y Prif Weithredwr yn annogol iawn gydag arweiniad clir iawn y byddai'r Cyngor yn cyfrannu'n llawn ac yn darparu pa gymorth y gallai i'r PABM i gyflawni'r heriau enfawr o'u blaen. Roedd y cymorth a roddodd y Cyngor i'r Bwrdd Iechyd yn cynnwys:

- Darparu faniau a gweithwyr y Cyngor i gasglu, symud a gosod oergelloedd mawr yr oedd eu hangen ar gyfer y sesiynau galw heibio yn yr ysbytai a'r rhaglen imiwneiddio mewn ysgolion ar draws ffiniau Castell-nedd Port Talbot ac Abertawe;
- Gweithio ochr yn ochr â Thîm Cyfryngau PABM i atgyfnerthu'r prif negeseuon cyfathrebu allweddol trwy wefan y Cyngor a safleoedd Facebook a Twitter;
- Darparu staff y Cyngor ac adnoddau i argraffu, llenwi amlenni a phostio cannoedd o lythyron personol unigol i rieni plant Castell-nedd Port Talbot;
- Trefnu, cydlynu a hyrwyddo'r Rhaglen Imiwneiddio mewn Ysgolion ar ran Bwrdd Iechyd PABM.

Rhaglen Imiwneiddio mewn Ysgolion, Castell-nedd Port Talbot

Cytunwyd yn y Grŵp Arian cyntaf gan canolbwynt y clefyd yn rhanbarth Abertawe, dylai'r Rhaglen Imiwneiddio mewn Ysgolion ddechrau yn Abertawe yn ogystal ag yn ysgolion Castell-nedd Port Talbot sy'n denu disgyblion o ar draws y ffin. Cytunwyd mai'r ystod oedran targed fyddai pob disgybl ysgol uwchradd a'r rhai oedd yn ddiamddiffyn, megis disgyblion ysgolion arbennig.

Gwnaeth y Grŵp Arian gwrdd sawl gwaith yn ystod Gwyliau'r Pasg gan drefnu a pharatoi amserlen ar gyfer ysgolion i sicrhau fod cynifer o ddisgyblion â phosib yn cael eu targedi mewn cyfnod mor fyr â phosib.

Cysylltwyd â phenaethiaid yr ysgolion hynny a oedd yn rhan o wythnos 1 yr ymgyrch gartref yn ystod yr hanner tymor er mwyn cael caniatâd i gynnwys yr ysgol ac i ddechrau trefnu pethau er mwyn sicrhau llwyddiant y rhaglen a chyfradd brechiadau uchel. Dylid canmol y Penaethiaid wnaeth ymateb yn gefnogol iawn. Cysylltwyd â Phenaethiaid eraill ar raglen dreigl wrth gyd-drefnu'r ysgolion hynny a oedd yn rhan o wythnos 2 ac yn eu tro, wythnos 3 yr ymgyrch.

Yn ogystal â chyfathrebu â'r Penaethiaid hynny a oedd yn rhan o'r rhaglen ysgolion, cysylltwyd â Phenaethiaid, Cadeiryddion, Is-gadeiryddion a Llywodraethwyr eraill ysgolion Castell-nedd Port Talbot yn gyson gan roi'r wybodaeth ddiweddaraf iddynt am yr achosion, rhoi cyngor, ffeithlenni, cylchlythyron a chwestiynau cyffredin.

Gofynnwyd i ysgolion ddarparu copïau o'u logos a llun o'r Pennaeth er mwyn creu gwe-dudalen benodol ar gyfer pob ysgol er mwyn personoli'r ymgyrch i rieni a disgyblion. Trefnodd ysgolion i fanylion penodol eu hymglymiad â'r rhaglen yn ogystal â gwybodaeth ychwanegol am y Frech Goch i gael eu rhoi ar eu gwefan eu hunain ac anfon neges destun at rieni trwy system neges destun yr ysgol.

Anfonwyd llythyron personol unigol at bob rhiant drwy'r awdurdod lleol a oedd yn cynnwys ffurflen ganiatâd. Cafodd y ffurflenni eu holrhain ar gyfer ymatebion i weld a rhoddwyd, neu a wrthodwyd caniatâd, neu hysbysiad fod y disgybl wedi derbyn brechiad mewn man arall, neu fod y disgybl wedi gadael yr ysgol. Rhoddwyd yr wybodaeth hon i PABM i gael ei dosbarthu i wasanaethau gwahanol gan gynnwys y Prif Nyrs Ysgol, y Tîm Rheoli Meddyginiaeth ac Uned Ddata Iechyd Plant i gyfrifo faint o nyrsys a brechiadau fyddai eu hangen ym mhob sesiwn. Pan na ddychwelwyd ffurflenni, cysylltodd staff yn uniongyrchol â rhieni unigol i ofyn a dderbyniwyd y llythyron ac a oeddent yn bwriadu rhoi caniatâd. Yn y rhan fwyaf o achosion rhoddwyd caniatâd.

Cydlynodd yr Awdurdod Lleol â phob un o'i hysgolion ar ran PABM i sicrhau bod ystafelloedd addas ar gael i roi'r brechiadau, gosod a chysylltu oergelloedd, derbyn llif y disgyblion trwy gydol y dydd,

cynnig y brechiad i aelodau o staff a oedd am dderbyn yr MMR ac anfon negeseuon testun atgoffa a hysbysiadau i rieni.

Gyda diddordeb cynyddol gan y wasg genedlaethol a dechrau'r rhaglen imiwneiddio mewn ysgolion gofynnodd y cyfryngau am fynediad ar sawl adeg i ysgolion Castell-nedd Port Talbot er mwyn adrodd am yr ymgyrch. Darparwyd sylw cenedlaethol gan Ysgol Gyfun Cwmtawe ym Mhontardawe ac Ysgol Gyfun Dŵr-y-Felin yng Nghastell-nedd. Ymddangosodd erthyglau yn y Times, Telegraph a nifer o bapurau cenedlaethol prif ffrwd dyddiol eraill; ffilmiwyd ar gyfer BBC Wales, BBC News, SKY, ITV a Newsnight a chafwyd sylw hefyd ar radio lleol a chenedlaethol gan gynnwys Radio 5 Live. Gwnaeth Tîm Cyfathrebu'r Cyngor gydlynu'r ymateb hwn ochr yn ochr â Thîm Cyfathrebu PABM.

Gwnaeth Tîm Cyfathrebu Castell-nedd Port Talbot ganfod fod y cyn chwaraewr rygbi cenedlaethol, Christian Loader, athro chwaraeon yn Dŵr-y-Felin, yn derbyn ei frechiad yn yr ysgol a defnyddiwyd y cyfle i ehangu'r sylw. O ganlyniad dywedodd Mr Loader ei fod wedi colli ychydig o'i glyw o ganlyniad i'r Frech Goch pan oedd yn blentyn, ac arweiniodd hyn at hyd yn oed mwy o sylw cenedlaethol yn y DU i gadarnhau'r angen am frechiad MMR.

Gwnaeth cyfanswm o 13 ysgol uwchradd ac arbennig yng Nghastell-nedd Port Talbot gymryd rhan yn y rhaglen imiwneiddio mewn ychydig dros pythefnos. Targedwyd bron 1600 o ddisgyblion a oedd mewn perygl gyda dros 700 o ddisgyblion a staff yn cael eu himiwneiddio. Pan gyfrifwyd y data a chymerwyd y rhaglen ysgolion a'r disgyblion a aeth i'r sesiynau galw heibio mewn ysbyty neu'r Meddyg Teulu i ystyriaeth, dim ond un ysgol arbennig yn y Fwrdeistref Sirol oedd â chyfradd imiwneiddio a oedd yn is na 95%. Cyflawnodd un ysgol gyfradd imiwneiddio 100% a chyflawnodd un arall 99%. Fel ymateb partneriaeth, roedd hwn yn wych.

Yn ogystal â'r Rhaglen Imiwneiddio mewn Ysgolion, cysylltodd swyddogion y Cyngor yn uniongyrchol â'r holl deuluoedd sy'n derbyn eu haddysg gartref, gan roi'r wybodaeth iddynt am yr achosion ac annog y rhai hynny nad oeddent wedi derbyn y brechiad i dderbyn yr

MMR. Roedd cydweithwyr yn y Gwasanaeth Ieuenctid, Gwasanaethau Plant a Llyfrgelloedd hefyd yn arddangos gwybodaeth yn gyhoeddus.

Gwersi y gellid eu dysgu er mwyn rhwystro achosion yn y dyfodol

Mae'n amlwg bod gan Awdurdodau Lleol sy'n gwasanaethu cymunedau lleol rôl allweddol ochr yn ochr â'r Byrddau Iechyd wrth geisio cael gwared ar rai o'r afiechydon hyn a ddylai, gyda'r brechiadau modern hyn fod yn afiechydon sy'n perthyn i'r gorffennol. Mae pawb sy'n ymwneud â'r Grŵp Ymateb Arian yn cytuno mai cyfathrebu uniongyrchol ac effeithiol oedd llwyddiant yr ymgyrch hon ac, os yw'r meddyginiaethau a'r brechiadau modern yn eistedd mewn storfeydd oer heb cael eu defnyddio, yna rhaid cael mai cyfathrebu beiddgar er mwyn atal achosion yn y dyfodol.

Materion da a rhai o'r gwersi allweddol a ddysgwyd o'r achosion presennol:

- Ymrwymiad a chyfranogiad personél allweddol o amgylch y bwrdd o bob sefydliad partner enwebedig;
- Mantais briffio'r rhai sy'n gwneud penderfyniadau o bob sefydliad partner yn gyson;
- Mae angen i sianeli cyfathrebu mewnol pob asiantaeth gael eu hagor er mwyn caniatáu eraill sy'n rhan anuniongyrchol, neu sydd â rolau eraill, i ddeall arwyddocâd y dasg a'r blaenoriaethau dan sylw;
- Amcangyfrifo ac ystyried faint o amser sydd ei angen ar ddechrau gweithredoedd mor fawr i asesu a ddylai staff (o bwy bynnag partneriaeth) gael eu danfon dros dro o'u swydd arferol i ganolbwyntio ar brosiectau tebyg ac yna dychwelyd i'w swyddi er mwyn sicrhau parhad y busnes;
- Mae data amser go iawn a chywir yn hanfodol nid yn unig i ddeall y broblem ond hefyd er mwyn cael ateb. Roedd sawl system TG iechyd nad oedd yn cyd-fynd â'i gilydd ac roedd gwir angen eu moderneiddio;
- Dylid gwerthfawrogi'r defnydd o negeseuon testun, Facebook a chyfryngau cymdeithasol eraill fel offer cyfathrebu torfol cyflym. Roedd targedu rhieni â negeseuon testun, a oedd yn eu harwain at we-dudalen benodol ysgol eu plentyn a oedd yna yn rhoi

gwybodaeth iddynt am y rhaglen imiwneiddio, yn effeithiol iawn. Mae gan y rhan fwyaf o rieni ffonau symudol erbyn hyn, gan gynnwys niferoedd cynyddol o'r disgyblion eu hunain. Prynodd PABM ofod hysbysebu ar Facebook a oedd yn anfon neges uniongyrchol at bob person rhwng 13 ac 18 oed a oedd wedi cofrestru gyda hwy o fewn radiws 40 milltir o Gastell-nedd. Fe gyrhaeddodd dros 13,000 o bobl ifanc ar unwaith. Mae rhan fwyaf o ysgolion Castell-nedd Port Talbot yn defnyddio gwasanaeth anfon neges destun pwrpasol at rieni fel dull o gyfathrebu cyflym. Mae wedi bod yn effeithiol iawn ar sawl adeg;

- Tra bod defnydd ysgolion o dechnoleg yn datblygu, nid oes gan bob ysgol fynediad i nodweddion syml megis gwasanaeth anfon neges destun at rieni. Rhywbeth yw hwn y gallai Llywodraeth Cymru ei ystyried fel menter genedlaethol.

Mae'r her yn parhau i bob sefydliad, beth bynnag eu sector neu lefel, os ydynt yn cyflwyno'n genedlaethol neu'n lleol i ennyn a chynnal digon o ddiddordeb mewn materion iechyd, felly nid yn unig yr MMR sydd ym meddyliau pobl, ond afiechydon peryglus tebyg hefyd.

John Burge
Prif Swyddog Llywodraethu Ysgolion
Cyngor Bwrdeistref Sirol Castell-nedd Port Talbot

Health and Social Care Committee
Inquiry into the measles outbreak 2013

The news media's role in the current outbreak of measles in Swansea

Dr. Andy Williams, School of Journalism, Media and Cultural Studies, Cardiff University

1 Introduction:

1.1 The recent spate of measles cases in Swansea now looks set to become the biggest outbreak in the UK since the introduction of the MMR vaccine in 1988. The scale of the problem has led some to ask questions about the role the news media played in fostering the current public health crisis. I was able to contribute evidence based opinions about this (on BBC Radio Wales, and on Radio 4's *You and Yours*) drawing on the excellent work carried out by JOMEC researchers Tammy Boyce, Justin Lewis, and Ian Hargreaves.

1.2 The evidence is clear. The UK news media have to share responsibility for what is happening in Swansea. They collectively dropped the ball over reporting the now discredited claims which linked the Measles Mumps and Rubella "triple vaccine" to autism in young children.

1.3 In the late 1990s and early 2000s, with very few exceptions, they gave far too much prominence to claims from controversial scientist Andrew Wakefield based on very thin evidence. It has since emerged that Wakefield's research was fraudulent, but even at the beginning of the media scare it was clear from the published evidence that there was no proven link between the vaccine and autism.

1.4 Enough public health experts and officials knew, and were saying at the time, that there was nothing in these claims, but these views were given too little prominence. The news media failed to check the facts, to evaluate the evidence, and also to give enough prominence to the expert voices who knew that MMR was safe. But in some cases it was even worse: it seems that too often the press saw the prospect of

reporting a controversy, a war of words between the “boffins”, as more important than passing on reliable information about public health, which was a real failing. In many cases the lure of conflict and controversy, both very common news values in reporting of science, was simply too strong for journalists.

2 What was the evidence for Wakefield’s claims at the time?

2.1 Much of the media scare coverage of MMR referred to a now retracted study published by Wakefield and others in the highly prestigious *Lancet* medical journal. Even if the study had been well conducted – which we know it was not – it was actually a “case control” study of just 12 children. It could never have justified the claim that MMR causes autism because it just didn't have enough participants. The media should have checked it out much more scrupulously, and arguably stopped reporting about it.

2.2 But again, it gets worse, Wakefield’s *Lancet* article actually admits it could not find evidence for a link between MMR and Autism. I am not a natural scientist, and I admit I sometimes struggle reading scientific papers, but these words from the journal article are actually very clear: “We did not prove an association between measles, mumps, and rubella vaccine and the syndrome described”. Wakefield made most of his claims about the supposed health risks of MMR in his public relations statements and interviews with journalists at sympathetic media outlets. This kind of science by press release should have been checked more against what his evidence actually showed.

2.3 Part of the reason why the news media did not report the claims more critically relates to the fact that science journalists, like their generalist counterparts, are under increasing pressures as newsroom budgets are cut, as staffing levels decrease, and as workloads rise. The steady stream of “information subsidies” provided to journalists by efficient and well-resourced PR operatives means that they are increasingly becoming processors, rather than active generators, of the news. They are more reliant on all kinds of media-facing PR than previously, and are

therefore more susceptible to claims made by unscrupulous and manipulative science communicators.

3 **The problem of "false balance":**

3.1 One of the main ways the news media messed up when reporting MMR was by balancing the news sources they quoted in their stories. When journalists report on politics it is common for them to quote a range of opinions from across the political spectrum, allowing readers to make up their own minds, and journalists to retain impartial.

3.2 But this can present problems when reporting on science. Science news should arguably be more concerned with communicating the evidence base, than simply reporting differing opinions on an issue. But on MMR, just as it often has when reporting about climate change, journalists still balanced their news stories. The weight of evidence was pretty much all on one side, MMR was (and still is) safe. But on the other side you had Andrew Wakefield, someone with no evidence, but who was shouting very loud and who was very adept at media management.

3.3 Lots of people saw those balanced news stories, and thought, "ah well, the scientists are arguing. They are not sure. They cannot make up their minds. It is not worth risking my child's health". And who can blame them? But there was no genuine split among the scientists, and the evidence clearly told us the vaccine was safe. In balancing stories about MMR the public were given the wrong impression by journalists.

4 **Swansea and the local press:**

4.1 The situation in Swansea was made worse by the fact that the local newspaper, the *South Wales Evening Post*, took a critical line on MMR, and gave quite a lot of prominence in its coverage to concerned local parents who (wrongly) believed their children were at risk from the jab. Swansea journalists were not alone in misinforming the public over MMR, most other UK papers and broadcasters did too. But that said the defense they have mounted recently is pretty surprising. The ex-editor at the paper claimed that they reported MMR like they did because their

readers were concerned about it. He went even further, claiming that he would do it all again the same way if it happened today. This is very concerning, and displays a lack of reflection about the role his newspaper's journalism played in creating the wrong impression about MMR.

4.2 It is true, one of the things newspapers should do is reflect public debate, but that is not all they should do. They have also got a responsibility to (as far as possible) check their facts, and check the evidence behind what they report. Otherwise they risk letting their readers down. It could be argued that generalist local journalists should not be expected to be able to read (often inaccessible and opaque) scientific papers. But part of the job journalists should do involves turning to expert sources who can guide them through difficult material and help them communicate it accurately and effectively. In this, the *Post*, along with many other news outlets, clearly failed.

4.3 The sceptical way news journalists reacted to the official (and correct) advice of scientists, medical professionals, and public officials is understandable to a point, however. Part of the recent historical backdrop to this story was the BSE crisis, in which the news media placed high amounts of trust in official advice about the risk of contracting CJD from BSE-infected beef only to find out later that this advice was incorrect. It could be argued that many journalists' and editors' distrust of official medical advice was rooted in part in the residual mistrust left over from this controversial news story.

5 Was the media actually to blame?

5.1 There is some very strong evidence that the media coverage affected uptake of the vaccine in alarming ways. Tammy Boyce's research, outlined extensively in her book about the MMR scare *Health, Risk, and News*, plots uptake of the MMR vaccine against the volume of news coverage at different stages of the scare, and she found a startling correlation: as the health scare built in the UK, uptake of MMR decreased. She then plotted media coverage against MMR uptake the USA, where there was no media scare, and found that vaccination rates

remained pretty stable. Some doctors in Swansea did a similar study, and found similar things in relation to the coverage of the South Wales Evening Post specifically.

5.2 Boyce also did some very strong audience research which shows just how many people were taken in by Wakefield's claims. It strongly suggests that people did not vaccinate their children because of the media coverage. In fact, her focus group research shows that people remembered the substance of Wakefield's scientific claims very badly. It seems that lots of us were not making decisions based on careful and rational evaluation of the evidence. But people did remember seeing reports of conflict between scientists, and they remembered repeatedly reading that some scientists were saying MMR caused autism. Her work suggests that Wakefield's false claims were believed in part because were repeated so often in the news.

