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Contents

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CURRENT NOTES

Anthrax cases among injecting drug users – Germany and Denmark

46/2801 Further to *Current note* 46/2601 (at http://www.hps.scot.nhs.uk/ewr/redirect.aspx?id=51845), the European Centre for Disease Prevention and Control (ECDC) and the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) have issued an update to their joint risk assessment in response to a third case of anthrax in an injecting drug user (IDU) in Berlin.

The first two cases (in Regensburg, Bavaria), one of which was fatal, are considered as probably linked through exposure to heroin contaminated by an identical *Bacillus anthracis* strain. The link with the third case, though probable, needed to be confirmed (as of 9 July).

The geographical distribution of the contaminated heroin was unknown at this time, but ECDC/EMDDA consider it possible that the batch has the same source as the contaminated heroin incriminated in the 2009/2010 outbreak in Scotland* (which had cases also reported from Germany and England). The risk of exposure for heroin users in Germany and other countries is assumed to be still present and therefore additional cases among IDUs may occur.

ECDC/EMDDA are concerned that, as anthrax has rarely been associated with severe infection among drug users, clinicians may not consider anthrax in the differential diagnosis of severe infections in this population and this consequently may result in undiagnosed cases. It is thought therefore that clinical awareness in healthcare settings of the risk of injection-related infection with rare pathogens among the IDU population is crucial. [Source: ECDC News Release, 9 July 2012. http://www.ecdc.europa.eu/EN/PRESS/Pages/index.aspx]

On 8 July, a further case was confirmed in a 55-year-old Danish IDU. The subject had purchased heroin on or around 1 July 2012 on the streets of Copenhagen and administered this intravenously over the following days. On 5 July, the patient was admitted to hospital with pain in one leg and a 'black wound' in the groin, where the injection had taken place. The disease accelerated rapidly and, despite intensive care, the patient died.

The identified bacteria will be compared with those isolated in the German cases and, though this is a notoriously difficult procedure, the Danish Statens Serum Institut (SSI) will be analysing samples of heroin for the bacillus. [Source: SSI News Release, 9 July 2012. http://www.ssi.dk/Aktuelt/Nyheder/2012/2012_07_miltbrand.aspx]

* Further information / guidance on anthrax in general and the 2009/2010 outbreak in particular can be accessed at http://www.hps.scot.nhs.uk/giz/anthrax.aspx.

Legionnaires' disease outbreak in Spain - update

46/2802 Further to *Current note* 46/2204 (at http://www.hps.scot.nhs.uk/ewr/redirect.aspx?id=51590), the European Centre for Disease Prevention and Control (ECDC) further updated its risk assessment on the outbreak of travel-associated Legionnaires' disease occurring in a hotel in Spain on 6 July.

The outbreak has been ongoing since November 2011 and is associated with a hotel in Calpe, in the province of Alicante, Spain. To 6 July, it had resulted in 38 cases, including six deaths. The thirteen new cases involved six Belgian and seven Spanish citizens.

The new cases among visitors to the hotel suggest that there is an intermittent source of *Legionella* contamination in association with the hotel. According to the Spanish health authorities, the hotel is complying with all relevant regulations. As a precautionary measure, the hotel was closed on 3 July. For the time being, the risk of infection seems to have been removed. However, unless the source of the *Legionella* contamination is found and eliminated, the risk of future exposure cannot be ruled out. ECDC is offering support to the investigations of the Spanish authorities to prevent further cases.

Guests and staff who were in the hotel before its closure have been informed about their possible exposure to *Legionella*, and asked to immediately seek medical attention should they develop

symptoms suggestive of legionellosis. Information is of utmost importance to enhance early diagnosis and treatment, since the disease is associated with a high case-fatality rate. [Source: ECDC News Release, 6 July 2012. http://www.ecdc.europa.eu/en/press/news/Pages/News.aspx]

Edinburgh Legionnaires' disease outbreak - update

46/2803 As of noon on 9 July, no additional cases had been confirmed in the Edinburgh Legionnaires' disease outbreak for the sixth day in a row. The total number of confirmed cases therefore remained at 50, the number of suspected cases at 49 and the total number of overall cases at 99.

Of those cases being treated in hospital, two patients were in intensive care and seven on general wards. A total of 20 cases were being treated in the community, 59 had been discharged from hospital and there had been three deaths.

Ten cases are being treated outwith the NHS Lothian area. The ages of the confirmed cases range from 32 to 85, with more males than females affected.

Investigations into the source and cause of the outbreak continue. Lothian and Borders Police and the Health and Safety Executive are jointly investigating the circumstances of the deaths under the direction of the Crown Office and Procurator Fiscal Service (COPFS) Health and Safety Division. [Source: Scottish Government News Release, 9 July 2012. http://www.scotland.gov.uk/News/Releases/2012/07/Legionnaires-outbreak09072012]

SMC approves fidaxomicin for restricted use

46/2804 On 9 July, the Scottish Medicines Consortium (SMC) confirmed that fidaxomicin (Dificlir®) had been accepted for restricted use within NHS Scotland in the treatment of adults with *Clostridium difficile* infections (CDI).