6 **Current media coverage of the measles outbreak:**

6.1 This time around things have been a lot better in the news media. The Wakefield research has pretty universally (and rightly) been called "discredited", and the public health authorities have had a lot of air time and column inches. There has not been much acknowledgement of news media complicity in manufacturing this scare in the first place, but there has (again, rightly) been some soul searching.

6.2 Among the worst of the recent coverage has been the *Independent's* front page coverage of a self-serving attempt from Andrew Wakefield to defend himself, to claim his innocence of any blame for the current outbreak, and to drum up some more fake controversy. This is a pity, because publicity for his groundless claims is exactly what this man wants, and that what got us in this mess in the first place.

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Health and Social Care Committee
Inquiry into measles outbreak 2013 – Evidence from Sense

Paper to Health & Social Care Committee inquiry into measles
July 2013

About Sense

Sense is a national charity that supports and campaigns for children and adults who are deafblind. We provide tailored support, advice and information as well as specialist services to all deafblind people, their families, carers and the professionals who work with them. In addition, we support people who have a single sensory impairment with additional needs.

About deafblindness

Deafblindness is a combination of both sight *and* hearing difficulties. The complex impact of dual sensory loss means that it is a unique disability. Deafblind people often need support with communication, access to information and mobility.

About rubella

Sense was founded as the 'The Rubella Group' in 1955 by parents who had deafblind children after catching rubella while pregnant. One of the parents said: "It is difficult to believe that a minute virus,

so small it can only be seen with a microscope of great magnitude, could cause impairments to the vision and hearing of a child even before it is born."[1]

A baby born affected by rubella is said to have congenital rubella syndrome (CRS). Many will have hearing loss, cataracts, other eye conditions, and heart problems that require significant hospital treatment – and other support – and will affect the child throughout their life. A baby's brain can also be affected. Vaccination means congenital rubella syndrome is now very rare in the UK.

[1] http://www.sense.org.uk/peggyfreeman

Key points

The measles outbreak in Swansea was a warning about people who are unvaccinated against MMR. When the vaccination rate dips over a period of time or when particular groups of people are unvaccinated this can lead to outbreaks.

A catch up programme is needed to address immunisation gaps. Lower uptake of childhood MMR vaccination over an extended period in Wales means that it is no longer just a childhood issue. Unvaccinated children and babies have become unvaccinated young adults. In particular, we would recommend the programme targets people we know are likely to be susceptible to measles, mumps and rubella.

Wales has been rubella-free since 2006 but there is no room for complacency. We cannot rely on unvaccinated people avoiding exposure to measles, mumps or rubella. Last year saw more cases of rubella in England than in any year since 1999. The first notifications of measles in Swansea came from children who had caught measles while in England.

Single vaccinations are less effective than combined MMR and health professionals should continue to inform parents about this fact. Data in one study suggest that nearly half of children who had started to have single jabs did not receive the maximum possible protection against MMR. Six single jabs are needed to achieve the equivalent protection given by only two MMR jabs.

Response to the committee's terms of reference

1) Factors that led to the current measles outbreak

We would draw the committee's attention to the Welsh Health & Social Service Minister's description of the outbreak in Assembly plenary on 11 June 2013:

> "The recent outbreak in the Swansea area started last November when a small number of children returned home infected with measles from a holiday camp in south-west England. Those young people were drawn from an age group most susceptible to the disease because of low vaccination levels in earlier years. Moreover, they lived in a part of Wales especially vulnerable to a measles outbreak. The 1997 controversy about the MMR vaccine reduced the take-up of that vaccine everywhere, but particularly so in Swansea and Neath Port Talbot."

Sense Cymru thinks this description effectively summarises the main factors in the outbreak:

a) Lower uptake of MMR vaccination over an extended period of time

In 1990-2000 the proportion of children in Wales vaccinated once by two years old was 85.3% but had dropped to 80.1% by 2003-04, which was the lowest rate since 1989-90.[2] It increased in the years following this period but the drop off left a significant proportion

[2] Welsh Government statistical release (SDR 139/2012), NHS Immunisation Statistics, Wales, 2011-12, 28 August 2012

of the teenage and young adult population susceptible to measles, mumps and rubella.

b) Very close links between England and Wales

The Health Minister said that the children were infected with measles while in the south-west of England. Unvaccinated people are susceptible to measles, mumps and rubella regardless of where they are encountered.

We cannot take for granted that unvaccinated children from Wales will not catch mumps or rubella just because the numbers of cases in Wales has been low. If the vaccination rates drops the prospect of outbreaks increases. Wales is an internationally linked nation with considerable daily population movements into and from England and close links with Europe and the wider world.

In particular Sense Cymru would also draw the committee's attention to rubella in England. There were 65 laboratory confirmed cases of rubella in England in 2012 – more than in any other year since 1999.[3] In the first quarter of 2013 there were four cases in England, including in two pregnant women.[4] The measles outbreak was a warning: despite the absence of recent rubella cases in Wales rubella could follow if vaccination rates drop.

c) Groups of unvaccinated people

[3] Public Health England, Weekly Report, 22 February 2013
[4] Public Health England, Laboratory confirmed cases of measles, mumps and rubella (England), Q1 2013 – May 2013 reports

We are concerned that the outbreak shows that there was a significant geographic cluster of unvaccinated people in the wider Swansea area who were susceptible to measles, mumps and rubella.

The pan-Wales dip around 2003 in first MMR vaccinations for children aged two years was shared in the Swansea area, where the outbreak occurred. However, Public Health Wales data show vaccination rates in the Iechyd Morgannwg/Abertawe Bro Morgannwg UHB area fell further than the overall Wales rate of 80.1%, to around 73.0% between 2002 and 2004.[5]

Sense Cymru is concerned about particular cohorts of people who may be susceptible to rubella, mumps and measles or who may be at greater risk if there are outbreak. These groups include:

- 10-18 year olds.
- People born in the 1980s with incomplete MMR vaccination history.
- Ethnic minority people.
- People in areas where vaccination rates are known to be too low. The Welsh Health Minister's letter to the committee mentioned "particular concern" about susceptibility to MMR in Gwent.[6]
- Health professionals and workers
- Women thinking about becoming pregnant, and their families, and women identified as susceptible during antenatal health checks.

[5] Public Health Wales, Response to Health Committee, 29 May 2013
[6] Health Minister letter to Health Committee, 23 May 2013

Sense Cymru was concerned to note the establishment of a private clinic offering single vaccinations. We would draw the committee's attention to evidence in the British Medical Journal from a UK study (2008). It suggests only 52% of children having the single jabs had been fully immunised against measles, mumps and rubella by having six jabs.[7] By contrast recent data from Public Health Wales show that during Q1 2013 the proportion of five year olds getting their second MMR jab was 90%.[8]

d) Reasons for not seeking immunisation

We know there are various factors for parents or adults not seeking vaccination. They include:

- Lingering concerns about the safety of the MMR vaccination.
- Reduced awareness of the impact of measles, mumps and rubella, partly because the MMR vaccination has made them rarer. This potentially applies to younger healthcare staff as well as the wider population.
- People whose opportunities to be immunised or informed about immunisation are reduced, e.g. unvaccinated young adults no longer in education.
- Socio-economic reasons, e.g. ethnic minority people who have moved from countries where vaccination is not commonplace or people with restricted access to health information.

[7] British Medical Journal, Factors associated with uptake of measles, mumps, and rubella vaccine (MMR) and use of single antigen vaccines in a contemporary UK cohort: prospective cohort study, 28 January 2008
[8] Public Health Wales, Vaccine uptake in children in Wales: January to March 2013

2) Actions taken by public health professionals, in partnership with other agencies, in response to the outbreak

Public health messages are critical to the success of immunisation. Sense Cymru was pleased to work with Public Health Wales to raise awareness of rubella during the measles outbreak. We also noted Public Health Wales' awareness raising about mumps, which was a significant cause of viral meningitis and hearing loss in the pre-vaccination era.[9]

The Health Minister's statement in May 2013 contained very welcome messages about MMR vaccination.[10] We were also pleased to note that local Assembly Members in the Swansea, Neath Port Talbot and Bridgend areas – and relevant party spokespeople – offered helpful public interventions to encourage further MMR vaccination uptake.

The successful containment of the outbreak is a testament to the hard work of Welsh NHS staff and Public Health Wales. The challenge is sustain a high level of vaccination and address any concerns or questions people have. The concept of herd immunity ('community immunity') is important and could be used as a driver to increasing take up of the vaccination across Wales. For example, the case study reported of a parent of a six year old child with leukaemia was potent. The parent spoke very strongly about the impact on his family and risks to his child because people in his community had not sought MMR vaccination.[11]

[9] Sense and PHW press release, 17 May 2013: http://www.wales.nhs.uk/sitesplus/888/news/27266; and PHW press release, 11 June 2013: http://www.wales.nhs.uk/sitesplus/888/news/27584
[10] Welsh Government statement, 23 May 2013
[11] http://www.bbc.co.uk/news/uk-england-london-22230875

3) Lessons that could be learned in order to prevent future outbreaks

Sense Cymru thinks the lessons of the outbreak are:

- Wales must sustain the current high vaccination rate to minimise the risk of outbreaks of measles, mumps and rubella and to contain outbreaks that might occur. Enough people were unvaccinated for a measles outbreak to occur around Swansea. These people are almost definitely susceptible to rubella and mumps too. If the vaccination rate drops there is a risk of outbreaks of rubella and mumps.

- The current national MMR vaccination rate is high but it conceals particular localities and groups or cohorts for which vaccination rates are currently too low. We must concentrate resources on identifying them and offering opportunities to immunise.

- There are a variety of reasons why people have not sought MMR vaccination and these must be addressed. Public Health Wales and the Welsh Government must continue to engage with the public about the dangers of the diseases and importance of vaccination as well as responding to any questions or concerns that people have.

- As direct experience of measles, mumps and rubella diminishes people might give more weight to concerns about vaccination. Public health messages about the dangers of the diseases are critical.

Following these lessons Sense Cymru would make the following recommendations, particularly to public health professionals and Public Health Wales:

Undertake a systematic MMR vaccination catch up programme to target people particularly at risk. We know that during the outbreak Abertawe Bro Morgannwg UHB identified young people under 18 with no evidence of MMR vaccination on their records and sent them a personalised letter.[12] We would like to see this kind of approach adopted more widely.

Address general fears and people who feel like they have unanswered questions about MMR. Fears or feelings of uncertainty can cause people to turn to poor alternatives, such as clinics offering single vaccinations in Wales. Elected representatives, such as councillors and Assembly Members, also have a responsibility to do address concerns.

The NHS and Public Health Wales should work with others to promote uptake of the MMR vaccination. This could include colleagues in education and social services. Sense Cymru and others are willing to help develop public health messages around rubella, the dangers of the disease and the importance of vaccination.

Sense Cymru suggests the Health and Social Care Committee monitors vaccination rates. If the rate drops or when particular concerns are brought to the committee's attention it could seek urgent clarification from the Health and Social Services Minister and Public Health Wales. We suggest also that the committee

[12] Public Health Wales, Response to Health Committee, 29 May 2013

revisits the issue periodically to assess actions taken in reaction to the outbreak.

Health and Social Care Committee

Inquiry into the measles outbreak 2013

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Introduction

Many of the factors influencing vaccine uptake apply to all vaccines, not just MMR. Presented below is therefore a general discussion as well as some issues specific to MMR vaccine. However the next vaccine scare may well be to do with another vaccine already in the programme or, bearing in mind the major changes to the schedule currently being implemented, it could be a new vaccine.

Background to the MMR vaccine safety scare

The combined measles, mumps and rubella (MMR) vaccine was introduced to the UK in 1988.

Uptake of the vaccine rose rapidly to a high of 92%. In 1992, two brands containing the Urabe strain of the mumps vaccine virus were withdrawn after it was noted to be associated with an increased risk of aseptic meningitis (Miller *et al*, 2007). This did not appear to have a deleterious effect on uptake. In 1995, a paper was published suggesting a link between measles vaccines and the development of bowel disorders in adulthood (Thomson *et al,* 1995). This was associated with a small decline in the uptake of MMR vaccine. In 1998, the same group of researchers published observations on 12 children with pervasive developmental disorders and bowel disease and suggested that the latter may have led to the former (Wakefield *et al*, 1998). In eight children, the history of the onset of symptoms coincided with receipt of MMR vaccine. Although the researchers stated in the paper that ''we did not prove an association between measles, mumps, and rubella vaccine and the syndrome described'', and an accompanying commentary was heavily critical of any suggestion of such a link, (Chen and DeStefano, 1998), the story attracted much attention in the media

(especially between 2001-2). This was largely fuelled by a paragraph in the press release accompanying a press conference: ''The majority opinion among the researchers involved in this study supports the continuation of MMR vaccination. Dr Wakefield feels that vaccination against the measles, mumps, and rubella infections should undoubtedly continue but until this issue is resolved by further research there is a case for separating the three vaccines into separate measles, mumps, and rubella components and giving them individually spaced by at least 1 year''(Horton 2004). Subsequently, public confidence in the vaccine was dented and uptake of the vaccine in England fell to 79%, with some parents seeking the single antigen components. (taken from Elliman and Bedford, 2007).

Factors influencing immunisation uptake

High vaccine uptake depends on a range of inter-related factors:

Good information systems:

- Are required to implement and monitor immunisation programmes locally and nationally.
- Should be used locally to send out invitations for childhood immunisations, produce lists of those who do not attend and should be followed up. Reminder and recall systems, alone, have been shown to increase coverage by up to 20% (Jacobson and Szilagyi 2009)
- Can produce general practice level coverage data for local action. Feedback of performance to vaccine providers at local level is important for improving coverage. (Crowcroft 2009).

Well organised immunisation services:

- Need a lead person to take responsibility and coordinate the service,
- Should provide a source of expert clinical advice.
- Should provide flexible services – immunisations need to be provided in a variety of settings, in addition to primary care and schools (for older children). These could include hospitals, children's centres and nurseries.

- Should involve all members of the team, including administrative staff- to ensure everyone is providing the same positive message about immunisation and giving accurate information.

Well informed, motivated and enthusiastic staff

- Health care professionals (HCPs) who deliver immunisation services, (in general practice, nurses and school nurses administer vaccines and health visitors and GPs advise about them) need both to be well informed about the principles and practice of immunisation, but also able to communicate effectively with parents, children and young people. This is not simply a case of providing a standard set of information. Most parents, even those who accept vaccination, have questions about the vaccines. HCPs need to assess what information parents need, i.e. what they know and have read, as well as their individual concerns, and tailor the information accordingly. Some questions are complex and require both a high level of knowledge and confidence to discuss them, as well as a significant amount of time.
- The Health Protection Agency (HPA now part of Public Health England - PHE) issued guidance on minimum standard for training and the content of a core curriculum for all those involved in immunisation in 2005. It is not clear to what extent immunisation training adheres to this guidance. Provision of immunisation training locally is variable and maybe provided by local experts, or bought in from universities or independent companies. In addition, two e-learning packages are available. Ideally these should augmented with training provided locally where local issues are discussed and local expert sources of advice are introduced.

Vaccine acceptance

- Overall coverage rates for childhood vaccines are very high. However, children who are not fully immunised tend to fall into two main groups: partially immunised children who simply do not complete the immunisation course (varies in size, but probably 3-5% on average) and children who are totally unimmunised (about 1-2% but maybe higher in some geographical areas).
- The characteristics of these two groups differ (Samad *et al* 2006a):

    - Parents of unimmunised children often have strong beliefs and are less likely to consider vaccination to be safe or to be necessary. In one large UK study, almost a half of the parents of 228 unimmunised children reported this to be due to their beliefs and attitudes (Samad *et al* 2006b). Mothers of these children are often older and more highly educated.
    - Children who commence the immunisation course but do not complete it are more likely to have social or practical issues making access to immunisation services difficult (32% of 697 partially immunised children (Samad *et al* 2000b)). Among this group are parents who do not object to immunisation, but for whom social or family pressures may mean that they do not get round to completing the course.
    - Children at greater risk of being partially immunised include:
        - Children in large families (Li & Taylor 1993; Samad *et al* 2006a)
        - Younger mothers (Samad et al 2006a) who are lone parents (Sharland *et al* 1997; Samad *et al* 2006a)
        - History of hospitalisation in the child (Samad *et al* 2006a).
- These two groups, partial and non-immunisers, thus may require different interventions.
- Services for partial immunisers in particular need to be accessible and flexible. Health care professionals should consider offering opportunistic or domiciliary immunisation and reviewing immunisation status when families attend primary care for other reasons as well as in other health care settings, particularly hospitals.
- Vaccine uptake also tends to be poorer among:
    - looked after children (Ashton-Key and Jorge 2003)
    - those with disabilities or other long term conditions (Peckham *et al* 1989; Tuffrey and Finlay 2001)
    - travelling communities (Dar *et al*, 2013)
    - certain ethnic groups –though maybe specific vaccines (MMR and Somali population Schickler and Bedford Unpublished).

- For non-immunisers, or hesitant immunisers, the required intervention relates to providing information that is tailored to respond to parents' questions and concerns, at a level of complexity appropriate to the individual. In practice, this may mean that some parents require a lot of detailed information, including lengthy discussions with different health

care professionals as well as written material. Some parents will not change their mind, despite this.

- Among parents who accept vaccines for their children, some will accept vaccine without question (approx. 30-40%) others will be hesitant or cautious (approx. 60-70%). These parents in particular will often have many questions and concerns about immunisation. Another small group of parents may request to have certain vaccines omitted. (Leask *et al* 2012).

Parental Factors Affecting Uptake of MMR vaccine

- In a large UK study of factors influencing uptake of MMR uptake among children born in 2000-2002, at the height of public concern over the safety of MMR vaccine, children were more likely to be unimmunised against MMR if they lived in larger families, if their mother was over 34 or under 20 years of age when then child was born, or they were a lone parent. Higher educational attainment and smoking in pregnancy were also risk factors for non-immunisation. Girls were less likely to be unimmunised than boys. (Pearce *et al* 2008). Children were at increased risk of having single antigen vaccines if their mother was older and more highly educated and had a higher income.

- Reasons given by the 879 parents, whose children had not had the combined MMR vaccine, were mainly that they had made a conscious decision (67%) because of fears over vaccine safety, fears over possible link with autism and negative media publicity.