The SMC had found that the drug demonstrated non-inferiority to another antibiotic in the clinical cure of *Clostridium difficile* infection and superiority in reducing recurrence. It nonetheless found that the submitting company had not presented a sufficiently robust economic analysis to gain acceptance by SMC for first-line use in adults with severe CDI.

The SMC position is therefore that fidaxomicin is approved for use in the treatment of adults with a first CDI recurrence only on the advice of local microbiologists or specialists in infectious diseases. [Source: SMC Advice, 9 July 2012. http://www.scottishmedicines.org.uk/SMC_Advice/Advice/791_12_fidaxomicin_dificlir/fidaxomicin_Dificlir]

The current national guidance *Guidance on Prevention and Control of Clostridium difficile Infection (CDI) in healthcare settings in Scotland* (which includes treatment of CDI - accessible at http://www.hps.scot.nhs.uk/haiic/sshaip/guidelinedetail.aspx?id=42640) is due for review within this financial year. Advice on the treatment of CDI will be updated accordingly.

Undiagnosed illness in Cambodia – EV-71

46/2805 As part of the continuing investigations into recent undiagnosed illness in children, the Ministry of Health of the Kingdom of Cambodia is finalising the review of all suspected hospitalised cases. This final review added an additional two cases between April to 5 July 2012, making the total number of children affected 59. Of these, 52 have died.

The age-range of the cases is from three months to 11 years, with the majority being under three years old. The overall male:female ratio is 1.3:1. Laboratory samples were not available for the majority of the cases as they died before appropriate samples could be taken.

Based on the latest laboratory results, a significant proportion of the samples tested positive for enterovirus 71 (EV-71), which causes hand foot and mouth disease (HFMD). The EV-71 virus has been known to generally cause severe complications amongst some patients.

Additionally, a number of other pathogens, including dengue and *Streptococcus suis* were identified in some of the samples. The samples were found to be negative for H5N1 and other influenza viruses, SARS and Nipah virus.

Further investigations into matching the clinical, laboratory and epidemiological information are ongoing, and are likely to be concluded in a few days. [Source: WHO Outbreak News, 9 July 2012. http://www.who.int/csr/don/2012_07_09/en/index.html]

FAO/OIE Global Strategy to control foot-and-mouth disease

46/2806 On 29 June, a new global strategy to control the spread of foot-and-mouth disease (FMD)was endorsed by representatives from more than 100 countries and international donors at a conference in Bangkok organised by the Food and Agriculture Organization of the United Nations (FAO) and the World Organisation for Animal Health (OIE) with support from Thailand's Ministry of Agriculture and Cooperatives.

More than 1 billion smallholder farmers around the world depend on livestock for their livelihoods, but outbreaks of FMD inflict an estimated annual global loss of US$5 billion. Developing countries are often hardest hit by FMD, a highly-contagious viral disease, with small farmers suffering devastating impacts to their earnings and survival. Consumers are also affected as they

pay more for milk, meat and other foodstuffs when FMD fells livestock. Foot-and-mouth disease affects cattle, swine, sheep, goats and other ruminants, as well as a number of wildlife species. The strategy is intended to make a big impact not only on decreasing the ravages of FMD, but to improve countries' situation with regard to many other diseases, some of which affect human health directly.

The global strategy developed by FAO and OIE advises countries on their risk management policy for controlling FMD outbreaks, allowing them to take early steps to prevent the disease from spreading to other farms, communities and across borders. It includes the development of regional vaccine banks (e.g. OIE regional vaccine bank for Southeast Asia, FAO's Animal Production and Health Commission for Asia, etc.) and centres for quality control for developing countries. Other measures include improving the efficiency of surveillance systems, capacity of laboratories, quality control of vaccines and movement control of animals. [Source: OIE Press Release, 29 June 2012. http://www.oie.int/for-the-media/press-releases/2012/]

Warning about drinking Zam Zam water

46/2807 With the approach of Ramadam, the Food Standards Agency (FSA) has again issued advice on bottled water described or labelled as Zam Zam water.

Zam Zam water is sacred to Muslims and comes from a specific source in Saudi Arabia. Under Saudi law, Zam Zam water cannot be exported from Saudi Arabia for sale. Any water on sale in the UK that is labelled as Zam Zam is therefore of uncertain origin. Tests carried out on water described as Zam Zam in the UK over the past few years, including water brought into the country for personal consumption, have indicated the presence of arsenic at almost three times the legal limit.

Consumers need to be aware that drinking Zam Zam water contaminated with arsenic could contribute to an increased risk of cancer. People should consider avoiding drinking any water described as Zam Zam because there is no completely safe level of arsenic in water – and the more arsenic consumed the greater the risk. However, the risk presented by the occasional consumption of small amounts of this Zam Zam water would be very low for adults and older children.

Infants may also be sensitive to the high levels of nitrates that have also been detected.