In a systematic review of 31 studies conducted between 1997-2004 exploring parental decisions about combination vaccines including MMR, in comparison with vaccine accepting parents, those who declined combination vaccines were: (Brown *et al* 2010):

- Less likely to perceive vaccines to be safe and effective
- Less likely to consider the diseases to be serious and for their child to be likely to catch them
- Less trusting in the health care system and the Government
- Less satisfied with immunisation information they had received
- More likely to believe MMR vaccine causes autism
- Less satisfied with their immunisation related interactions with HCPs

- More likely to view media reports favourably
- More likely to have experienced vaccine adverse events
- More convinced of the benefits of single vaccines
- More concerned about immune overload
- Less likely to view vaccinating as a positive social responsibility
- Less likely to have vaccinated previously and to plan to do it again in the future
- Less likely to anticipate regret as a consequence of not vaccinating
- Less likely to consider their HCP supports their decision
- Likely to have started thinking about the vaccination decision earlier
- Less likely to perceive that current vaccine research is adequate
- More likely to express preference for natural immunity
- Less happy to defer to medical advice about vaccines
- Less like to perceive their peers as supportive of their decision

- Department of Health conducted annual tracking studies 1996-2006 among about 1000 parents of young children and reported that by 2006 more parents were confident in the safety of MMR vaccine. Importantly a consistent finding over this 10 year period was that parents were more likely to trust the information given to them by their GP, health visitor or practice nurse than that given to them by the Government. (Smith *et al*, 2007)

- A more recently conducted small study among 24 mothers of children under three years of age who planned to either accept, postpone or decline their child's first MMR dose reported that parents who were rejecting MMR vaccine expressed views which were anti-immunisation in general rather than specifically anti-MMR. Those that were intent on using single measles, mumps rubella vaccines felt that MMR vaccine was unsafe but were not clear why they felt this to be the case. This may suggest that, for some parents of young children, MMR is now considered to be just another vaccine and not one that any longer warrants special concern (Brown *et al* 2012).

- An analysis of factors affecting catch up by 5 years of age of 751 children who were unimmunised with MMR at 3 years reported that those who partially (1 dose) or fully caught up (2 doses) with MMR tend to be those children whose families experienced practical issue or access issues,

whereas the parents of children who remain unimmunised by 5 years of age are more likely to have made a conscious decision not to accept the vaccine. Among this group parents tend to be more highly educated (Pearce *et al* 2013 accepted for publication).

Parents' Perceptions of vaccines and diseases

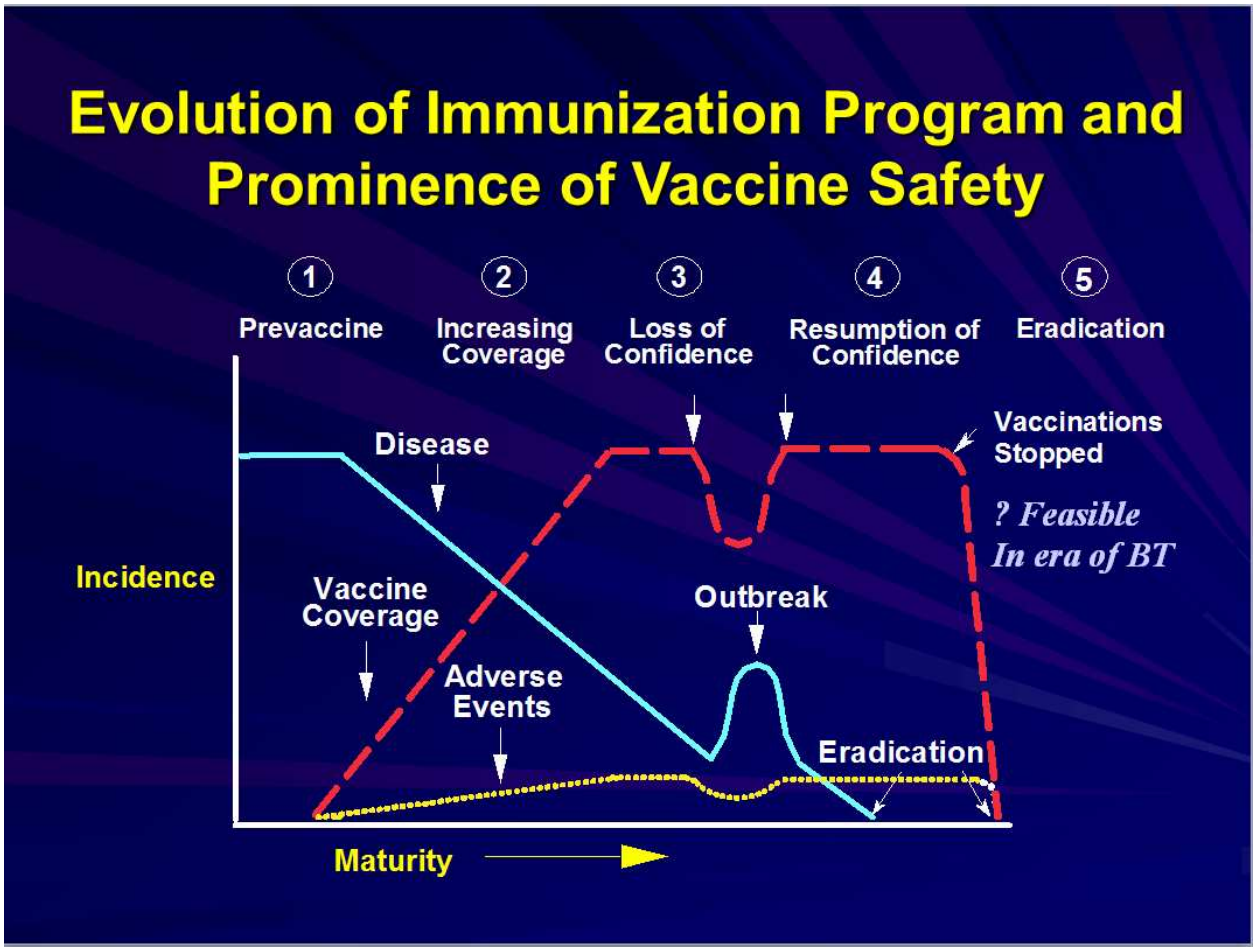
- Parents' attitudes are critically important, in particular concerning the safety and
  effectiveness of vaccines and the seriousness of diseases (Peckham 1989). These will be influenced by prior beliefs and experience as well as by the advice and information they gather from a variety of sources, including health care professionals.

- As might be predicted, parents who view the diseases as serious and the vaccines as safe are more likely to have their child vaccinated than parents who think otherwise (Peckham *et al* 1989, Sutton & Gill 1993). The solution to this would superficially appear to be simply one of providing these parents with evidence-based information about the seriousness of disease and safety of vaccines. However, parents who have vaccinated their children also express concerns about vaccine safety, and it is clear that the relationship between perceptions and behaviour is complex (Evans *et al* 2001, Raithatha 2003, Salmon *et al* 2005).

- Vaccines differ from other interventions in that they are administered to healthy individuals at the instigation of health care professionals and so there is a greater ethical imperative to show that their benefits outweigh the risks. Although there is a significant body of evidence, both from research and experience, showing that most vaccines have very low rates of serious adverse reactions, the perception of risk and what is acceptable differs not only between individuals, but alters depending on levels of herd immunity and, therefore, disease in the local population.

- Part of the perception of risk involves the definition of safety. Vaccines are referred to in official literature as being 'very safe'. While this is true, what it really means is 'relatively safe'. Nothing is totally risk free. For vaccines, the adverse side-effects are well-documented, for example, there is a risk of febrile convulsions within 6-11 days of the MMR vaccine of 1 in 3000 doses

(Farrington et al 1995), whereas the risk of convulsions with natural measles infection is reported to be 1 in 100. Clearly there are greater risks associated with the natural infection than with the vaccine. This balance of risks and benefits changes when vaccine uptake is high and the likelihood of catching an infection diminishes; all the risks are then associated with the vaccine. However, this is a delicate balance as any reduction in vaccine uptake may once again lead to a resurgence of disease. This has been graphically portrayed by Bob Chen (Chen 2005)



- Studies report that some parents who decline to have their children immunised do so on the basis that they believe vaccines do more harm than good, that the diseases they are designed to prevent are not harmful and may even be beneficial, by strengthening a child's developing immune system (Evans *et al* 2001, Rogers and Pilgrim 1995, Smailbegovic *et al* 2003; Samad).

- Anti-vaccination groups disseminate the view that the risks of vaccines are far greater than is acknowledged and, in addition to short-term risks, may

have long-term side-effects. Diabetes, cancers, atopy (asthma, eczema and hayfever), multiple sclerosis and autism have all been reported, albeit misguidedly, to be associated with receipt of vaccines.

- Perceptions of disease severity also determine whether or not a child is immunised, but there is disagreement over the severity of some infections between the orthodox medical community and other health care providers, for example, homeopaths (Schmidt & Ernst 2003). It is argued that the death rate from measles was declining long before vaccines came in and that vaccination has had a minor and, possibly, even no part to play (Schiebner 1993). Such extreme views are not supported by the significant body of scientific evidence, but are commonly expressed, and every practitioner will have been challenged to respond to them.

Decision to immunise

The decision to immunise a child is a dynamic process and may change over time. Attitudes to vaccines and diseases are influenced by a range of other factors including prior beliefs about health and medicine, use of alternative or complementary therapies, advice from parents, friends and health care professionals, as well as the influence of the media and more recently the Internet and Social Media. Many studies report health professionals to be the key source of information for parents about immunisation.

The experience of the immunisation process itself may also affect acceptance of further vaccines (Harrington *et al* 2000).

- Evans *et al* (2001) reported that many parents find the decision about immunisation difficult and stressful, and parents have also been described as experiencing severe emotional distress at the prospect of their child being immunised (Harrington et al 2000). Such experiences can lead to failure to complete immunisation courses and to decline immunisation for future children.

- Health care professionals need to recognise that some parents may need considerable time and discussion before they feel able to make a decision and to provide services that cater for this.

- McMurray *et al* (2004) highlighted the fact that some professionals have a tendency to view a parent's attendance at clinic as an indication of informed consent when, in reality, at this point parents may still have questions and professionals should be using that opportunity to offer information and elicit questions as a matter of course. Parents appreciate health care professionals who are empathetic, understand that they may have concerns and who respond appropriately (Harrington *et al* 2000).

- Trust in the source of advice has been found to be pivotal. For example some parents express a lack of trust with the government (BSE, etc. having dented their faith), with the Department of Health. However most say they can trust their own individual GP or health visitor. This emphasises the important role these professionals have.

- However, studies conducted in the early 2000s at the height of the MMR vaccine safety scare reported that some health professionals (GPs and Health visitors) were:
    - poorly informed about vaccines (Cotter et al 2003, Harris et al 2001, Henderson et al 2004, Petrovic et al 2001)
    - did not feel completely confident about explaining specific vaccine issues (Henderson et al 2004, Petrovic et al 2001)
    - disagreed with or had reservations with some vaccine policies (Henderson et al 2004, Petrovic et al 2001)
    - did not use or are not aware of nationally available resources on immunisation (Cotter et al 2003, Petrovic et al 2001)
    - believed that single measles, mumps and rubella vaccines should be available on the
    - NHS (Macdonald et al 2004).
    - had lost confidence in the safety of MMR vaccine (Smith et al 2001)
    - expressed reservations about giving their own child specific vaccines (Brownlie & Howson 2006, Petrovic et al 2001).

Although these findings cannot be extrapolated to all health professionals, it may in part explain why the MMR vaccine safety scare took hold.

Lessons for the future

The uptake of MMR and other vaccines, in children going through the system now is good, though there is still room for improvement. It is important to make full use of the guidance already in existence.

2009 - NICE "Reducing Difference in the uptake of immunisations". This provides guidance on the action that should be taken, and by whom, to optimise immunisation uptake. This allows one to redirect resources to children less likely to be immunised without increased input. (NICE 2009)

2012 – Health Protection Agency "Quality criteria for an effective immunisation Programme". Defines the key elements required for the implementation and delivery of a safe, equitable, high quality, efficient immunisation service which is responsive to the needs of vaccine recipients and/or their carers. http://www.hpa.org.uk/Publications/InfectiousDiseases/Immunisation/1207Qualitycriteriaforimmprogramme/

2013 – Monitoring of the media can provide early warning of a potential issue. This may arise within a country or anywhere in the world and with the advent of social media scares can travel faster than any infectious disease, but an issue may be recognised before it 'takes off'. A media surveillance system has been established to monitor public concerns about vaccine Globally (Larson H *et al*, 2013).

To some extent, the MMR scare was predictable. Prior to the publication of the Lancet paper in 1998, there had been some indication of what was coming. Up to then there was no research into a possible link between MMR vaccine and autism. However, the accompanying commentary in the Lancet, by two American vaccine experts, did point out the limitations of the research. If more experts had been willing to speak out and journalists had been better informed, the scare might have been dealt with quicker. The Science Media Centre trains scientists in presenting their case and how to interact with the media. They also lay on sessions in relation to particular topics where experts are brought together with journalists, so that hopefully the journalists better understand the issues.

Should immunisation be legally required?

Inevitably any outbreak of disease prompts discussion about the need to introduce a legal requirement for immunisation.

- Few countries have compulsory vaccination
- In, USA, there is a requirement for children to be immunised before entering school – this cannot increase uptake in younger children
- Exemptions on religious and philosophical grounds are allowed – States vary in their level of enforcement.
- There is evidence that vaccine refusal is increasing In USA and 1 in 10 use an alternative, sometimes incomplete schedule (Dempsey et al 2011). It is not clear how much of this is concerns about vaccination and how much is a reaction, in principle, to what is seen as an infringement of parental choice. The general view in UK is that we have achieved high uptakes without the need to legislate. The uptake of MMR vaccine among 2 year olds in USA and UK differed little in 2011.
- If legislation were introduced, or benefits were linked to immunisation, there is the potential to widen inequalities in child health & well-being (Elliman and Bedford 2013)
- A case can be made for checking immunisation status at key points i.e. entry to nursery and school which acts as a reminder to parents, and of excluding unimmunised children from communal groups in event of an outbreak

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Mr.Vaughan Gething AC AM
Chair of Health and Social Care Committee
National Assembly for Wales
Cardiff Bay
CF99 1NA

29th May 2013

Dear Mr Gething

Further to your letter of May 14th 2013, please find attached answers to questions you raised.

If you have further queries, please do not hesitate to contact me.

Yours sincerely,

Marion Lyons

Dr. Marion Lyons
Director of Health Protection / Cyfarwyddwr Adran Amddiffyn Iechyd

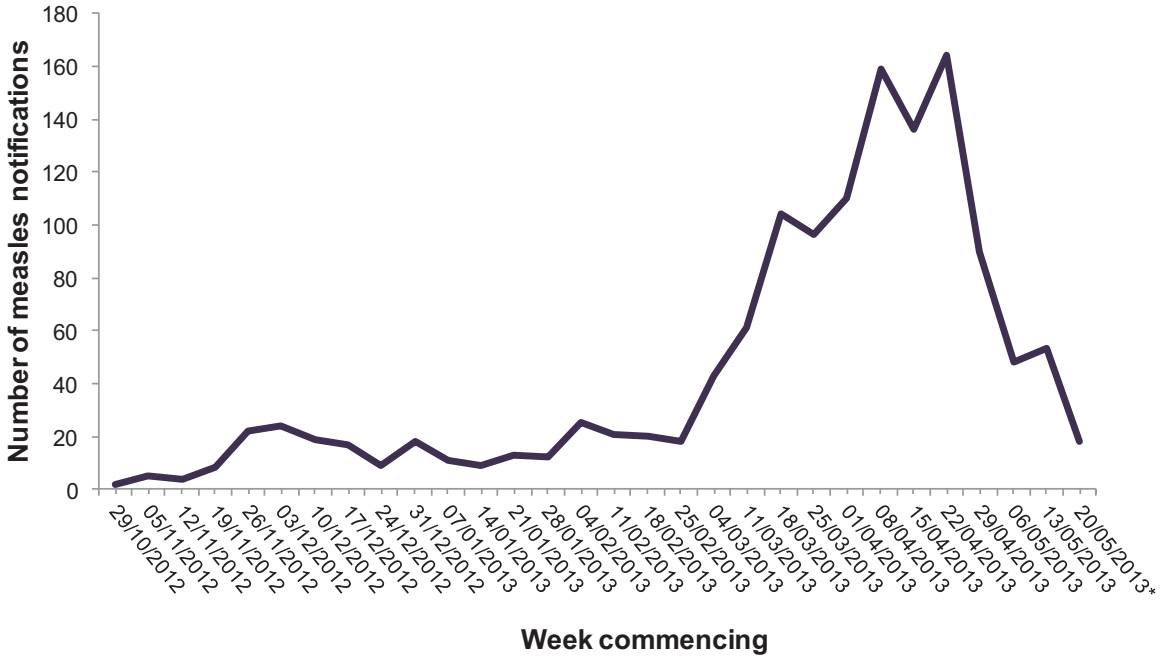
Response to Vaughan Gething AC AM , Chair of the National Assembly for Wales' Health and Social Care Committee from Dr Marion Lyons, Director of Health Protection, Public Health Wales

1. **Is there any understanding of when the current outbreak will peak, and what the full impact of this is likely to be?**

   The epidemiology suggests that the outbreak mainly centered in the Swansea, Neath Port Talbot area peaked by the 22nd April. (Figure 1). Since then general practitioners have continued to notify cases of measles, however, both the numbers reported and the numbers confirmed as true measles has fallen weekly. This drop in cases reported weekly will have been as a result of the successful local MMR campaign to immunise thousands of individuals from the at risk pool of children and young adults who had not received two doses of MMR vaccine.

   Based on information received as at 20th May 2013, healthcare staff in Abertawe Bro Morgannwg UHB had administered a total of 26,160 unscheduled doses of MMR since March 2013. Of these 5,096 were administered to those aged between 10-18 years, representing 55% of those at risk in this age group because they had missed previous immunisations.

Figure 1. Weekly numbers of notifications in Wales since November 2012 (Public Health Wales CoSurv data)



* Data until 23/05/2013 of week 21 2013. Data for week 21 is provisional and may increase due to further notifications being received

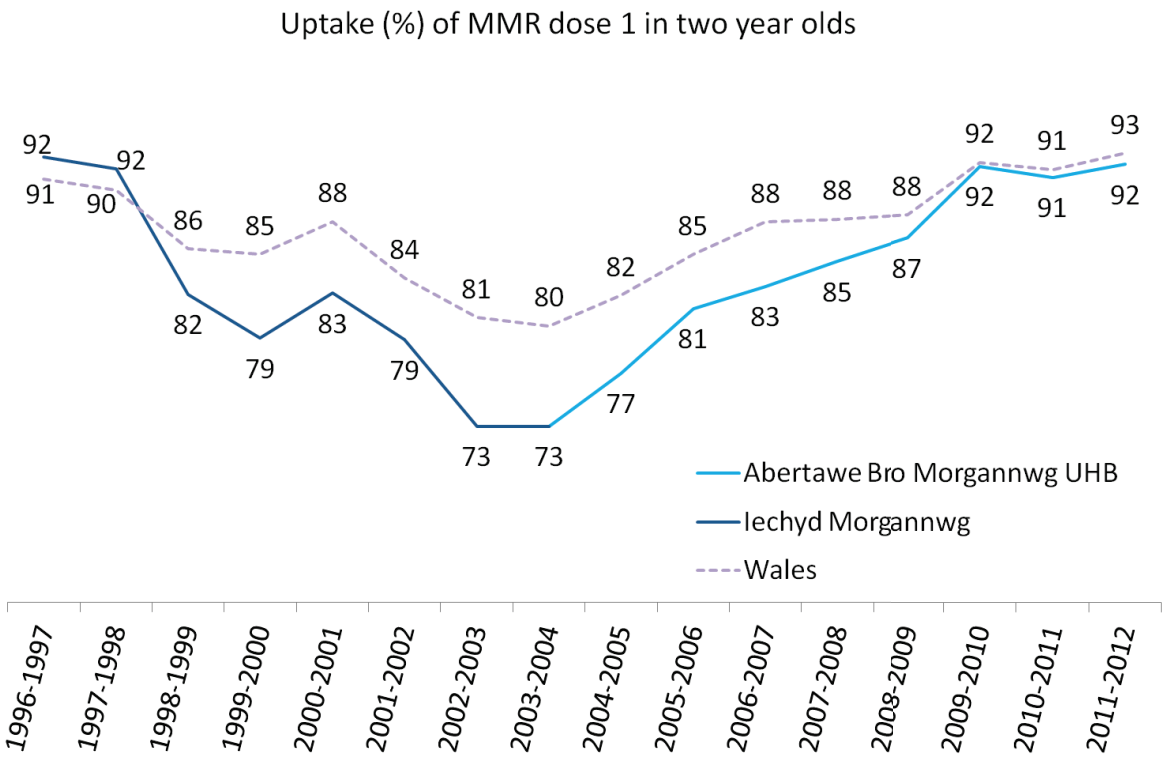
2. What factors have led to the current measles outbreak, and to what extent could future outbreaks be anticipated and planned for in order to minimise their impact?