The FSA has previously consulted on this issue with its Muslim Organisations Working Group (comprising representatives from Muslim community groups and companies involved with the production of halal food) which advises the Agency on foods appropriate for Muslim faith groups. If consumers find any water on sale that is labelled as Zam Zam, they should contact the local authority enforcement office at their local council so they can investigate further. [Source: FSA News Release, 5 July 2012. http://www.food.gov.uk/news/newsarchive/2012/july/zamzam2012]

SEISS report – fire incident in Inverness

46/2808 The Scottish Environmental Incident Surveillance System (SEISS - at http://www.hps.scot.nhs.uk/surveillance/SystemsDetail.aspx?id=107) recorded an incident on Saturday 7 July. The incident involved a major blaze at an industrial unit in Inverness. The main agent of concern was smoke which was spreading across the city. According to police reports, no -one was injured. (http://www.bbc.co.uk/news/uk-scotland-highlands-islands-18755003).

Eurosurveillance awarded first impact factor of 6.15

46/2809 *Eurosurveillance*, a European peer-reviewed scientific journal devoted to the epidemiology, surveillance, prevention and control of communicable diseases, was awarded its first impact factor, a prestigious 6.15 for 2011. This places it sixth among the 70 journals in the category Infectious Diseases. HPS would like to congratulate the *Eurosurveillance* editorial team on an impressive achievement.

The figure of 6.15 gives *Eurosurveillance* a firm basis for future growth. The journal's main aims, however, will continue to be the provision of timely information to support infectious disease prevention and control, and to influence the public health agenda and stimulate scientific debate.

Journal impact factors are published every year by Thomson Reuters in the Journal Citation Report. The figure is widely considered as an indicator of the scientific impact of a journal, and publishing in journals with a high impact factor is a requirement for an academic career in many institutions.

Eurosurveillance (http://www.eurosurveillance.org) has been published since March 2007 by the European Centre for Disease Prevention and Control (ECDC) in Stockholm, Sweden. The publisher grants editorial independence to the editorial team which is supported by a board of 18 associate editors and currently 37 editorial advisors. The entire content is open access and free of charge for both readers and authors. All articles are indexed in the PubMed/MEDLINE, Scopus, Embase and EBSCO databases. Approximately 11,700 active subscribers receive the weekly table of contents via email. In 2011, 95 peer-reviewed rapid communications and 94 peer-reviewed regular articles were published in *Eurosurveillance*, by authors from some 40 countries.

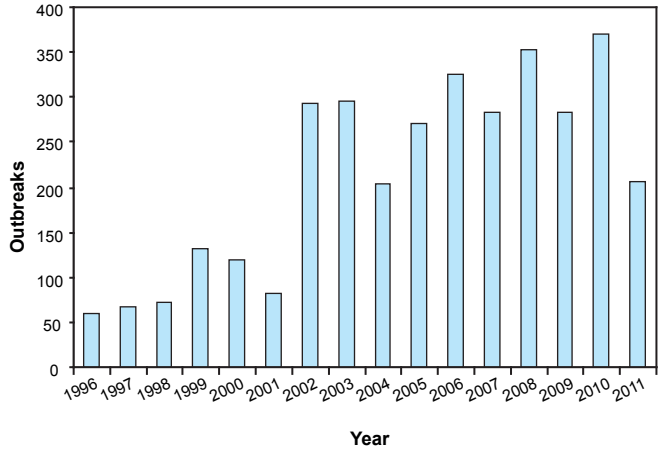
Gastro-intestinal and foodborne infections: General outbreaks of infectious intestinal disease reported to HPS 2011

Prepared by: Alison Smith-Palmer and John Cowden

ObSurv is a voluntary surveillance system established in 1996 for all general outbreaks of infectious intestinal disease (IID) in Scotland. For the purpose of ObSurv an outbreak is defined as an incident in which two or more linked cases experience the same illness, or when the observed number of cases unaccountably exceeds the expected number. The system collects information on general outbreaks, defined as outbreaks affecting members of more than one household or residents of an institution.

During 2010, 206 general outbreaks of IID were reported to ObSurv, this was a decrease of 165 (44.5%) compared to the 371 outbreaks in 2010. The number of outbreaks reported in 2010 had been the highest year since the establishment of ObSurv in 1996. The 2011 total of 206 is the lowest annual total since the 2004 (204) (Figure 1).

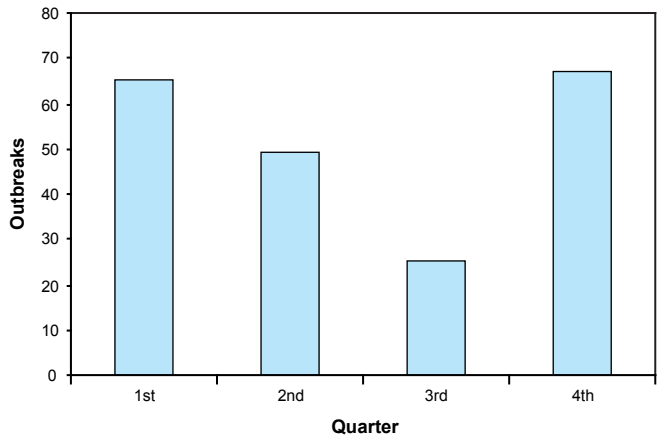
FIGURE 1: General outbreaks of IID reported to ObSurv 1996-2011



Completed outbreak report forms have been returned for 205 (99.5%) of the outbreaks

The first and fourth quarters of 2011 had the greatest numbers of outbreaks 65 (31.6%) and 67 (32.5%) respectively, 49 (23.8%) outbreaks being reported in the second quarter and 25 (12.1%) during the third quarter.