In the late 1990s, in response to extensive media coverage of a paper published in The Lancet in 1998 and the claims of a few researchers that MMR, autism and bowel disease were linked, uptake of MMR vaccine fell in the UK. In two year old children in Wales uptake fell from an annual peak of 91% in 1996 to 80% by 2003 (Figure 2), and from a quarterly peak of 94% to 78% over the same period, even lower in those areas for local reasons most affected by the controversy, such as Swansea and Neath Port Talbot. The Lancet paper has since been formally withdrawn, and the research thoroughly discredited, with independent research overwhelmingly supporting the safety of MMR.

Public health services and the NHS in Wales has been working continuously to improve uptake of MMR vaccine, with the support of Welsh Government, implementing a number of effective Wales wide initiatives since 1999. These included 'MMR Mythbyster' pack for use with parents distributed to all practices in 2000; a national catch-up campaign in 2005-6 in which 53,708 school children received one or more doses of MMR, reducing the number of children who had missed MMR by 42.4%; and a change to the routine follow up of children to offer MMR vaccine as primary and secondary school entry and with the teenage booster to children identified as missing MMR vaccine (WHC 2005 081); and an audit of the implementation of that circular by Public Health Wales in 2008, with consequent correspondence between Welsh Government and Health Boards in 2009. These efforts have undoubtedly significantly increased the number of children protected against measles, so that the number affected and at-risk in the current outbreak is much smaller than it otherwise would have been.

However, the consequences of the scare would be apparent for years to come as a minority of children who were not routinely vaccinated over the years of the controversy, many now of secondary school age, continued to have no protection against measles, mumps, and rubella infection.

Figure 2. Annual uptake of MMR vaccination (dose 1) in two year olds in Abertawe Bro Morgannwg University Health Board area (Iechyd Morgannwg NHS area 1996 – 2003), compared to All Wales figures, as reported in Public Health Wales Annual COVER report.



: http://howis.wales.nhs.uk/sites3/Documents/474/cover200366.pdf

Across Wales Health Boards, Local Authorities and Public Health Wales are again working together to ensure all susceptible children and young people are offered another opportunity now to have the MMR vaccine. If this campaign is successful and the proportion of children immunised with two doses of MMR reaches 95%, that would be sufficient to ensure further outbreaks of measles would be avoided. As measles is currently endemic in England, Europe and other parts of the world we will inevitably import cases of measles to Wales, but if the 95% is reached this would ensure 'herd immunity', the point at which the sustained transmission of measles in Wales would be interrupted. At that point the international goal of measles elimination would have been reached in Wales.

COVER data, detailing the uptake of vaccines, including MMR by health board, has been published quarterly in Wales since before MMR vaccine was introduced. A range of additional surveillance tools at various population levels have been regularly published. These provide information for action to health boards, and including data at health board, local authority, and practice level on uptake of childhood vaccines including MMR, so that health boards can target interventions and support individual practices with low uptake reducing the risk of local outbreaks.

3. **The current outbreak has centered around Swansea, although there have been cases of measles throughout Wales. Uptake data shows varying levels of MMR coverage across Wales. Are there any other areas in Wales where there are particular concerns, and if so, how is this being addressed?**

   All Health Boards in Wales recognise that an MMR uptake rate of 95%, required for the elimination of measles, has not been achieved in older children and young adults due to past controversy over the MMR vaccine. All Heath Boards have for a number of years had plans in place to offer the MMR vaccine to all those susceptible to measles mumps and rubella, now focusing more directly on those aged between 10-18 years. Work is currently underway to deliver on the most recent plans for catch-up immunisation arising from the current outbreak: all Health Boards are delivering a school based immunisation catch-up programme inviting children identified as missing MMR; some have introduced weekend and evening drop-in clinics and across Wales general practitioners are offering both extra vaccination clinics and opportunistic immunisation.

   In addition to providing coverage data to help Health Boards identify those most at risk of not having received MMR vaccinations, Public health Wales monitors the success of the catch-up immunisation programme and feeds back to the Directors of Public Health weekly.

4. **In his letter to the Children and Young People Committee, the Minister stated that all GP practices in the Swansea area have received lists of unvaccinated and partially vaccinated children from the Child Health Office, and that GPs have sent personalised letters to parents of those children. In what ways are unvaccinated and under-vaccinated children throughout Wales being targeted?**

   Similar to the activity described for Abertawe Bro Morgannwg UHB all Health Boards are identifying children up to 18 years who have no documented history of MMR vaccination on the Child Health System. Parents are contacted and the child or young person is invited to attend for MMR immunisation in either a school clinic session, an MMR drop-in clinic or in primary care. General Practices and drop-in clinics are also providing opportunities for children and adults to catch-up opportunistically on MMR vaccinations they have previously missed out on.

5. **The Minister's letter also described arrangements that GP practices in the Swansea area have in place to provide catch-up doses of the MMR vaccine. What arrangements are there across Wales to ensure immediate access to the MMR vaccine for those who are under-vaccinated? Have here been any resource issues in relation to this, in terms of staff, facilities, supply of vaccine for example?**

   Across Wales all the Health Boards have for a number of years had Local Enhanced Service Agreements in place such that general practitioners are reimbursed for delivering unscheduled MMR immunisations. General practitioners are currently delivering these either in special clinics, opportunistically or on a drop-in basis. The response from primary care has been considerable. Across Wales, as at 20th May

2013, primary care had delivered 33,386 of the 61,396 unscheduled immunisations given since March 2013.

There is no shortage of MMR vaccine and there is no delay in its delivery to the front line.

All Health Boards in Wales and Public Health Wales have recognised the public health significance of the measles outbreak centered in the Swansea, Neath Port Talbot area and have responded accordingly. They have worked proactively with the media to ensure that the public understand the risks associated with measles and the benefits afforded by MMR vaccination. The high level of public and media interest has offered a unique opportunity to engage with parents who had previously decided against the vaccination of their children with MMR. They recognised the urgent need to ensure that children in their area were not susceptible to a similar outbreak. All Health Boards have made this public health emergency a priority and there will inevitably be opportunity costs to this. There will in addition be vaccine costs and staffing costs.

6. **Public Health Wales has identified the worst affected age group in the current outbreak as those between 10 and 18 years old. What action has been taken and how would you assess the effectiveness of this action to raise public awareness of the importance of vaccination to protect people from measles, particularly for the 10 – 18 age group, and to reassure the public about the safety and efficacy of the MMR vaccine?**

Public Health Wales carried out an analysis of the proportion of children unvaccinated in each local authority by age group and school using data from the Child Health System. On the 11th April Public Health Wales provided all Directors of Public Health and Health Boards with figures showing the coverage levels of MMR in schools in their area so that children aged between 10-18 years could be targeted effectively. This was presented in the form of a league table so that health boards could plan accordingly targeting those with the poorest uptake first.

By the 19th April all health boards in Wales had submitted their plans for a school catch-up campaign for consideration and comment to the outbreak Senior Response Team. The Health Protection Division of Public Health Wales developed systems to collect data from Health Boards and report on the success of MMR catch-up campaigns on a weekly basis from Monday 22nd April.

Arrangements had been in place to collect daily data on numbers of individuals receiving MMR vaccination in response to outbreak measures on from General Practice, through the Audit+ reporting system since the week commencing 18th March. Uptake in general practice, including an age profile of those receiving vaccination, was reported back to Health Boards, through the Senior Response Team (SRT) each Monday, Wednesday and Friday.

The initial response to the school based clinics was felt to be disappointing. As a result, it was requested that Public Health Wales undertake a rapid evaluation of the non responsive parents (no consent form returned /vaccine refused) in the schools where vaccine had been offered to inform future action by the Health Board and others.

Information was provided to Public Health Wales on children who had not responded to invitations to attend school based MMR vaccination clinics at one of three Swansea Secondary Schools. The children had all been identified as being susceptible to measles based on their immunisation status recorded on the Child Health Computer System. School clinics were held in the week commencing 15th April 2013. Invitations, containing consent forms, were individually addressed and given to the pupils at school during the previous week.
Analysis of the results showed that approximately 50% of the children had recently received the MMR during the outbreak, others had previously received it overseas and some parents claimed not to have received the letter. Around 3% of the total sample had been told or believed that the vaccine was contraindicated due to other health problems.
Only 15% of the overall sample remained unimmunised due to concerns about the safety of the vaccine or vaccination in general, however these represented less than 2% of all children. The majority of this small group were concerned about the outbreak and were receptive to receiving more information or discussing the issue in more detail. Only a few parents were concerned about the safety of the vaccine.

Information from the above survey and from the high coverage of MMR in children at their second birthday of over 95% suggests that almost all parents now consider the MMR to be a safe and effective vaccine.

7. **The response to the outbreak has involved a number of different agencies, including Public Health Wales, local health boards, education authorities and Welsh Government. How has a co-ordinated approach to dealing with the outbreak been managed?**

The multiagency response required has been supported at both a local and national level.

At a local level, outbreaks have been overseen by multiagency outbreak teams and delivery of the required public health response by a 'silver' operational group. This has proven to be extremely effective in identifying resources for delivering the programme of work.

At a national level, Public Health Wales has supported the response through its Senior Response Team (SRT). The SRT has met weekly since its first meeting on the 18th February. This team provided advice to both Health Boards and Welsh Government on the response required to deal with the outbreak and minimize opportunities for further cases to arise across Wales. It oversaw the delivery of consistent advice to professionals and the public. As Directors of Public Health from

all the health boards are members of the SRT it allowed for the sharing of good practice between health boards and offered a forum for discussion of issues as they arose. Through the SRT, weekly data was provided on the impact of the various interventions at health board level. The SRT fed back to Welsh Government after each meeting and minutes of these meetings are copied to the Health Protection Division, Welsh Government.

8. What further action is needed/planned to increase MMR coverage in order to prevent future measles outbreaks?

When the school campaign is complete (end of May), Public Health Wales will analyse MMR uptake by age group for each local authority and, with colleagues in health boards, define communities /age groups with unacceptable levels of susceptibility to measles, mumps and rubella.

Public Health Wales will:

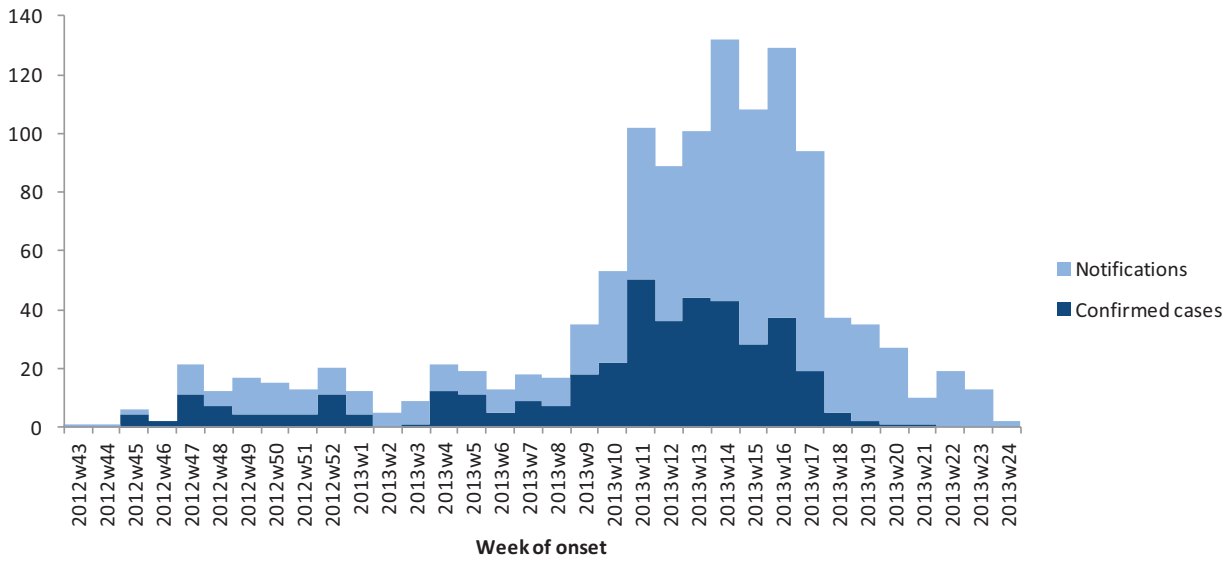
- Continue to work closely with Health Boards to ensure all available measures are in place so that children who have missed MMR are identified and offered vaccine at primary and secondary school entry and at the time of teenage booster vaccination, as required in WHC (2005) 081.
- Working with Health Boards to identify 'hard to reach' under-immunised groups across Wales and ensure MMR is offered.
- Maintain the current level of reporting of routine vaccination uptake at national, Health Board, Local Authority and General Practice level and introduce new measures to allow Health Boards to monitor overall coverage of MMR in their school aged populations both by year group and by school.
- Routinely publish information on MMR uptake by deprivation quintiles to allow Health Boards to monitor inequalities in vaccine uptake and support local action to improve uptake the groups most at risk of being unvaccinated.
- Maintain and build on the current level of support offered to Health Board Immunisation Coordinators, through the Public Health Wales Vaccine Preventable Disease Programme, in improving coverage of MMR and other routine vaccinations.

Descriptive Epidemiology of the South-West Wales Measles Outbreak

Between November 1 2012 and June 16 2013, there were 1,430 notifications of measles in Wales, of which 1,202 were from the health board areas of Abertawe Bro Morgannwg, Hywel Dda and Powys in South-West and Mid Wales. Notifications from this area, designated the outbreak area, were at around 20 per week from November 2012 to February 2013, then increased sharply in early March 2013, peaking during March and April 2013 (Figure 1). The outbreak was declared over on July 2 2013 when more than two incubation periods had passed without a confirmed case of measles in the outbreak area.

Provisional analysis of linked laboratory and notification data indicate that the distribution of confirmed cases from the outbreak area reflects that of notifications, with the peak in laboratory confirmations at around the same period, possible peaking slightly earlier. Of 1,202 notifications of measles from the outbreak area, 430 (36%) were laboratory confirmed.

Figure 1. South-West Wales measles outbreak: Epidemic curve



Similar numbers of male and female cases were notified from the outbreak area (620 males, 574 females, 8 gender not recorded). Notifications were most frequently in those aged five to fourteen years (Figure 2). However, when notification rates were calculated, incidence was highest in those aged under one year (Figure 3). Provisional analysis of linked laboratory and notification data indicate that the distribution of confirmed cases from the outbreak area was different in that more confirmed cases were identified in older children and young adults. This may reflect different testing patterns or different background rates of rash-illness in different age groups. Data on age-specific testing rates are available but have not yet been analysed.

Figure 2. South-West Wales measles outbreak: Age distribution of cases

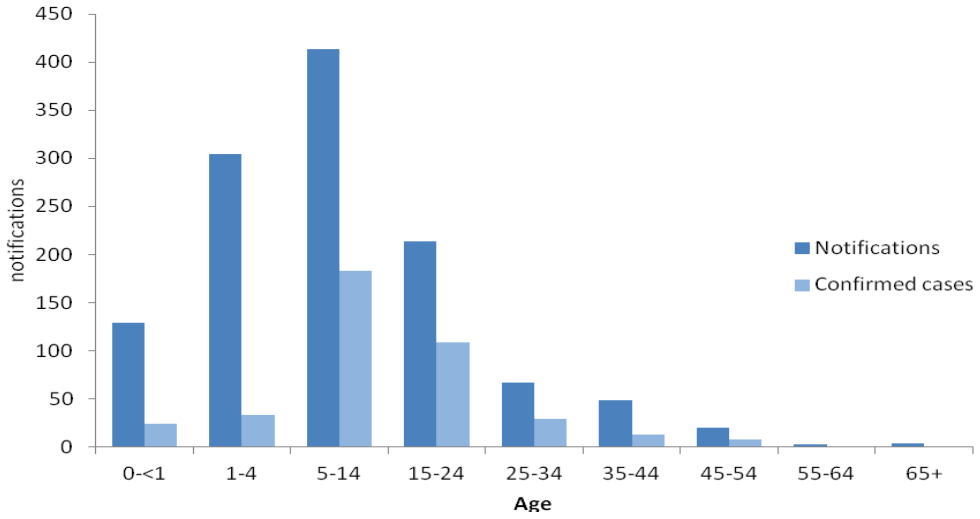
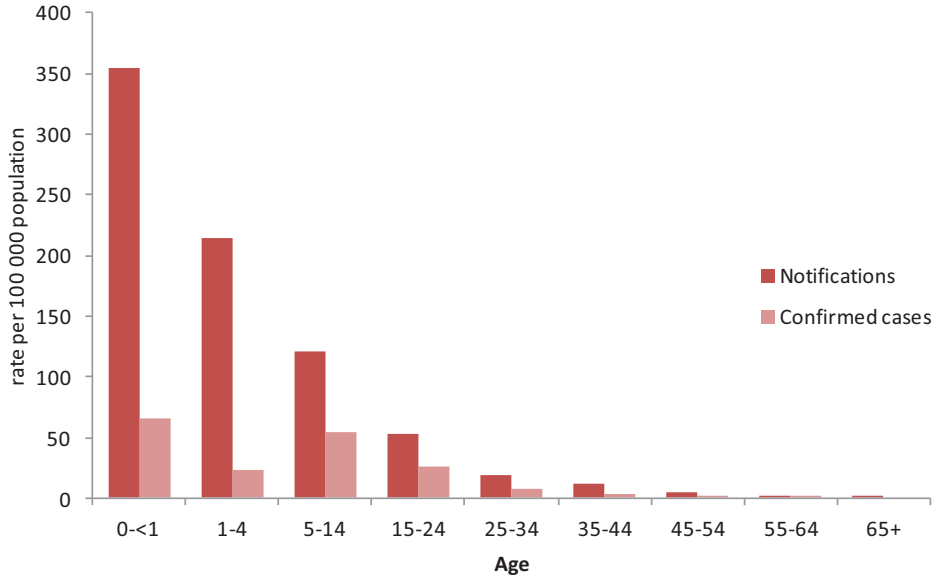
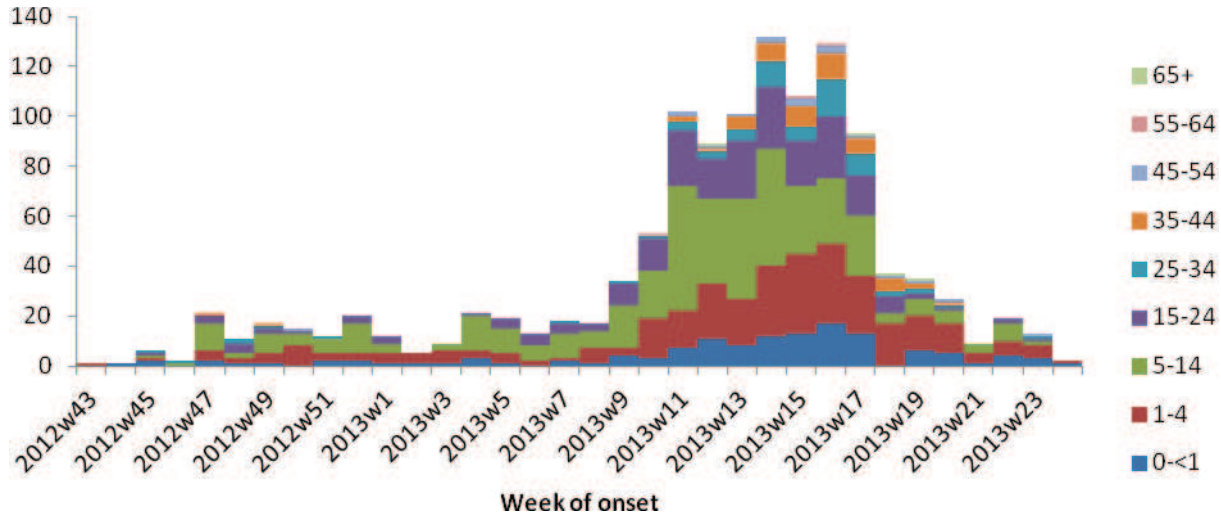


Figure 3. South-West Wales measles outbreak: Age distribution of cases expressed as notification and confirmation rates per 100 000 population



The peak of the epidemic curve was primarily cases in children, although there was a significant burden of infection in younger adults (Figure 4).