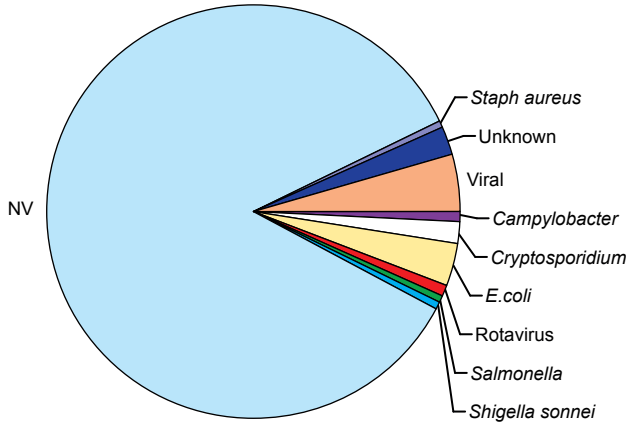
FIGURE 2: Quarter in which general outbreaks of IID were reported to ObSurv during 2011



NV was the principal agent responsible for general outbreaks of IID reported in 2011, accounting for 175 (85%) of the outbreaks. In addition there were nine outbreaks (4.4%) reported as of viral aetiology and five (2.4%) of unknown aetiology which are likely to have been NV.

There were 11 outbreaks of bacterial aetiology accounting for 5.8% of all outbreaks. Within the bacterial outbreaks seven were due to *Escherichia coli* O157, two of *Campylobacter,* and one each of *Salmonella* Napoli, *Shigella sonnei.* There was one outbreak of bacterial intoxication caused by *Staphylococcus aureus.* There were three protozoal outbreaks during 2011, all of *Cryptosporidium.*

FIGURE 3: Pathogens responsible for general outbreaks of IID in 2011



The seven outbreaks of *E. coli* O157 is a similar incidence as 2010 when there were seven outbreaks of *E. coli* O157 and one of *E. coli* O26.

Three of the outbreaks of *E. coli* O157 were associated with private houses, and one each with a farm, a restaurant, an agricultural show and the community.

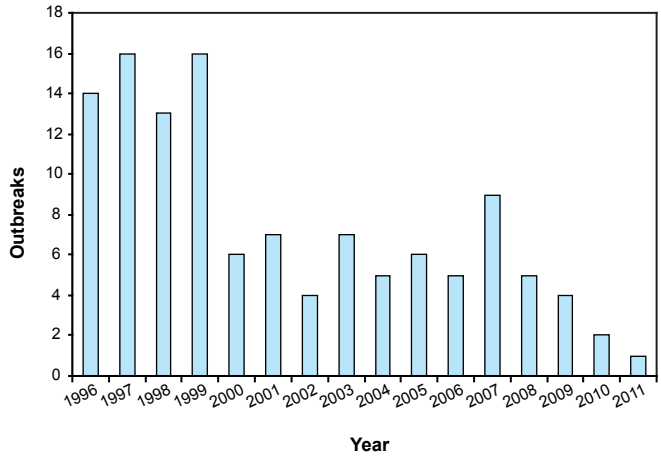
In three of the seven outbreaks person to person was identified as the main mode of transmission, in two environmental transmission was considered the main mode and in two transmission was considered to be mainly foodborne. Overall a total of 63 persons were reported to be ill in the outbreaks of *E. coli* O157 all of whom were laboratory confirmed.

The largest *E. coli* O157 outbreak in 2011 was of PT8 and was part of a larger UK-wide outbreak in which the multi-agency outbreak control team's investigation found a statistically significant association between illness and handling certain loose raw vegetables (particularly leeks and potatoes) in the home, which, although safe to eat, could have had soil on them containing the bacteria. Handling raw vegetables in the home explained many, but not all, of the cases (see *Current note* 45/4002 at http://www.hps.scot.nhs.uk/ewr/redirect.aspx?id=49297).

During 2011 only one general outbreak of *Salmonella* was reported to ObSurv, this compares two such outbreaks in 2010 and four in 2009, and is the lowest number of *Salmonella* outbreaks reported in a single year since ObSurv was

established. Figure 4 shows the general decline in the number of *Salmonella* outbreaks reported in recent years. In the years between 1996 and 2009, between four and 16 general outbreaks of *Salmonella* were reported each year, with an average of eight such outbreaks a year.

FIGURE 4: General outbreaks of *Salmonella* reported to ObSurv 1996 to 2011



There were two general outbreaks of *Campylobacter* reported in 2011, compared to one in each of the previous three years. A total of 31 persons were reported to be ill in these outbreaks, five of which cases were laboratory confirmed. In both outbreaks in 2011, foodborne was considered the main mode of transmission, in one the suspected food vehicle was chicken livers, no food vehicle being identified in the other outbreak.

There was one outbreak of *S. aureus* in 2011, associated with a catering company, affecting 18 persons, in which panna cotta desert was the suspected food vehicle. Outbreaks of IID associated with *S. aureus* are relatively infrequent with only seven reported to ObSurv since 1996, the previous one of which was in 2009

There was one outbreak of *Shigella sonnei* associated with a school. Since the establishment of ObSurv there have been a total of seven other outbreaks of *S. sonnei* and one of *S. flexneri*. Prior to the outbreak in 2011, the last outbreak of S. sonnei had been reported to ObSurv in 2007.

During 2011, there were three outbreaks of *Cryptosporidium*, this compared to one outbreak of *Cryptosporidium* in each of the previous four years. Two of the outbreaks in 2011 were associated with swimming pools and one with a farm.

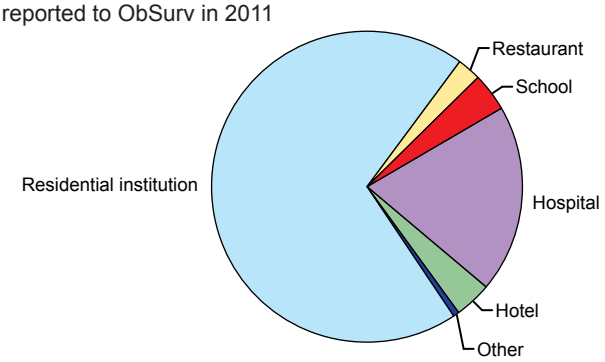
Two outbreaks of rotavirus were reported during 2011, both associated with schools, and in both person to person was the main mode of transmission. In these two outbreaks there were a total of 31 cases, three of which were microbiologically confirmed.

In 2011, 175 outbreaks of NV were reported, a decrease of 169 (49%) on 2010 when 344 NV outbreaks were reported.

NV was laboratory confirmed in 70 (40%) of NV outbreaks, in the remaining 105 (60%), NV was clinically suspected.

Residential institutions were the most frequently reported location associated with outbreaks of NV, accounting for 122 (70%) outbreaks, 34 (19%) being associated with hospitals, seven (4%) each with hotels and schools, and four (2%) with restaurants.

FIGURE 5: Locations associated with general outbreaks of NV reported to ObSurv in 2011



Person to person transmission was reported for 109 (63%) of NV outbreaks, 58 (34%) being reported to have multiple modes excluding a foodborne component and five (2%) considered to be environmental. Foodborne transmission was not identified as the principal mode in any of the NV outbreaks reported in 2011.

HPS whould like to thank all the consultants in public health medicine, infection control nurses, health protection nurses, environmental health officers and microbiologists who contribute to the outbreak surveillance system.

TABLE 1: General outbreaks of infectious intestinal disease reported to HPS during 2011

HB	Organism	Confirmed Suspected, Nil return	Location	Main mode/s of spread	Cases ill	Cases positive	Suspect vehicle	Evidence For suspicion
AA	Campylobacter	C	Restaurant	FB	4	3	Chicken livers	D
GGC	Campylobacter	C	Other	FB	27	2	N/K	N/A
FV	*E.coli* O157	C	Agricultural show	E	4	4	N/A	N/A
GGC	*E.coli* O157	C	Restaurant	FB	2	2	N/K	N/A
GR	*E.coli* O157	C	Private house	P to P	2	2	N/A	N/A
GR	*E.coli* O157	C	Farm	E	3	3	N/A	N/A
LN	*E.coli* O157	C	Private house	P to P	8	8	N/A	N/A
LN	*E.coli* O157	C	Private house	P to P	2	2	N/A	N/A
VV	*E.coli* O157 PT 8	C	Community	FB	42	42	Raw leeks & raw potatoes	E
GR	*Salmonella* Napoli	C	Restaurant	FB	2	2	Raw fish	D
TY	*Shigella sonnei*	C	School	P to P	5	5	N/A	N/A
LN	*Staph aureus*	C	Caterers	FB	18	5	Panna cotta desert	M, E