Figure 4. South-West Wales measles outbreak: Epidemic curve by age group



Local authority of residence was known for 1,177 of the 1,202 notifications (98%). Between November 1 2012 and June 16 2013, notifications from the outbreak area were most frequently from Swansea (650 notifications) and Neath Port Talbot (232). Smaller numbers were notified from Powys (99), Carmarthenshire (66), Pembrokeshire (60), Bridgend (49) and Ceredigion (21). Notification rates are shown in Figure 5. Notifications from Pembrokeshire were associated with the initial increase in cases in November 2012. The main peak in the epidemic curve comprised cases mainly from Swansea and Neath Port Talbot local authority areas (Figure 6).

Figure 5. South-West Wales measles outbreak: Incidence by local authority of residence

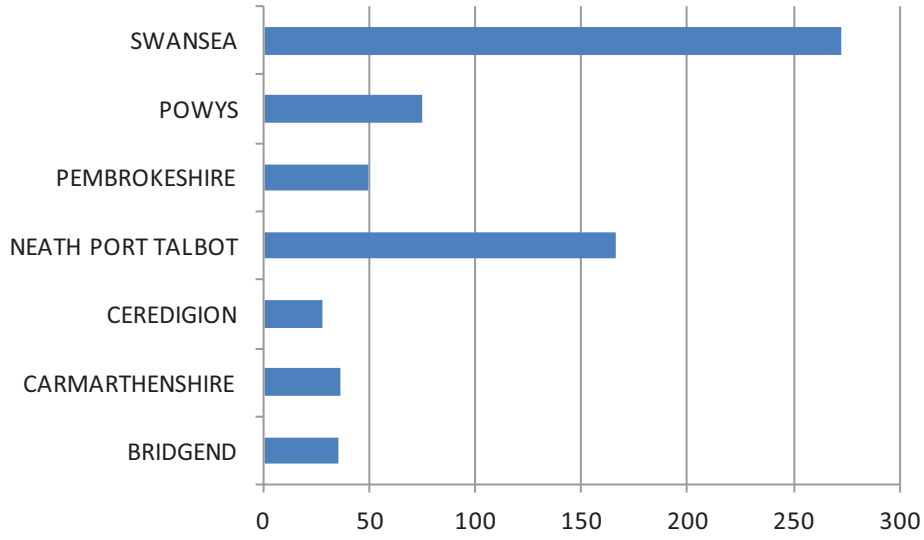
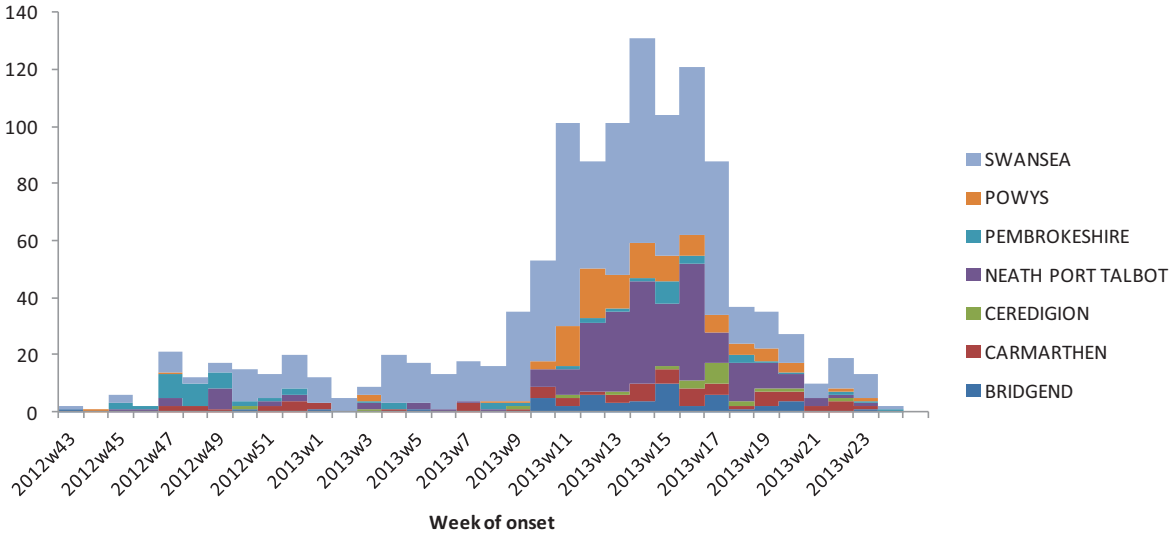


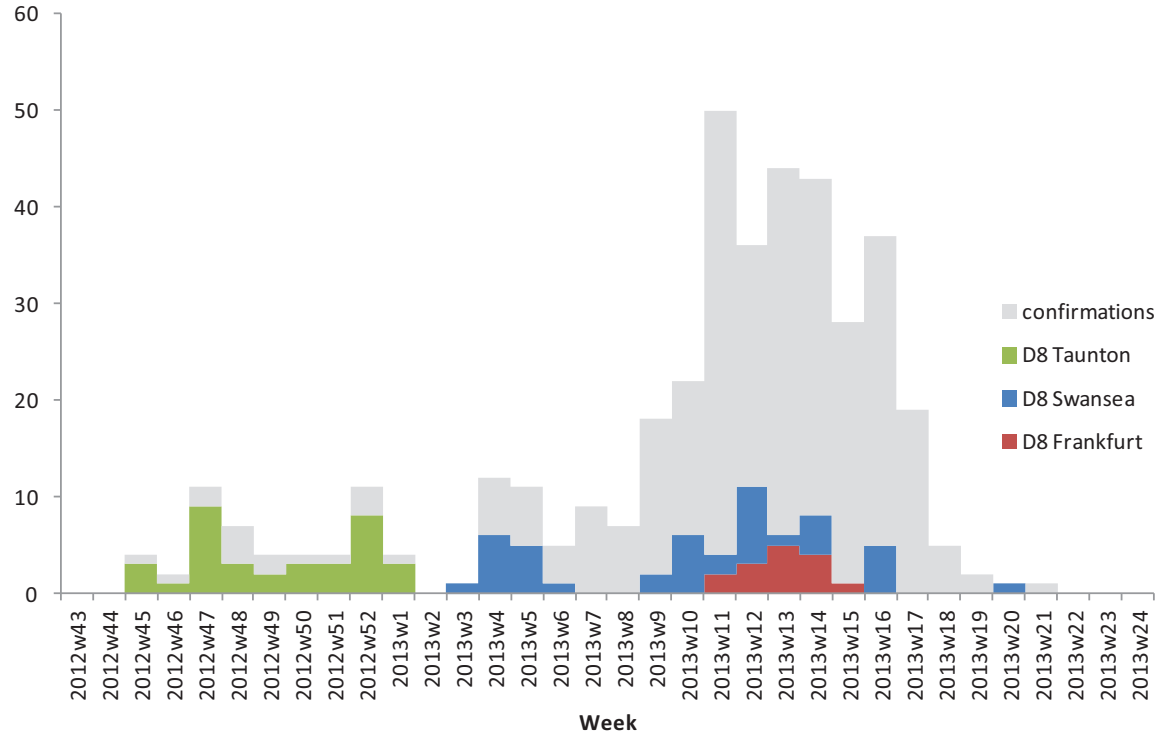
Figure 6. South-West Wales measles outbreak: Epidemic curve by local authority of residence



Genotyping was carried out on a proportion of laboratory cases. Provisional data on clinical notifications in the outbreak area that were notified, indicate that three genotypes were associated with the outbreak: D8 Taunton, D8 Swansea and D8 Frankfurt. Whilst it is possible that further genotyping data will become available in the coming weeks, early analysis indicate an intriguing molecular epidemiology, with three successive epidemic waves associated with different genotypes (Figure 7). The D8 Frankfurt genotype was confined to North Powys and is likely to represent a distinct cluster. The Taunton genotype occurred early on in the outbreak and was distributed in Pembrokeshire, Carmarthenshire, Swansea and Neath Port Talbot. The Swansea genotype occurred as a later wave affecting Swansea and Neath Port Talbot. Whilst the data are incomplete and should be interpreted with caution, the succession from D8 Taunton to D8 Swansea 'epidemic waves' raises some

interesting questions. Did the Swansea genotype represent a drift in the D8 strain or was it a new introduction?

Figure 7. South-West Wales measles outbreak: Temporal distribution of measles D8 strains



CDSC
27 June 2013

Y Pwyllgor Iechyd a Gofal Cymdeithasol
Ymchwiliad i'r achosion o'r Frech Goch 2013 – Tystiolaeth gan Lywodraeth Cymru

Diben

Mae'r papur hwn yn trafod yr achosion diweddar o'r frech goch a'r materion penodol a godwyd gan y Pwyllgor:

- y ffactorau sydd wedi arwain at yr achosion presennol o'r frech goch;
- y camau a gymerwyd gan weithwyr iechyd y cyhoedd proffesiynol, mewn partneriaeth ag asiantaethau eraill, mewn ymateb i'r achosion;
- y gwersi y gellid eu dysgu er mwyn atal achosion o'r fath yn y dyfodol.

Rôl Llywodraeth Cymru

Mae Llywodraeth Cymru yn gyfrifol am bennu polisi a chyfeiriad strategol, sy'n cynnwys materion polisi a strategol sy'n codi yn ystod achosion o glefyd sy'n effeithio ar iechyd y cyhoedd neu oherwydd hynny. Bydd y rhan a chwaraeir gan Lywodraeth Cymru yn dibynnu ar raddau a natur yr achosion.

Yn ystod yr achosion diweddar o'r frech goch, mae swyddogion Llywodraeth Cymru wedi gweithio gydag Iechyd Cyhoeddus Cymru, yr Uwch Dîm Ymateb i Achosion a Byrddau Iechyd er mwyn:

- pennu llinellau cyfathrebu clir er mwyn sicrhau bod gwybodaeth a chyngor rheolaidd ac amserol yn cael eu rhoi i Weinidogion ac eraill (fel y bo'n briodol);
- creu cydberthnasau gwaith a chyswllt effeithiol rhwng pob asiantaeth dan sylw;
- asesu effeithiolrwydd yr ymateb lleol neu genedlaethol ac ystyried effaith yr achosion ar bolisi neu strategaeth genedlaethol.

Y cefndir a'r ffactorau a arweiniodd at yr achosion presennol

Cyn cyflwyno brechiad yn erbyn y frech goch yn 1968, roedd nifer yr achosion o'r frech goch ledled y Deyrnas Unedig yn amrywio rhwng 160,000 ac 800,000 bob blwyddyn, gan gyrraedd eu hanterth bob dwy flynedd ac achosi 100 o farwolaethau bob blwyddyn. Pan gafodd y brechlyn MMR ei gyflwyno ym mis Hydref 1988, newidiodd y sefyllfa honno'n sylweddol. Yn yr ugain mlynedd rhwng 1992 a 2012, dim ond dwy farwolaeth a fu oherwydd haint brech goch acíwt ledled y Deyrnas Unedig. Yn sgil y brechlyn MMR, erbyn canol y nawdegau, amharwyd ar drosglwyddiad y frech goch gyda nifer isel iawn o achosion. Ddiwedd y nawdegau a dechrau'r 2000au, gostyngodd lefelau brechu MMR yn sylweddol. Dilynodd hyn erthyglau a gyhoeddwyd yn 1997/98 gan Andrew Wakefield ac ambell ymchwilydd arall yn honni bod cysylltiad rhwng MMR ac awtistiaeth a chlefyd y coluddyn. Nid yw'r erthyglau hyn yn dal dŵr bellach ond gwnaeth y sylw a gawsant yn y cyfryngau ar y pryd beri pryder ymhlith y cyhoedd ynghylch diogelwch y brechlyn.

O ganlyniad, gostyngodd cyfraddau defnyddio'r brechlyn MMR ledled y DU. Yng Nghymru, gostyngodd cyfraddau o uchafbwynt chwarterol o 94% yn 1995 i 78% erbyn 2003 ymhlith plant dwy oed. Yn Abertawe, gostyngodd y gyfradd yn 2003 i 67.5%. Er bod hyn yn amlwg yn ffenomenon cenedlaethol, dengys data i'r dirywiad yn ardaloedd Abertawe a Chastell-nedd Port Talbot ddigwydd yn gynt ac i raddau mwy nag yng ngweddill Cymru. Mae'n debygol mai cyfuniad o ymgyrchoedd yn y cyfryngau lleol, megis ymgyrch "MMR Parent's Fight for Facts" y South Wales Evening Post, ynghyd â sylwadau gan arweinwyr cymunedol ynghylch diogelwch MMR, a allai fod wedi bod yn gyfrifol am hyn. Codwyd pryderon rhieni yn yr ardal hon.

Yr unig ffordd o atal achosion o'r frech goch yw drwy sicrhau bod o leiaf 95% o'r boblogaeth wedi cael dau ddogn o frechlyn MMR er mwyn cyflawni'r hyn a elwir yn "imiwnedd torfol". Ers yr hyn a ddigwyddodd yn Wakefield, mae Llywodraeth Cymru ac Iechyd Cyhoeddus Cymru wedi rhoi cychwyn ar gyfres o gamau gweithredu ac ymgyrchoedd er

mwyn gwyrdroi'r cwymp mewn cyfraddau defnyddio MMR. Ymhlith y camau allweddol yn hyn o beth mae'r canlynol:

- Yn 2000, cafodd llyfryn "MMR Mythbuster" ei gyhoeddi a'i ddosbarthu i bob meddygfa.
- Yn 2005, cyhoeddodd Llywodraeth Cymru Gylchlythyr Iechyd Cymru yn ei gwneud yn ofynnol i Fyrddau Iechyd gymryd rhan mewn rhaglen dal i fyny genedlaethol ar gyfer plant a phobl ifanc rhwng 11 a 25 oed. Cafodd dros 60,800 o blant a phobl ifanc eu brechu gydag un neu fwy o ddognau o MMR yn ystod yr ymgyrch.
- Yn 2008, cynhaliodd y Gwasanaeth Iechyd Cyhoeddus Cenedlaethol archwiliad o'r modd y gweithredwyd yr argymhellion i wella cyfraddau defnyddio MMR. O ganlyniad, yn 2009, ysgrifennodd Llywodraeth Cymru at yr holl fyrddau iechyd i'w hannog i gydymffurfio â Chylchlythyr Iechyd Cymru (2005) yn llawn.
- Yn 2009, gwnaeth Llywodraeth Cymru hi'n ofynnol i bob bwrdd iechyd benodi arweinwyr imiwneiddio a chydgysylltwyr imiwneiddio amser llawn.
- Yn 2010, sefydlwyd Grŵp Imiwneiddio Cymru i roi cyngor ar faterion polisi a gweithredu rhaglenni brechu.
- Yn 2011, roedd y Rhaglen Lywodraethu yn cynnwys ymrwymiad i ddileu'r problemau iechyd a achosir gan y frech goch, clwy'r pennau a rwbela, i'w fesur yn ôl nifer y plant dwy oed sydd wedi cael y brechlyn MMR.

Ers y lefel isel a welwyd yn 2003, mae cyfraddau MMR ar oedrannau rheolaidd wedi parhau i gynyddu. Ar ddechrau'r cyfnod lle gwelwyd achosion o'r frech goch, roedd y gyfradd ar gyfer y dogn cyntaf o MMR yn ddwy oed wedi cyrraedd 94% ledled Cymru. Er bod llawer mwy o fabanod yn cael y brechlyn fel rhan o'r amserlen frechu reolaidd, roedd nifer fawr o blant a oedd wedi colli allan yn y gorffennol yn dal i fod yn agored i'r clefyd.

Dechreuodd yr achosion o'r frech goch o amgylch Abertawe ym mis Tachwedd 2012. Rhwng 9 ac 16 Tachwedd, cafodd Iechyd Cyhoeddus

Cymru wybod am dri achos o'r frech goch. Erbyn 27 Tachwedd, roedd yn amlwg bod y clefyd yn cael ei drosglwyddo mewn ysgolion ac roedd clystyrau o achosion yn cael eu cofnodi yn ardaloedd Byrddau Iechyd Prifysgol Abertawe Bro Morgannwg a Hywel Dda.

Ymateb i'r achosion o'r frech goch

Cafwyd ymateb chwim i'r achosion drwy system iechyd y cyhoedd integredig Cymru. Roedd angen ymateb amlasiantaethol er mwyn sicrhau bod yr achosion yn cael cyn lleied o effaith â phosibl.

Darparwyd yr ymateb cychwynnol i'r achosion gan dîm amlddisgyblaethol lleol a oedd yn cynnwys swyddogion o Fwrdd Iechyd Prifysgol Abertawe Bro Morgannwg ac Iechyd Cyhoeddus Cymru. Roedd y camau a gymerwyd yn canolbwyntio ar godi ymwybyddiaeth o gylchrediad y clefyd ac annog pobl i gael y brechlyn MMR. Yn eu plith roedd: sesiynau brechu mewn ysgolion wedi'u targedu; llythyrau i gyrff gofal sylfaenol; llythyrau i bob ysgol; llythyrau pwrpasol at rieni plant heb eu brechu mewn ysgolion lle cofnodwyd y frech goch a datganiad i'r wasg.

Erbyn 7 Chwefror, cafwyd gwybod am 168 o achosion. Felly, penderfynwyd rhoi ymateb cenedlaethol ar waith drwy sefydlu Uwch Dîm Ymateb a wnaeth gyfarfod am y tro cyntaf ar 18 Chwefror. Rhoddodd yr UDY gyngor i fyrddau iechyd, gan gynnwys gofal sylfaenol, y sector addysg a Llywodraeth Cymru, ar y camau roedd eu hangen i ymdrin â'r achosion a sicrhau bod cyn lleied o gyfle â phosibl i nifer yr achosion o'r frech goch gynyddu ledled Cymru.

O ganlyniad i'r cydberthnasau gwaith da a sefydlwyd rhwng swyddogion Llywodraeth Cymru, gweithwyr iechyd proffesiynol a'r cyfryngau yn ystod yr achosion bu modd rhoi gwybodaeth glir a chywir i'r cyhoedd, a thrwy hynny godi ymwybyddiaeth o ddifrifoldeb y frech goch a phwysigrwydd brechiad MMR. Dylai pawb dan sylw gael eu canmol am eu gwaith caled a'u hymdrechion parhaus dros y misoedd diwethaf i atal y clefyd rhag lledaenu.

Camau gweithredu

Ers dod yn ymwybodol o'r achosion o'r frech goch ym mis Tachwedd 2012, mae Llywodraeth Cymru wedi bod yn monitro hynt yr achosion hyn drwy linellau adrodd a bennwyd gydag Iechyd Cyhoeddus Cymru a'r Uwch Dîm Ymateb. Wrth i nifer yr achosion gynyddu, cafwyd adroddiadau dyddiol ar nifer yr achosion a'r camau a gymerwyd. O ganlyniad, bu modd i swyddogion sicrhau bod yr holl fesurau angenrheidiol a phriodol ar waith i leihau effaith yr achosion. Roedd y camau gweithredu hyn yn anelu at wneud y canlynol:

- sicrhau bod cynifer o blant â phosibl rhwng un a 18 oed wedi cael eu brechiad MMR diweddaraf.
- ei gwneud yn bosibl i'r plant hynny nad oeddent wedi cael brechlyn MMR i gael eu brechu, er mwyn diogelu eu hunain, aelodau o'r teulu ac eraill yn y gymuned.
- gweithio gyda'r cyfryngau er mwyn codi ymwybyddiaeth y cyhoedd o bwysigrwydd brechiad MMR a'r camau y gallai pobl eu cymryd i helpu eraill a hwy eu hunain.
- ymgysylltu â gweithwyr iechyd proffesiynol – gan gynnwys meddygon teulu, bydwragedd ac ymwelwyr iechyd er mwyn nodi unigolion agored i niwed a hwyluso brechiadau.
- cynnal sesiynau dal i fyny â brechiadau mewn ysgolion, meddygfeydd a chlinigau galw i mewn agored yn yr ardal lle cafwyd achosion a ledled Cymru.
- rhoi cyngor a gwybodaeth glir i'r cyhoedd gan gynnwys mewn ieithoedd lleiafrifol.
- annog mwy o staff gofal iechyd i gael eu brechu.
- gweithio gyda'r gwasanaeth carchardai i hwyluso sesiynau brechu i garcharorion.
- gwneud newidiadau i gyflymu profion labordy a diagnosis.
- cyflwyno gwell systemau gwyliadwriaeth fel bod modd olrhain y clefyd a monitro'r ymateb i'n gweithredoedd, yn enwedig cyfraddau brechu.

Ar 17 Ebrill, cyhoeddodd y Prif Swyddog Meddygol gynlluniau i frechu pob plentyn ysgol nad oedd wedi'i ddiogelu fel rhan o ymgyrch ledled Cymru, gyda'r nod o gwblhau'r gwaith cyn gynted â phosibl ac erbyn

24 Mai 2013 fan bellaf. Cafodd y gwaith hwn ei gwblhau ar amser a chafwyd dros 12,000 o frechiadau mewn ysgolion.

Cyfathrebu

Arweiniwyd yr ymateb yn y cyfryngau gan Iechyd Cyhoeddus Cymru ond cafodd ei gydgysylltu'n agos gyda Byrddau Iechyd, awdurdodau lleol a Llywodraeth Cymru. Cynhaliwyd dros 100 o gyfweliadau rheolaidd â'r cyfryngau, cyhoeddwyd datganiadau i'r wasg ddwywaith yr wythnos a defnyddiwyd y we a safleoedd cyfryngau cymdeithasol i gyfleu negeseuon hyrwyddo. Bu'r gydberthynas gadarnhaol a gafodd ei meithrin gyda'r cyfryngau o fudd mawr i ddal sylw'r cyhoedd.

Rhoddodd y Prif Swyddog Meddygol nifer o gyfweliadau i'r cyfryngau er mwyn codi ymwybyddiaeth o'r achosion a phwysigrwydd brechiad MMR a phwysleisio'r camau y gallai pobl eu cymryd i helpu eu hunain ac eraill.

Hefyd, ysgrifennodd y Prif Swyddog Meddygol a'r Ysgrifennydd Parhaol at eu cymheiriaid yng ngwledydd eraill y DU er mwyn eu hysbysu am y camau a oedd yn cael eu cymryd yng Nghymru i atal y clefyd rhag lledaenu.

Rwyf wedi ceisio rhoi'r wybodaeth ddiweddaraf i Aelodau'r Cynulliad ac eraill:

15 Mawrth	Ymatebais yn fanwl i lythyr gan y Pwyllgor Plant a Phobl Ifanc a gododd bwyntiau allweddol ynghylch ymdrin â'r achosion ar y pryd.
26 Mawrth	Ysgrifennais at Aelodau'r Cynulliad, Aelodau Seneddol, Arweinwyr Cynghorau a Chadeiryddion Byrddau Iechyd yng Nghymru i roi'r wybodaeth ddiweddaraf iddynt a gofyn am eu cymorth fel arweinwyr cymunedol, wrth fynd i'r afael â lledaeniad y clefyd.

16 Ebrill/23 Mai	Cyhoeddais ddatganiadau ysgrifenedig yn nodi'r sefyllfa ddiweddaraf ac yn annog pobl ifanc a rhieni plant nad oeddent wedi'u brechu'n llawn i gysylltu â gweithwyr iechyd proffesiynol.
11 Mehefin	Cafwyd cyfarfod llawn ar yr achosion o'r frech goch a'r rhaglenni brechu newydd.

Canlyniad

Cyrhaeddodd nifer yr achosion a gofnodwyd o'r frech goch eu hanterth erbyn 15 Ebrill pan nodwyd bron 200 o achosion mewn wythnos. Erbyn canol mis Mai, roedd nifer yr achosion a nodwyd bob wythnos wedi syrthio i un rhan o ddeg o'r ffigur hwnnw. Mae'r graff yn Atodiad 1 yn dangos effaith y camau cyfunol a gymerwyd mewn ymateb i'r achosion.

Rhwng 18 Mawrth ac 23 Mehefin, rhoddwyd 72,790 o frechiadau MMR nas trefnwyd mewn amrywiaeth o leoliadau. Cafodd y mwyafrif, 45,080, eu rhoi mewn gofal sylfaenol drwy feddygfeydd; cafodd 12,427 eu rhoi drwy'r rhaglen ysgolion a chafodd 5,639 eu rhoi mewn sesiynau galw i mewn agored. Ceir dadansoddiad fesul Bwrdd Iechyd yn Atodiad 2. Yn ogystal, mae dros 1,600 o garcharorion a thros 5,600 o staff gofal iechyd wedi cael brechiadau MMR ers mis Mawrth.

Yn ôl amcangyfrifon Iechyd Cyhoeddus Cymru, ym mis Tachwedd 2012, roedd 41,129 o blant yng Nghymru rhwng dwy a 18 oed nad oeddent wedi cael unrhyw frechiad MMR a 35,926 arall a oedd wedi derbyn un dos. O fewn y grŵp hwn, ystyriwyd bod y gyfran uchaf o blant a oedd yn debygol o wynebu risg rhwng 10 a 18 oed, gydag amcangyfrifon yn dangos nad oedd 50,887 o blant a phobl ifanc yn eu harddegau yng Nghymru wedi cael y cwrs dau ddogn llawn o MMR.

Dengys y graff yn Atodiad 3 yr effaith a gafodd yr ymgyrch MMR ar leihau nifer y plant heb eu brechu yng Nghymru. Cafwyd yr effaith fwyaf yn yr ardal lle gwelwyd yr achosion o'r frech goch lle canolbwyntiwyd yr ymateb fwyaf.

Mae'r gwaith modelu a wnaed gan Iechyd Cyhoeddus Cymru, drwy Brifysgol Warwick, wedi awgrymu, dros dro, heb ymgyrch dal i fyny â brechiadau, y byddai'r epidemig wedi parhau tan ddiwedd yr hydref 2013, gyda nifer yr achosion yn cyrraedd eu hanterth ddiwedd mis Mehefin. Mae'r ymdrechion a wnaed ar y cyd wedi golygu bod yr achosion o'r frech goch wedi para llai o amser, tua 10 wythnos yn llai, a'u bod yn llai difrifol o ffactor o 20. Gydag 88 o unigolion wedi'u derbyn i'r ysbyty oherwydd yr achosion o'r frech goch, mae'n hawdd gweld yr effaith bosibl fel arall.

Gwersi a ddysgwyd ar gyfer achosion yn y dyfodol

Yn unol â'r Cynllun ar gyfer Achosion i Gymru a pholisi iechyd y cyhoedd cenedlaethol, caiff adroddiad cynhwysfawr ar y ffactorau a wnaeth gyfrannu at yr achosion o'r frech goch a'r camau a gymerwyd gan bawb dan sylw mewn ymateb iddynt ei lunio ar ôl cyhoeddi nad yw'r frech goch yn dal i gylchredeg yn y gymuned. Iechyd Cyhoeddus Cymru fydd yn arwain ar hyn a'r nod fydd nodi bylchau yn y strategaethau a'r systemau a ddefnyddiwyd yn ystod yr achosion a gwneud argymhellion ar gyfer gwelliannau pellach i'w rhoi ar waith yn y dyfodol. Bydd Is-Grŵp Achosion a Digwyddiadau y Pwyllgor Diogelu Iechyd yn adolygu'r argymhellion a'r gwersi a ddysgwyd. Caiff y Cynllun ar gyfer Achosion i Gymru ei adolygu a'i ddiweddaru yn sgil yr argymhellion.

Yn y cyfamser, mae rhai canfyddiadau defnyddiol eisoes wedi dod i'r amlwg o waith a wnaed eisoes. Cynhaliodd Iechyd Cyhoeddus Cymru arolygon dros y ffôn gyda rhieni plant ysgol y cofnodwyd nad oeddent wedi cael brechiadau MMR llawn mewn rhai ysgolion yn Abertawe a Threfynwy. Canfu'r arolygon hyn fod cyfran fach iawn o'r rhieni hyn wedi nodi pryder parhaus ynghylch diogelwch y brechlyn MMR fel rheswm dros beidio â gadael i'w plant gael eu himiwneiddio. Mae hyn yn awgrymu bod y mwyafrif helaeth o rieni bellach o'r farn bod y brechlyn MMR yn ddiogel ac yn effeithiol.

Yn ogystal, dengys data sy'n dod i'r amlwg o'r ardal lle cafwyd achosion yn Abertawe fod dau ddogn o'r brechiad MMR wedi bod yn

fwy na 99% effeithiol wrth atal yr haint, gyda llai na 10 o achosion wedi'u cadarnhau ymhlith pobl a gafodd eu brechu'n flaenorol. Mae'r data hefyd yn awgrymu bod un dogn o'r brechlyn MMR yn diogelu pobl rhag y frech goch mewn mwy na 95% o'r achosion a gafodd eu brechu – sy'n uwch na'r hyn a welwyd yn flaenorol.

Mae'r canfyddiadau hyn yn galonogol ond ni ddylid llaesu dwylo. Dros yr wythnosau diwethaf, rydym wedi gweld bod unigolion a sefydliadau sy'n barod i hyrwyddo'r brechlyn unigol ar gyfer y frech goch o hyd. Nid yw Llywodraeth Cymru yn cefnogi'r defnydd o frechlynnau didrwydded a byddwn yn parhau i atgyfnerthu'r neges mai'r brechlyn MMR yw'r unig opsiwn diogel ac effeithiol.

Casgliad

Mae'r achosion o'r frech goch wedi galluogi Llywodraeth Cymru a gweithwyr iechyd proffesiynol i ailymgysylltu â'r cyhoedd, a rhieni yn arbennig, ynghylch pwysigrwydd brechu yn erbyn y frech goch a chlefydau eraill a allai fod yn ddifrifol.

Mae adroddiad COVER chwarterol diweddaraf Iechyd Cyhoeddus Cymru wedi dangos bod 95% o blant dwy oed bellach yn cael y dogn cyntaf o MMR ar gyfartaledd ledled y wlad, am y tro cyntaf erioed, a chaiff y gyfradd hon ei chyflawni gan y nifer fwyaf erioed o awdurdodau lleol yng Nghymru. Mae hyn yn deillio o duedd gadarnhaol hirdymor, yn dilyn ymdrechion ar y cyd dros nifer o flynyddoedd a gafodd hwb gan ymdrechion Byrddau Iechyd, Meddygfeydd ac Iechyd Cyhoeddus Cymru dros yr wythnosau diwethaf. Mae angen gwneud rhagor o waith i gynnal y lefel hon a gwella cyfraddau dau ddogn yr MMR ymhlith plant sy'n cyrraedd pump oed ac 16 oed, sef 90% ac 82% yn y drefn honno ar hyn o bryd.

Bydd swyddogion ac Iechyd Cyhoeddus Cymru yn gweithio gyda byrddau iechyd i sicrhau bod pob mesur sydd ar gael ar waith i alluogi plant sydd wedi methu brechlyn i ddal i fyny, gan gynnwys y rheini mewn grwpiau 'anodd eu cyrraedd'. Ategir hyn gan Fframwaith Cyflawni newydd y GIG, sy'n cynnwys, fel mesur Haen 1, yr angen i

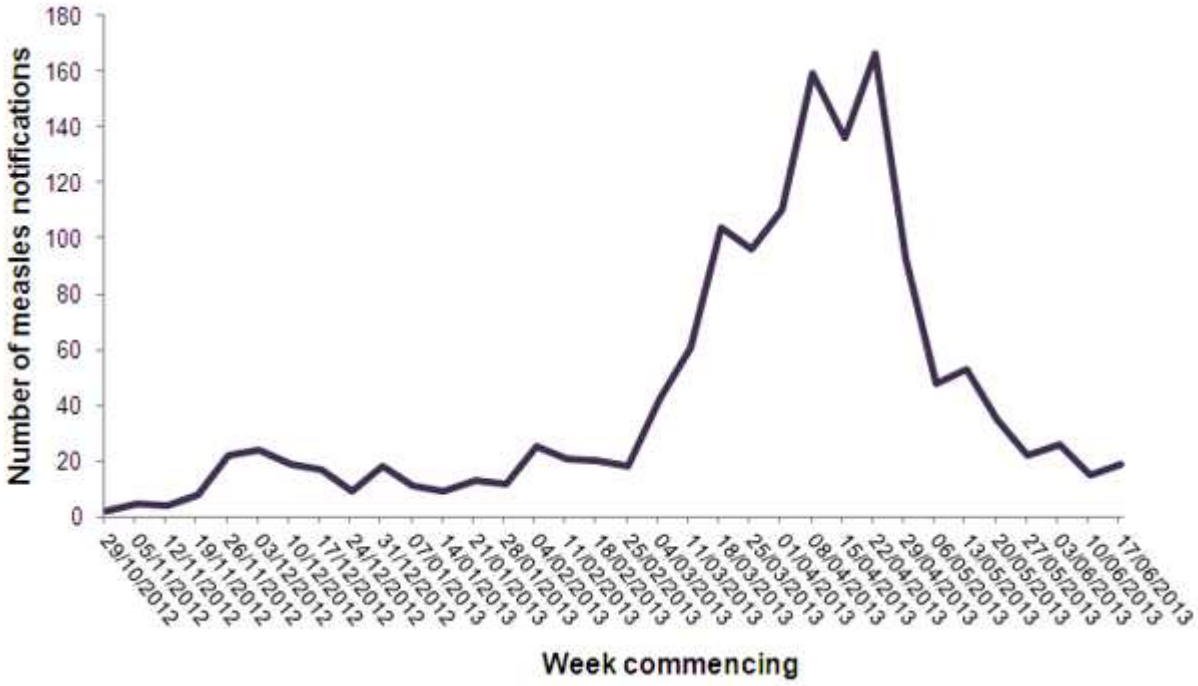
sicrhau bod 95% o blant yn cael eu himiwneiddio'n llawn erbyn pedair oed.

Mae'r ymateb i'r achosion o'r frech goch yng Nghymru wedi rhoi hwb i'r tair gwlad arall yn y DU gyflwyno rhaglenni dal i fyny ar gyfer pobl ifanc yn eu harddegau yn eu hardaloedd. Fel yr amlinellais uchod, mae'r camau amserol a gymerwyd yma wedi lleihau difrifoldeb yr achosion ac wedi golygu eu bod wedi para am lai o amser.

Mae'n amlwg bod yr ymateb yng Nghymru wedi cael budd o system iechyd y cyhoedd genedlaethol a all arwain a chydgysylltu ymdrech ddwys ac effeithiol sy'n cynnwys gofal sylfaenol, awdurdodau lleol a'r sector gwirfoddol. O ganlyniad, bu modd i wasanaethau ymateb yn gyflym a sefydlu prosesau i roi nifer fawr o frechiadau mewn ffordd effeithlon ac effeithiol y tu hwnt i drefniadau rheolaidd.

Nifer yr achosion o'r frech goch a gofnodwyd yng Nghymru fesul wythnos

Siart yn nodi nifer yr achosion a gofnodwyd fesul wythnos: wythnos yn dechrau 29/10/2012 - wythnos yn dechrau 17/06/2013



Data tan ddiwedd wythnos 25 2013 (17/06/13 - 23/06/13). Data dros dro a geir ar gyfer wythnos 25 a gall gynyddu yn sgil achosion a gofnodwyd yn hwyr.