HB	Organism	Confirmed Suspected, Nil return	Location	Main mode/s of spread	Cases ill	Cases positive	Suspect vehicle	Evidence For suspicion
FF	*Cryptosporidium*	C	Swimming pool	Water	8	8	N/A	N/A
GGC	*Cryptosporidium*	C	Swimming pool	Water	4	4	N/A	N/A
TY	*Cryptosporidium*	C	Farm			4	N/A	N/A
AA	NV	C	Hospital	P to P	18	3	N/A	N/A
AA	NV	C	Residential institution	P to P	47	3	N/A	N/A
DG	NV	C	Residential institution	P to P	52	2	N/A	N/A
DG	NV	C	Residential institution	P to P	64	2	N/A	N/A
DG	NV	C	Residential institution	P to P	39	3	N/A	N/A
DG	NV	C	Residential institution	P to P	53	2	N/A	N/A
DG	NV	C	Residential institution	P to P	49	1	N/A	N/A
FF	NV	C	Hospital	P to P	16	1	N/A	N/A
FF	NV	C	Hospital	P to P	12	3	N/A	N/A
FF	NV	C	Hospital	P to P	14	6	N/A	N/A
FF	NV	C	Hospital	P to P	6	2	N/A	N/A
FF	NV	C	Hospital	P to P	15	7	N/A	N/A
FF	NV	C	Hospital	P to P	11	1	N/A	N/A
FF	NV	C	Hospital	P to P	21	1	N/A	N/A
FF	NV	C	Hospital	P to P	24	1	N/A	N/A
FF	NV	C	Hospital	P to P	25	2	N/A	N/A
FF	NV	C	Hospital	P to P	14	2	N/A	N/A
FF	NV	C	Hospital	P to P	16	1	N/A	N/A
FF	NV	C	Hospital	P to P	24	2	N/A	N/A
FF	NV	C	Hospital	P to P	5	1	N/A	N/A
FF	NV	C	Hospital	P to P	28	2	N/A	N/A
FF	NV	C	Hospital	P to P	26	1	N/A	N/A
FF	NV	C	Hospital	P to P	10	1	N/A	N/A
FV	NV	C	Hospital	P to P	21	1	N/A	N/A
FV	NV	C	Hospital	P to P	16	2	N/A	N/A
FV	NV	C	Residential institution	Multi excl FB	27	1	N/A	N/A
GR	NV	C	Restaurant	P to P	3	3	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	11	1	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	11	1	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	22	3	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	30	3	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	16	2	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	6	4	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	23	3	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	25	8	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	28	11	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	15	2	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	37	7	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	17	1	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	31	4	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	20	4	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	20	4	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	13	3	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	36	2	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	10	1	N/A	N/A
GR	NV	C	Residential institution	Multi excl FB	17	1	N/A	N/A
HG	NV	C	Residential institution	P to P	28	5	N/A	N/A
HG	NV	C	Hospital	P to P	10	2	N/A	N/A
HG	NV	C	Residential institution	P to P	38	1	N/A	N/A
HG	NV	C	Residential institution	P to P	34	4	N/A	N/A

HB	Organism	Confirmed Suspected, Nil return	Location	Main mode/s of spread	Cases ill	Cases positive	Suspect vehicle	Evidence For suspicion
HG	NV	C	Hotel	P to P	5	1	N/A	N/A
LN	NV	C	Residential institution	P to P	12	1	N/A	N/A
LN	NV	C	Residential institution	P to P	62	2	N/A	N/A
LN	NV	C	Residential institution	P to P	29	2	N/A	N/A
LN	NV	C	Residential institution	P to P	27	2	N/A	N/A
LN	NV	C	Residential institution	P to P	38	3	N/A	N/A
LN	NV	C	Residential institution	P to P	30	5	N/A	N/A
LN	NV	C	Residential institution	P to P	30	3	N/A	N/A
LO	NV	C	Hotel	E	18	1	N/A	N/A
LO	NV	C	School	P to P	80	1	N/A	N/A
TY	NV	C	Residential institution	Multi excl FB	27	4	N/A	N/A
TY	NV	C	Residential institution	E	12	4	N/A	N/A
TY	NV	C	Residential institution	P to P	16	1	N/A	N/A
TY	NV	C	Residential institution	Multi excl FB	57	3	N/A	N/A
TY	NV	C	Residential institution	Multi excl FB	18	2	N/A	N/A
TY	NV	C	Residential institution	Multi excl FB	27	1	N/A	N/A
TY	NV	C	Residential institution	Multi excl FB	9	1	N/A	N/A
TY	NV	C	Residential institution	Multi excl FB		4	N/A	N/A
TY	NV	C	Residential institution	Multi excl FB	13	1	N/A	N/A
AA	NV	S	Residential institution	P to P	18	0	N/A	N/A
AA	NV	S	Residential institution	P to P	40	0	N/A	N/A
AA	NV	S	Hospital	P to P	22	0	N/A	N/A
AA	NV	S	Residential institution	P to P	14	0	N/A	N/A
AA	NV	S	Residential institution	P to P	47	0	N/A	N/A
AA	NV	S	Hospital	P to P	9	0	N/A	N/A
AA	NV	S	Residential institution	P to P	10	0	N/A	N/A
AA	NV	S	Residential institution	P to P	10	0	N/A	N/A
AA	NV	S	Hospital	P to P	6	0	N/A	N/A
AA	NV	S	Residential institution	P to P	39	0	N/A	N/A
AA	NV	S	Residential institution	P to P	8	0	N/A	N/A
AA	NV	S	Hospital	P to P	11	0	N/A	N/A
AA	NV	S	Hospital	P to P	9	0	N/A	N/A
AA	NV	S	Hospital	P to P	10	0	N/A	N/A
AA	NV	S	Hospital	Multi excl FB	11	0	N/A	N/A
AA	NV	S	Residential institution	P to P	58	0	N/A	N/A
AA	NV	S	Residential institution	P to P	12	0	N/A	N/A
AA	NV	S	Residential institution	P to P	8	0	N/A	N/A
AA	NV	S	Hospital	P to P	6	0	N/A	N/A
BR	NV	S	Hotel	E	48	0	N/A	N/A
DG	NV	S	Residential institution	P to P	20	0	N/A	N/A
DG	NV	S	Residential institution	P to P	6	0	N/A	N/A
FV	NV	S	Residential institution	Multi excl FB	28	0	N/A	N/A
FV	NV	S	Hospital	P to P	12	0	N/A	N/A
FV	NV	S	Residential institution	Multi excl FB	7	0	N/A	N/A
FV	NV	S	Restaurant	Multi excl FB	26	0	N/A	N/A
GR	NV	S	School	P to P	13	0	N/A	N/A
GR	NV	S	School	P to P	50	0	N/A	N/A
GR	NV	S	Restaurant	P to P	4	0	N/A	N/A
GR	NV	S	Residential institution	Multi excl FB	8	0	N/A	N/A
GR	NV	S	School	Multi excl FB	21	0	N/A	N/A
GR	NV	S	School	Multi excl FB	20	0	N/A	N/A
GR	NV	S	Residential institution	Multi excl FB	17	0	N/A	N/A
GR	NV	S	Residential institution	Multi excl FB	12	0	N/A	N/A

HB	Organism	Confirmed Suspected, Nil return	Location	Main mode/s of spread	Cases ill	Cases positive	Suspect vehicle	Evidence For suspicion
GR	NV	S	Residential institution	Multi excl FB	6	0	N/A	N/A
GR	NV	S	Residential institution	Multi excl FB	18	0	N/A	N/A
GR	NV	S	Residential institution	Multi excl FB	19	0	N/A	N/A
GR	NV	S	Residential institution	Multi excl FB	19	0	N/A	N/A
GR	NV	S	Residential institution	Multi excl FB	16	0	N/A	N/A
GR	NV	S	Other	Multi excl FB	8	0	N/A	N/A
GR	NV	S	Residential institution	Multi excl FB	16	0	N/A	N/A
HG	NV	S	Hospital	P to P	5	0	N/A	N/A
HG	NV	S	Residential institution	P to P	8	0	N/A	N/A
HG	NV	S	Residential institution	P to P	56	0	N/A	N/A
HG	NV	S	Residential institution	P to P	11	0	N/A	N/A
HG	NV	S	Hospital	P to P	13	0	N/A	N/A
HG	NV	S	Hospital	P to P	5	0	N/A	N/A
HG	NV	S	Hospital	P to P	11	0	N/A	N/A
HG	NV	S	Hospital	P to P	9	0	N/A	N/A
HG	NV	S	Residential institution	P to P	18	0	N/A	N/A
HG	NV	S	Residential institution	P to P	14	0	N/A	N/A
HG	NV	S	Residential institution	P to P	6	0	N/A	N/A
HG	NV	S	Residential institution	P to P	8	0	N/A	N/A
HG	NV	S	Hotel	P to P	49	0	N/A	N/A
HG	NV	S	Hotel	P to P	18	0	N/A	N/A
HG	NV	S	Hotel	P to P	21	0	N/A	N/A
HG	NV	S	Residential institution	P to P	35	0	N/A	N/A
HG	NV	S	Residential institution	P to P	24	0	N/A	N/A
LN	NV	S	Residential institution	P to P	6	0	N/A	N/A
LN	NV	S	Residential institution	P to P	5	0	N/A	N/A
LN	NV	S	Residential institution	P to P	51	0	N/A	N/A
LN	NV	S	Residential institution	P to P	56	0	N/A	N/A
LN	NV	S	Residential institution	P to P	35	0	N/A	N/A
LN	NV	S	Residential institution	P to P	13	0	N/A	N/A
LN	NV	S	Residential institution	P to P	7	0	N/A	N/A
LN	NV	S	Residential institution	P to P	6	0	N/A	N/A
LN	NV	S	Residential institution	P to P	22	0	N/A	N/A
LN	NV	S	Residential institution	P to P	4	0	N/A	N/A
LN	NV	S	Residential institution	P to P	17	0	N/A	N/A
LN	NV	S	Residential institution	P to P	7	0	N/A	N/A
LN	NV	S	Residential institution	P to P	15	0	N/A	N/A
LN	NV	S	Residential institution	P to P	16	0	N/A	N/A
LN	NV	S	Residential institution	P to P	17	0	N/A	N/A
LN	NV	S	Residential institution	P to P	43	0	N/A	N/A
LN	NV	S	Residential institution	P to P	10	0	N/A	N/A
LN	NV	S	Residential institution	P to P	8	0	N/A	N/A
LN	NV	S	Residential institution	P to P	40	0	N/A	N/A
LN	NV	S	Residential institution	P to P	10	0	N/A	N/A
LN	NV	S	Residential institution	P to P	16	0	N/A	N/A
LN	NV	S	Residential institution	P to P	20	0	N/A	N/A
LN	NV	S	Residential institution	P to P	36	0	N/A	N/A
LN	NV	S	Residential institution	P to P	17	0	N/A	N/A
LN	NV	S	Residential institution	P to P	36	0	N/A	N/A
LN	NV	S	Residential institution	P to P	17	0	N/A	N/A
LN	NV	S	Residential institution	P to P	21	0	N/A	N/A
TY	NV	S	Residential institution	Multi excl FB	10	0	N/A	N/A
TY	NV	S	Residential institution	E	11	0	N/A	N/A