***Ffynhonnell**: CoSurv Notifications, Iechyd Cyhoeddus Cymru*

Atodiad 2

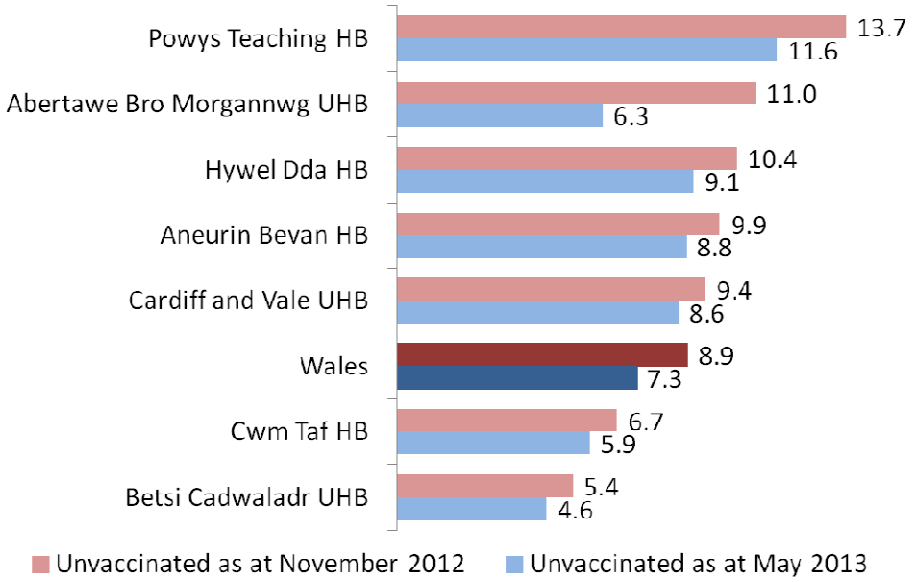
Y nifer gronnol o frechiadau MMR a roddwyd ar oedrannau nad ydynt yn oedrannau brechu rheolaidd:
18/03/13 – 23/06/13

	Meddyg teulu*	Clinigau Galw Heibio	Sesiynau Ysgol	Iechyd Galwedigaethol	Cyfanswm
BIP Abertawe Bro Morgannwg	16859	8764	1749	2600	29882
BI Aneurin Bevan	9233	2940	2094	472	14739
BIP Betsi Cadwaladr	3132	0	1344	548	5024
BIP Caerdydd a'r Fro	4442	214	1283	1108	7047
BI Cwm Taf	3402	0	1640	466	5508
BI Hywel Dda	5527	570	1204	386	7687
BI Addysgu Powys	2485	29	330	59	2903
Cyfanswm Cymru	45080	12427	9644	5639	72790

- Efallai y bydd y ffigurau ar gyfer yr wythnos ddiweddaraf yn cynyddu wrth i ddata hwyr gael ei gyflwyno. Data wedi'i gyflwyno gan tua 90% o'r meddygfeydd yng Nghymru. Dechreuwyd casglu data ran o'r ffordd drwy'r wythnos yn dechrau 11/03/2013.

***Ffynhonnell**: Data meddygon teulu o Audit+ DQS, Bwrdd Iechyd Prifysgol Abertawe Bro Morgannwg, Bwrdd Iechyd Aneurin Bevan, Bwrdd Iechyd Prifysgol Betsi Cadwaladr, Bwrdd Iechyd Prifysgol Caerdydd a'r Fro, Bwrdd Iechyd Cwm Taf, Bwrdd Iechyd Hywel Dda a Bwrdd Addysgu Iechyd Powys*

Y newid yng nghyfran y plant a phobl ifanc rhwng 10 a 18 oed mewn ardaloedd Byrddau Iechyd lle cofnodwyd nad oeddent wedi cael unrhyw ddognau MMR rhwng mis Tachwedd 2012 a mis Mai 2013



Ffynhonnell data: NCCHD, Chwefror 2013 a diweddariadau Mai 2013 i Iechyd Cyhoeddus Cymru

Eitem 5

Y Pwyllgor Iechyd a Gofal Cymdeithasol

Lleoliad:	**Ystafell Bwyllgora 1 – y Senedd**
Dyddiad:	**Dydd Iau, 6 Mehefin 2013**
Amser:	**09:30 – 15:40**

Cynulliad Cenedlaethol Cymru
National Assembly for Wales

Gellir gwylio'r cyfarfod ar Senedd TV yn:
<insert link here>

Cofnodion Cryno:

Aelodau'r Cynulliad:	**Vaughan Gething (Cadeirydd)** **Rebecca Evans** **William Graham** **Elin Jones** **Darren Millar** **Lynne Neagle** **Gwyn R Price** **Ken Skates** **Lindsay Whittle** **Kirsty Williams**
Tystion:	**Gwenda Thomas, Dirprwy Weinidog Gwasanaethau Cymdeithasol** **Albert Heaney, Llywodraeth Cymru** **Mike Lubienski, Llywodraeth Cymru** **Julie Rogers, Llywodraeth Cymru** **Dame June Clark** **Yr Athro Ceri Phillips, Prifysgol Abertawe**
Staff y Pwyllgor:	**Fay Buckle (Clerc)** **Llinos Madeley (Clerc)** **Claire Griffiths (Dirprwy Glerc)**

Catherine Hunt (Dirprwy Glerc)
Joanest Jackson (Cynghorydd Cyfreithiol)
Stephen Boyce (Ymchwilydd)
Victoria Paris (Ymchwilydd)
Philippa Watkins (Ymchwilydd)
Eleanor Roy (Ymchwilydd)

TRAWSGRIFIAD
Gweld trawsgrifiad o'r cyfarfod.

1 Cyflwyniad, ymddiheuriadau a dirprwyon

1.1 Ni chafwyd ymddiheuriadau ac nid oedd dirprwyon.

2 Ymchwiliad i weithredu'r Fframwaith Gwasanaeth Cenedlaethol ar gyfer diabetes yng Nghymru a'i gyfeiriad yn y dyfodol – ystyried yr adroddiad drafft

2.1 Bu'r Pwyllgor yn trafod yr adroddiad drafft.

3 Mynediad at dechnolegau meddygol yng Nghymru – ystyried y cylch gorchwyl

3.1 Cytunodd y Pwyllgor ar y cylch gorchwyl drafft.

4 Paratoi ar gyfer y sesiynau craffu ariannol cyffredinol a chanol blwyddyn ar 18 Gorffennaf

4.1 Bu'r Pwyllgor yn trafod y materion yr hoffai gael gwybodaeth amdanynt yn y sesiynau craffu ar 18 Gorffennaf.

5 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): sesiwn dystiolaeth 5

5.1 Bu'r Pwyllgor yn clywed tystiolaeth gan y Dirprwy Weinidog Gwasanaethau Cymdeithasol.

6 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): sesiwn dystiolaeth 5

6.1 Bu'r Pwyllgor yn cymryd tystiolaeth gan y Fonesig June Clark a'r Athro Ceri Phillips.

7 Papurau i'w nodi

7.1 Nodwyd y papurau.

7.1 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Anabledd Cymru – gwybodaeth ychwanegol

7.2 Anabledd Cymru - Gwybodaeth ychwanegol: Cymdeithas Llywodraeth Leol Cymru a Chymdeithas Cyfarwyddwyr Gwasanaethau Cymdeithasol - Cyflwr y Genedl

7.3 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): CLlLC - Byrddau Diogelu Rhanbarthol

7.4 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Llythyr gan y Dirprwy Weinidog dyddiedig 8 Mai 2013

7.5 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): CLlLC - Gwybodaeth ychwanegol

7.6 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Y Gymdeithas Genedlaethol er Atal Creulondeb i Blant - gwybodaeth ychwanegol (10 Mai 2013)

7.7 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Llythyr gan y Dirprwy Weinidog dyddiedig 14 Mai 2013 'Pan fydda i'n Barod'

7.8 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Cynhalwyr Cymru - gwybodaeth ychwanegol

7.9 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Comisiynydd Plant Cymru - Asesiad o'r Effaith ar Hawliau Plant

7.10 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Pobl sy'n Gadael Gofal Sir Ddinbych - gwybodaeth ychwanegol

7.11 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Comisiynydd Pobl Hŷn Cymru - gwybodaeth ychwanegol

7.12 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Gwaith allgymorth Cynulliad Cenedlaethol Cymru ar ymgysylltu â grwpiau ffocws

7.13 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Llythyr gan y Dirprwy Weinidog dyddiedig 20 Mai 2013

7.14 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Y Gymdeithas Genedlaethol er Atal Creulondeb i Blant - Gwybodaeth Ychwanegol (22 Mai 2013)

7.15 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Fforwm Gofal Cymru - tystiolaeth ychwanegol

7.16 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Alice (Grŵp Barnardo's 16 Mai) - tystiolaeth ychwanegol

7.17 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Bwrdd Iechyd Lleol Hywel Dda - gwybodaeth ychwanegol

7.18 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Cyngor Gofal Cymru - gwybodaeth ychwanegol

7.19 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): CLlLC/Cymdeithas Cyfarwyddwyr Gwasanaethau Cymdeithasol - Diffiniad o oedolion mewn perygl

7.20 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Papur y Grŵp Cynghori

7.21 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Cymdeithas Llywodraeth Leol Cymru, ADSS Cymru, Conffederasiwn GIG Cymru - llythyr at y Cadeirydd (3 Mehefin 2013)

7.22 Rheoliadau Mangreoedd etc. Di-fwg (Cymru) (Diwygio) 2012 - Llythyr gan y Gweinidog Iechyd a Gwasanaethau Cymdeithasol

7.23 Rheoliadau Mangreoedd etc. Di-fwg (Cymru) (Diwygio) 2012 - Llythyr gan Gadeiryddion yr Is-bwyllgorau

8 Cynnig o dan Reol Sefydlog 17.42 i benderfynu gwahardd y cyhoedd o'r cyfarfodydd a gynhelir ar 12, 20 a 26 Mehefin

8.1 Derbyniwyd y cynnig.

Y Pwyllgor Iechyd a Gofal Cymdeithasol

Lleoliad:	**Ystafell Bwyllgora 1 – y Senedd**
Dyddiad:	**Dydd Mercher, 12 Mehefin 2013**
Amser:	09:00 – 12:38

Cynulliad Cenedlaethol Cymru
National Assembly for Wales

Cofnodion Cryno:
Preifat

Aelodau'r Cynulliad:	**Vaughan Gething (Cadeirydd)** **Rebecca Evans** **William Graham** **Elin Jones** **Darren Millar** **Lynne Neagle** **Gwyn R Price** **Ken Skates** **Lindsay Whittle** **Kirsty Williams**
Tystion:	
Staff y Pwyllgor:	**Fay Buckle (Clerc)** **Llinos Madeley (Clerc)** **Catherine Hunt (Dirprwy Glerc)** **Claire Griffiths (Dirprwy Glerc)** **Stephen Boyce (Ymchwilydd)** **Lisa Salkeld (Cynghorydd Cyfreithiol)** **Joanest Jackson (Cynghorydd Cyfreithiol)** **Yr Athro John Williams (Cynghorydd)**

1 Memorandwm Cydsyniad Deddfwriaethol: Y Bil Gofal

1.1 Bu'r Pwyllgor yn ystyried y Memorandwm Cydsyniad Deddfwriaethol a chytunodd i gyflwyno adroddiad ar ei gasgliadau.

2 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): prif faterion ac argymhellion

2.1 Bu'r Pwyllgor yn ystyried a thrafod y prif faterion a ddeilliodd o'r dystiolaeth a gafwyd ar y Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru).

Y Pwyllgor Iechyd a Gofal Cymdeithasol

Lleoliad:	**Ystafell Bwyllgora 1 – y Senedd**
Dyddiad:	**Dydd Iau, 20 Mehefin 2013**
Amser:	**09:05 – 15:00**

Cynulliad Cenedlaethol Cymru
National Assembly for Wales

Cofnodion Cryno:
Preifat

Aelodau'r Cynulliad:	**Vaughan Gething (Cadeirydd)** **Rebecca Evans** **William Graham** **Elin Jones** **Darren Millar** **Lynne Neagle** **Gwyn R Price** **Ken Skates** **Lindsay Whittle** **Kirsty Williams**
Tystion:	
Staff y Pwyllgor:	**Llinos Madeley (Clerc)** **Fay Buckle (Clerc)** **Catherine Hunt (Dirprwy Glerc)** **Claire Griffiths (Dirprwy Glerc)** **Joanest Jackson (Cynghorydd Cyfreithiol)** **Stephen Boyce (Ymchwilydd)** **Yr Athro John Williams (Cynghorydd)**

1 Memorandwm Cydsyniad Deddfwriaethol: Y Bil Gofal -Ystyried adroddiad drafft y Pwyllgor

1.1 Cytunodd y Pwyllgor ar ei adroddiad ar Femorandwm Cydsyniad Deddfwriaethol y Bil Gofal.

2 Y Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru) -Ystyried adroddiad drafft y Pwyllgor

2.1 Bu'r Pwyllgor yn ystyried ac yn trafod y prif faterion sy'n codi o'r dystiolaeth a gafwyd mewn perthynas â'r Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru).

3 Y Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru) - Ystyried adroddiad drafft y Pwyllgor

3.1 Bu'r Pwyllgor yn ystyried ac yn trafod y prif faterion sy'n codi o'r dystiolaeth a gafwyd mewn perthynas â'r Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru).

Y Pwyllgor Iechyd a Gofal Cymdeithasol

Lleoliad:	**Ystafell Bwyllgora 1 – y Senedd**
Dyddiad:	**Dydd Mercher, 26 Mehefin 2013**
Amser:	09:00 – 11:54

Cynulliad Cenedlaethol Cymru
National Assembly for Wales

Cofnodion Cryno:
Preifat

Aelodau'r Cynulliad:	**Vaughan Gething (Cadeirydd)** **Rebecca Evans** **William Graham** **Elin Jones** **Darren Millar** **Lynne Neagle** **Gwyn R Price** **Ken Skates** **Lindsay Whittle** **Kirsty Williams**
Tystion:	
Staff y Pwyllgor:	**Fay Buckle (Clerc)** **Claire Griffiths (Dirprwy Glerc)** **Joanest Jackson (Cynghorydd Cyfreithiol)** **Stephen Boyce (Ymchwilydd)**

1 Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Trafod adroddiad terfynol y Pwyllgor a chytuno arno

1.1 Bu'r Pwyllgor yn ystyried ac yn trafod y materion allweddol a gododd o'r dystiolaeth a gafwyd ar y Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru).

Y Pwyllgor Iechyd a Gofal Cymdeithasol

Lleoliad:	Ystafell Bwyllgora 1 - y Senedd
Dyddiad:	Dydd Llun, 1 Gorffennaf 2013
Amser:	14:00 - 15:06

Cynulliad Cenedlaethol Cymru
National Assembly for Wales

Gellir gwylio'r cyfarfod ar Senedd TV yn:

http://www.senedd.tv/archiveplayer.jsf?v=en_500000_01_07_2013&t=99&l=en

Cofnodion Cryno:
Preifat

Aelodau'r Cynulliad:	Mick Antoniw Rebecca Evans William Graham Darren Millar Lynne Neagle Gwyn R Price Jenny Rathbone Lindsay Whittle Kirsty Williams
Tystion:	
Staff y Pwyllgor:	Fay Buckle (Clerc) Claire Griffiths (Dirprwy Glerc) Joanest Jackson (Cynghorydd Cyfreithiol) Lisa Salkeld (Cynghorydd Cyfreithiol) Stephen Boyce (Ymchwilydd)

1 Cynnig i ethol Cadeirydd dros dro

1.1 Galwodd y Clerc am enwebiadau ar gyfer ethol Cadeirydd dros dro. Enwebwyd Lynne Neagle gan Rebecca Evans, ac etholwyd Lynne Neagle yn Gadeirydd dros dro.

2 Cyflwyniad, ymddiheuriadau a dirprwyon

2.1 Cafwyd ymddiheuriadau gan Vaughan Gething a Ken Skates. Roedd Mick Antoniw a Jenny Rathbone yn dirprwyo.

3 Papurau i'w nodi

3.1 Nodwyd y papurau.

3.1 Y Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Llythyr gan y Dirprwy Weinidog i'r Cadeirydd dyddiedig 11 Mehefin 2013

3.2 Y Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Llythyr gan y Dirprwy Weinidog i'r Cadeirydd dyddiedig 17 Mehefin 2013

4 Cynnig o dan Reol Sefydlog 17.42 i benderfynu gwahardd y cyhoedd o'r cyfarfod ar gyfer y canlynol:

4.1 Derbyniwyd y cynnig.

5 Y Bil Gwasanaethau Cymdeithasol a Llesiant (Cymru): Ystyried yr adroddiad drafft

5.1 Bu'r Aelodau'n trafod yr adroddiad drafft.

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THE MEASLES OUTBREAK

Inquiry by the National Assembly for Wales' Health and Social Care Committee

Response from BMA Cymru Wales

INTRODUCTION

BMA Cymru Wales is pleased to provide a response to the inquiry by the National Assembly for Wales' Health and Social Care Committee into the current measles outbreak in Wales.

The British Medical Association represents doctors from all branches of medicine all over the UK; and has a total membership of over 150,000 including more than 3,000 members overseas and over 19,000 medical student members.

The BMA is the largest voluntary professional association of doctors in the UK, which speaks for doctors at home and abroad. It is also an independent trade union.

BMA Cymru Wales represents some 7,000 members in Wales from every branch of the medical profession.

RESPONSE

1. The factors that have led to the current measles outbreak

BMA Cymru Wales recognises that the factors are, as always, multiple and complex. For an outbreak to occur there needs to be a pool of susceptible people who are in contact with each other, and an initial source of infection to introduce the disease into the group.

Wales has insecure boundaries as far as pathogens are concerned. Infection may enter from other places in the British Isles or further afield. Our coastline and skies are also inhabited by animals that can bring infections in from other areas. We are also vulnerable to windborne pathogens, most obviously in animal husbandry swine flu and foot-and-mouth disease. As the International Health Regulations (IHR) recognise, transmission and outbreaks will always occur. Nations should therefore have preparations in place for outbreaks.

The single most important resource that nations need is people trained to identify and respond to outbreaks. Wales is fortunate in that, unlike England, it has an integrated service with a tradition of sharing information openly and honestly between its parts on a co-operative basis.

The second important aspect is to have a legislative and social environment to enable required actions to take place. The picture here is more mixed.

In the aftermath of now discredited research purporting a link between the MMR vaccine and both autism and bowel disease, the media played an important role in encouraging the public, and parents in particular, to believe that immunisation against measles was more dangerous than the disease itself.

As a result of this, the uptake of MMR vaccination was very low amongst current 10-16 year olds. This, in turn, meant that herd immunity levels were low and there was therefore an increased pool of susceptible people in Wales, and especially within the Abertawe Bro Morgannwg University (ABMU) Health Board area. It was particularly unfortunate that a specific focus of this misleading information was in a major city.

GPs have highlighted that the factors which contributed to this lack of uptake of the MMR vaccine, in particular within the ABMU area, include:

- Sustained media coverage from the Swansea local paper propagating the now-discredited research – with little or no coverage of the counter argument. This media coverage also focussed on a small group of very vocal local parents who sincerely believed that the MMR vaccination had caused their child to be ill.
- Parents didn't know much about inflammatory bowel disease or autism, so reading about this gave rise to anxiety. What parent would want to potentially harm their child with what they perceived to be an "unsafe" vaccination? Sadly, bad news is not only great media fodder but is remembered by people.
- Parents either chose not to speak to their GP/healthcare professionals, or did not believe them. This was mainly again due to media coverage (in this case not just local) around healthcare professionals "hiding the truth".
- It was also disappointing that the myths around the MMR vaccine were shared by some healthcare professionals, and communicated both directly and indirectly to patients.
- By the time the furore had died down and the research in question was discredited, many parents had forgotten that their child was not fully vaccinated.
- Many parents chose, and still choose, to rely on herd immunity rather than have their child vaccinated. GPs still see ongoing "refusniks" in their surgeries despite taking time, or trying multiple methods, to persuade them to have their children vaccinated. The recent outbreak has, however, largely addressed this.

BMA Cymru Wales believes that the media need to be aware of the dangers to the public of misguided campaigns. They need to reflect carefully, and balance the undoubted benefit of challenging accepted dogma against replacing it with another unsafe one.

It seems unfair that the many excellent journalists are tarnished as a result by the behaviour of some, who it seems do not uphold the honourable role of seeking to lay the facts before the public for consideration.

The importation of measles into Wales from other parts of the British Isles, or directly via holiday makers or business travellers, was inevitable. A lack of experience in identifying the disease, both in the population and amongst medical and nursing staff, also meant that these initial cases might not have been diagnosed swiftly. Hence the surveillance arrangements that exist in Wales would not receive an alert. As such, keeping all medical and nursing staff aware of infectious diseases as part of their Continuous Professional Development (CPD) is an essential element of protecting against such outbreaks.

BMA Cymru Wales is concerned that pressure for the reduction within the health service of study leave, and Supporting Professional Activities (SPA) time for hospital doctors, in an often misguided pursuit of financial efficiency contributes to a culture that regrettably makes uncontrolled outbreaks more likely.

The protection of communities from infectious disease is principally a social activity. It requires everyone to be aware of their responsibility to others in their community, and to act on that. Unfortunately, the mantra for many years has often been about personal rights and individual freedoms. Whilst it is clear that no one has advocated the freedom to infect a community, the use of isolation and quarantine has become very rare. Indeed many large employers, including the NHS itself, have sickness policies that encourage people to stay in or return to work at a time when they might be incubating diseases. Changes to the benefits system may also make it harder for patients who might be incubating disease to stay home in case they become ill.

BMA Cymru Wales is therefore concerned that the failure to highlight the duty we all have to absent ourselves from social activities including work when we might be infectious contributed to the outbreak. We also believe that a major contribution may have been made by employers, including the NHS and other public bodies, failing to encourage staff through their sickness absence policies to act responsibly when they might be infectious, or in some cases even punishing them for doing so.

It became accepted dogma that market methods should be applied to health following the introduction of the internal market in 1990. The separation of health services from health planning was, in our view, a mistake that was corrected in Wales with the recent abolition of the market. However the effect of this has been to steadily reduce the resources available for public health, particularly for senior personnel. Whilst the remainder of health services have seen an expansion in staff numbers since 1990, public health has seen a decline (at consultant level of over 30%) at a time when other parts of the NHS expanded their consultant work force by 66%. At the same time GP numbers have been essentially static.

BMA Cymru Wales believes that a failure to sufficiently invest in, and maintain, a specialist public health workforce also contributed to the outbreak gaining traction in the susceptible community.

2. The actions taken by public health professionals, in partnership with other agencies, in response to the outbreak

It is the view of members of BMA Cymru Wales that the response, both in the initial phase when the infection was imported from outside of Wales and later on in the subsequent explosive stage, was in the most part exemplary. This does not mean we acknowledge that, with hindsight, some decisions might have been different. However, we feel the decisions made were reasonable and appropriate considering the social environment that now exists.

In the initial phase, full contact tracing was undertaken. Though recognition of the disease was patchy, we recognise that the notification by frontline staff in the NHS was timely as demonstrated by the observation that the outbreak in Milford Haven and surrounding areas was both limited and self-extinguishing. The contemporaneous outbreaks in Swansea and Pontarddulais areas were also fully monitored by the local team. Again, it is noted that the Pontarddulais outbreak self-extinguished and did not spread. Unfortunately because of the greater mixing that occurs in an urban population, it was always going to be harder to control the outbreak in Swansea. Efforts were made to increase the immunisation of susceptible children, but it must be recorded that the public did not effectively respond, even when sessions were arranged in schools.

Consideration was given to imposing quarantine on susceptible contacts, as this has been shown to be 95% effective. But it was judged that neither political support for the confinement of individuals in their homes for 18 days, nor public adherence to such an order, would have been forthcoming. It is also very unclear if media support for such measures, an essential element of any public health action, would have been available. This powerful and effective tool was therefore not available to health professionals in Wales.

Once the infection passed from smaller groups of primary schools into large secondary schools, it became inevitable that the outbreak would grow exponentially. This is indeed exactly what happened.

At the explosive growth stage, NHS Wales leapt to respond. BMA Cymru Wales takes pride that the NHS Wales family worked to protect the public in such a cohesive and effective way. It is clear that by the actions of GPs and their primary care teams; school governors; heads and their teams (including school nurses – an often-overlooked, vital element of the public health team); health boards and their employed staff; and members of Public Health Wales, all worked to bring this outbreak under control as quickly as possible.

The important role of the media in supporting and encouraging this effort must also be acknowledged.

BMA Cymru Wales believes that particular praise is due to the Director of Public Health in Swansea, Sara Hayes, for the crucial role that she played. The value of having a medically-trained expert in this vital role during the outbreak cannot be understated. Her close links with primary care, her understanding of political

processes as well as her position in the health board played a crucial role in ensuring the urgent measures being undertaken ran smoothly

Sara led most of the work in ABMU in co-ordinating services in the form of the "bronze group". This was a multidisciplinary group including health board executives together with representatives of secondary and primary care. It also included the communication leads from the health board. This collaborative team-working enabled the situation to be managed as it arose.

Whilst there has been some criticism from local healthcare professionals that more might have been done in November during the early stages of the outbreak, it is easy to say this in hindsight. Should there be any lessons to be learnt, these can be identified as part of a review of the outbreak's management.

GPs have outlined a number of key areas that they believe contributed positively to the management of the outbreak:

- ABMU developing drop-in clinics in addition to the work going on in GP surgeries to give additional vaccinations. Large numbers of staff including health visitors, practice nurses, public health doctors and GPs made themselves available to deliver vaccines.
- The actions/response of the GP community and their practice teams in delivering additional vaccines, checking records, answering the huge swathes of queries coming through from anxious patients, seeing patients with possible measles infection (and quickly adopting sensible working practices in trying to isolate the infected individuals). This was achieved against a background of increased work as a result of changes to the GP contract, and there is still a significant piece of work to ensure the second dose of the MMR vaccine is given to those at risk.
- Localities/ABMU Health Board quickly designating appropriate Local Enhanced Services (LES) to practices to enable them to do the extra contractual vaccinations, and amending this when "gaps" were subsequently identified.
- Regular weekly updates being provided in a useful, easy-to-read format that clarified many questions on the regime – especially around the amended regime recommending earlier immunisation than usual to protect those patients at increased risk, under clinical supervision.
- Responsiveness of the Out of Hours service in enabling pregnant women to receive immunoglobulin whilst a more sustainable service developed.
- The impact of the communications teams from both ABMU Health Board and Public Health Wales in their co-ordinated approach. This has to be commended as not only did they secure significant amounts of sustained positive media coverage locally and nationally, but they also set up a Facebook page which enabled patients to ask questions and have queries answered quickly. This work greatly assisted in making in-roads into those in the population who are traditionally difficult to reach.
- A school programme was implemented. We are not sure of the impact of this, but having it available was useful in terms of offering vaccines. Sadly, many of the target audience were off revising as it coincided with preparing for, and sitting, mock exams,
- GPs and public health doctors agreeing to engage in media coverage. Many members of the BMA's General Practitioners Committee for Wales in the area contributed to TV, radio and newspaper coverage – this extended from Sky, BBC and ITV Wales to as far as Al Jazeera, Chinese BBC, Central Chinese Television, Australian BBC and the Wall Street Journal.
- Management of vaccine delivery and maintenance of the "cold chain" – to ensure vaccines were where they were needed when they were needed.

Another factor that enabled the public health team to monitor the outbreak via the "silver group" was the General Practitioners Committee for Wales enabling a "break glass" to the "Audit+" data extraction tool which enabled Public Health Wales to have access to the measles vaccination data. This was facilitated by an agreement with the General Practitioners Committee for Wales. Praise is also due to the responsiveness of the "Audit+" team at the NHS Wales Informatics Service for amending the module at very short notice, and providing the figures on a regular basis to Public Health Wales.

3. The lessons that could be learned in order to prevent future outbreaks.

BMA Cymru Wales believes that there needs to be a recognition at all levels that control of infectious disease is governed by uncertainty.

The previous outbreak in 2008–09 did not "take off" even though the control measures used then were identical. It was fortunate that the changes that have occurred since then have made mounting the response to an outbreak easier. If the outbreak had not occurred this time, there could potentially have been comments about "shroud waving" as there were after the swine flu outbreak.

BMA Cymru Wales believes that there is a need to invest further in public health specialists. Fortunately, in this case, the outbreak occurred near to major conurbations, so the majority of the public health workforce was available to assist in co-ordinating the efforts of frontline NHS staff.

It is also important to ensure that there is an adequate number of trained immunisers available within a health board area to cope with an outbreak.

We recognise the importance of collaborative team-working in responding to an outbreak, and the need to make sure that a variety of options is made available for people to be vaccinated.

Staff in the GP Out of Hours service must be included in local meetings as they often support delivery of the management of an outbreak. We must also ensure sessional doctors are included in the dissemination of information.

We would contend that a flexible, well-trained health staff is the best investment any nation can make to protect itself against future outbreaks of disease.

Having a single portal to access information is in our view vital for healthcare professionals, especially as an outbreak develops. We believe it may be worth revisiting "GP One" as that might make an ideal portal together with appropriate funding.

Some concerns regarding access to up-to-date data need to be addressed. For instance, some members have reported that child health records which were made available to GP practices were found to be out of date, such as in relation to addresses and registered surgeries. This was particularly found to be the case in relation to those in their teenage years. A mechanism should therefore be developed to ensure that child health databases are kept as accurate as possible, to aid the identification of those who may be in need of vaccination when an epidemic hits. There may be many contributory factors to this, including practices not providing data in a timely manner, data not being entered in a timely manner and duplicate records existing within the database.

To assist in avoiding unnecessary duplication of effort, it would also be helpful to improve the timeliness of GP practices being informed once patients receive vaccinations in other centres.

We believe it is important to ensure that messages are consistent and that GP practices are not overloaded with so much information that this impedes important messages getting through. This is something that applies to other categories of information going to GP practices, and not confined simply to information that related to the measles outbreak.

BMA Cymru Wales believes that consideration should be given to recognising that the power of quarantine (social distancing) may need to be enhanced – so that all people with infectious disease expect to isolate themselves and susceptible members of their family for a suitable period.

We believe that employers, and the benefits system, need to recognise the risks to society of punishing people who absent themselves to protect others.

Enabling and enhancing health surveillance systems, to assist in detecting the next outbreak early, must be a priority. This should include efforts to better utilise the data that is already collected using the great computational power that is now available.

The significant role of primary care in the detection and first response to infections should be fully recognised. Efforts made to increase GP numbers to enhance their effectiveness should be supported by the investment of sufficient additional resources.

The move to reduce CPD and study leave across the NHS must be resisted and reversed as a matter of urgency.

BMA Cymru Wales believes that the risks of moving the public health service back into local authority control are highlighted by this outbreak. The value of having public health as a core group within the NHS assisted in ensuring a prompt, co-ordinated and collaborative response led by the Director of Public Health on the health board.

We believe that undertaking a debrief is vital and that we should consider developing a blueprint for future outbreaks, as certain lessons that can be learned will be generic in nature.

It is important not to forget the wider impact of the measles outbreak. Economically the area has taken a hit, with anxiety remaining in many parts of UK and abroad about travelling to Wales and Swansea. This is something that has been reported back to GPs by patients.

Finally, we would point out that the outbreak highlights an on-going need to undertake "myth-busting" with regard to health matters.

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Health and Social Care Committee

Inquiry into the measles outbreak 2013 – Evidence from RCN Wales

ABOUT THE ROYAL COLLEGE OF NURSING (RCN)
The RCN is the world's largest professional union of nurses, representing over 400,000 nurses, midwives, health visitors and nursing students, including over 23,000 members in Wales. The majority of RCN members work in the NHS with around a quarter working in the independent sector. The RCN works locally, nationally and internationally to promote standards of care and the interests of patients and nurses, and of nursing as a profession. The RCN is a UK-wide organisation, with its own National Boards for Wales, Scotland and Northern Ireland. The RCN is a major contributor to nursing practice, standards of care, and public policy as it affects health and nursing.
The RCN represents nurses and nursing, promotes excellence in practice and shapes health policies.

The Royal College of Nursing praised the dedication of nursing staff in South Wales, who worked tirelessly to provide vaccinations to curtail the current measles outbreak. In all, over 61,500 non-routine vaccinations have been given since 1 March. This includes 17,440 people aged 10 to 18 who are said to be the group hardest hit by the measles outbreak centred on the Swansea area.[i]

Martin Semple, Associate Director (Professional Practice), RCN in Wales, said: "Nurses are particularly skilled at working in partnership with communities and networking locally across different agencies, helping the community to address challenges. As usual, nurses have shown dedication and have been working beyond the call of duty to help out. They have also encouraged the communities' parents and carers to get children vaccinated as soon as possible."[ii]

Issues raised by clinical staff

Impacting factors that led to the outbreak

- The impact of Andrew Wakefield's study upon parents' willingness to consent to the MMR and the anxiety that this also created for Health Visitors (and the impact of the portrayal in the media)
- The impact of the local media /press reports and their high profile negativity towards the MMR vaccine
- The impact of the local *JABS* group (high profile group led by a local mother)

- Increasing numbers of children diagnosed with autistic spectrum disorder at the same time influencing parents' beliefs with no clinical evidence to link the same.
- Availability of single MMR vaccines.
- Cultural attitudes towards vaccines for older children (i.e. at 3 years) – i.e. seemingly less importance placed on vaccinating older ones
- Change in who and where immunisations and vaccinations may be administered

Responding to the Outbreak from Health Board perspective

- An Emergency Planning approach was taken with a Senior response team – which incorporated key health /social care and education leads and incorporated a detailed media approach to the same ensuring that a variety of communications was applied to ensure that all susceptible individuals were targeted

- Operationally there was an integrated Nursing response to support vaccination sessions (District Nurse, Health Visitors & School health Nurses supported school sessions/drop-in clinics in the 3 main Hospital settings and in support of the Occupational Health dept to vaccinate HB staff)

Prevention of future outbreaks

- Need to consider the way public health messages/information is disseminated and communicated and by whom to ensure that there is a consistent approach and that the public have confidence in the same
- Where possible to utilise lay members of the public who support the public health messages/information to influence their local communities
- Consistent national approaches that aim to increase immunisations of older children by changing attitudes towards the same
- Consideration given to mechanisms to alert young people/young adults of issues

Background clinical information

What is measles?

Measles is an acute viral illness, characterised by the onset of fever, cold like symptoms, conjunctivitis and cough. The rash commonly starts at the head and spreads to the trunk and limbs over three to four days.

How is it spread?

Measles is spread by airborne or droplet transmission. Individuals are infectious from when the first symptom appears to four days after the appearance of the rash. It is one of the most highly communicable infectious diseases. The incubation period is about ten

days (ranging between seven and 18 days) with a further two to four days before the rash appears.

What are the complications of measles?

- The most common complications of measles infection are otitis media (7 to 9% of cases), pneumonia (1 to 6%), diarrhoea (8%) and convulsions (one in 200).
- More rare complications include encephalitis (overall rate of one per 1000 cases of measles) and sub-acute sclerosing pan-encephalitis
- Death occurs in one in 5000 cases in the UK. The case-fatality ratio for measles is age-related and is high in children under one year of age, lower in children aged one to nine years and rises again in teenagers and adults
- Complications are more common and more severe in poorly nourished and/or chronically ill children, including those who are immunosuppressed.

Epidemiology

- Notification of measles began in England and Wales in 1940. Before the introduction of measles vaccine in 1968, annual notifications varied between 160,000 and 800,000, with peaks every two years and around 100 deaths from acute measles occurred each year.
- From the introduction of measles vaccination in 1968 until the late 1980s coverage was low and was insufficient to interrupt measles transmission. Therefore, annual notifications only fell to between 50,000 and 100,000 and measles remained a major cause of morbidity and mortality. Between 1970 and 1988, there continued to be an average of 13 acute measles deaths each year. Measles remained a major cause of mortality in children who could not be immunised because they were receiving immunosuppressive treatment. Between 1974 and 1984, of 51 children who died when in first remission from acute lymphatic leukaemia, 15 of the deaths were due to measles or its complications. Between 1970 and 1983, however, more than half the acute measles deaths that occurred were in previously healthy children who had not been immunised
- Following the introduction of measles, mumps and rubella (MMR) vaccine in October 1988 and the achievement of coverage levels in excess of 90%, measles transmission was substantially reduced and notifications of measles fell progressively to very low levels.
- Because of the substantial reduction in measles transmission in the UK, children were no longer exposed to measles infection and, if they had not been immunised, they remained susceptible to an older age. A major resurgence of measles was predicted, mainly affecting the school-age population. Small outbreaks of measles occurred in England and Wales in 1993, predominantly affecting secondary school children. In 1993-94, a measles epidemic, affecting the west of Scotland, led to 138 teenagers being admitted to one hospital.

- A UK vaccination campaign was implemented in November 1994.

Children under ten years of age

- The first dose of MMR should be given between 12 and 13 months of age (i.e. within a month of the first birthday).
- A second dose is normally given before school entry but can be given routinely at any time from three months after the first dose.
- Children with chronic conditions such as cystic fibrosis, congenital heart or kidney disease, failure to thrive or Down's syndrome are at particular risk from measles infection and should be immunised with MMR vaccine.

Children aged ten years or over and adults

- All children should have received two doses of MMR vaccine before they leave school.
- MMR vaccine can be given to individuals of any age. Entry into college, university or other higher education institutions, prison or military service provides an opportunity to check an individual's immunisation history.

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[i] http://www.bbc.co.uk/news/uk-wales-22641698

[ii] http://www.rcn.org.uk/newsevents/news/article/uk/rcn_praises_tireless_work_of_nurses_in_swansea_measles_epidemic