HB	Organism	Confirmed Suspected, Nil return	Location	Main mode/s of spread	Cases ill	Cases positive	Suspect vehicle	Evidence For suspicion
TY	NV	S	Residential institution	E	13	0	N/A	N/A
TY	NV	S	Residential institution	Multi excl FB	34	0	N/A	N/A
TY	NV	S	Residential institution	P to P	14	0	N/A	N/A
TY	NV	S	Restaurant	P to P	8	0	N/A	N/A
TY	NV	S	School	Multi excl FB	38	0	N/A	N/A
TY	NV	S	Residential institution	Multi excl FB	25	0	N/A	N/A
TY	NV	S	Residential institution	Multi excl FB	26	0	N/A	N/A
TY	NV	S	Residential institution	Multi excl FB	4	0	N/A	N/A
TY	NV	S	Residential institution	Multi excl FB	31	0	N/A	N/A
TY	NV	S	Residential institution	Multi excl FB	14	0	N/A	N/A
TY	NV	S	Residential institution	Multi excl FB	5	0	N/A	N/A
TY	NV	S	School	Multi excl FB	35	0	N/A	N/A
TY	NV	S	Residential institution	Multi excl FB	11	0	N/A	N/A
TY	NV	S	Residential institution	Multi excl FB	9	0	N/A	N/A
TY	NV	S	Residential institution	Multi excl FB	9	0	N/A	N/A
TY	NV	S	Residential institution	Multi excl FB	13	0	N/A	N/A
TY	NV	S	Residential institution	Multi excl FB	38	0	N/A	N/A
TY	NV	S	Residential institution	Multi excl FB	23	0	N/A	N/A
LO	NV	NR	Hotel	N/K	N/K	N/K	N/A	N/A
AA	Rotavirus	C	School	P to P	8	2	N/A	N/A
TY	Rotavirus	C	School	P to P	23	1	N/A	N/A
GR	Viral	S	School	P to P	10	0	N/A	N/A
HG	Viral	S	Hotel	P to P	10	0	N/A	N/A
TY	Viral	S	Residential institution	Multi excl FB	19	0	N/A	N/A
TY	Viral	S	Residential institution	Multi excl FB	9	0	N/A	N/A
TY	Viral	S	School	Multi excl FB	57	0	N/A	N/A
TY	Viral	S	Residential institution	Multi excl FB	11	0	N/A	N/A
TY	Viral	S	Residential institution	Multi excl FB	5	0	N/A	N/A
TY	Viral	S	Residential institution	Multi excl FB	24	0	N/A	N/A
TY	Viral	N/A	Residential institution	Multi excl FB	15	0	N/A	N/A
FV	Unknown	N/A	Residential institution	Multi excl FB	16	0	N/A	N/A
FV	Unknown	N/A	Residential institution	Multi excl FB	5	0	N/A	N/A
GGC	Unknown	N/A	Other	N/K	25	0	N/A	N/A
TY	Unknown	N/A	Residential institution	P to P	6	0	N/A	N/A
TY	Unknown	N/A	Residential institution	Multi excl FB	5	0	N/A	N/A

Modes of transmission: FB = Foodborne, P to P = Person to Person, E = Environmental, W = water, Multi excl FB = multiple modes without a foodborne element, Multi incl FB = multiple modes including a foodborne element.
Evidence for suspicion: D = descriptive, M = microbiological, E = epidemiological
N/K = not known, N/A = not applicable

The last Gastro-intestinal and foodborne infections Surveillance Report was in Issue 12/25
The next Gastro-intestinal and foodborne infections Surveillance Report will be in Issue 12/29

Measles, mumps, rubella and whooping cough illness and routine childhood vaccine uptake

Prepared by: HPS Immunisation Team

This quarterly report presents notifications and laboratory confirmed cases of vaccine preventable diseases measles, mumps, rubella and whooping cough for the quarter ending week 24, 2012 and childhood vaccine uptake figures for the quarter ending 31 March 2012.

Measles

In the second quarter of 2012 (weeks 9-24), there were 30 notifications of clinically suspected measles, bringing the total in 2012 so far to 44 (Table 1). This is less than the number notified in the same period in 2011. There have been eight cases of laboratory confirmed measles so far in 2012, all of which were in the current reporting period. In addition, there have been nine probable cases of measles in the current reporting period. A probable case is one which is clinically suspected and epidemiologically linked, but for which no sample was taken and which therefore cannot be laboratory confirmed. In the same period in 2011 there were 23 laboratory confirmed cases (Table 2).

Of the eight laboratory confirmed cases in 2012, six were linked with travel outside Scotland (to Pakistan, Lithuania and England) and two cases were sporadic with no known exposure. Three laboratory confirmed cases and nine probable cases are epidemiologically linked. There is no evidence of onward transmission form this cluster. All laboratory confirmed and probable cases so far in 2012 have been unvaccinated.

The widespread measles outbreak in Europe in 2010 and 2011 which particularly affected France, Italy, Romania, Spain and Germany, has now reduced. There has been no peak in measles incidences in the first half of 2012, as there was for 2011. However, in 2012 there have been large outbreaks in Ukraine and Romania and smaller outbreaks in France, England, Spain and Italy.

Mumps

In the second quarter of 2012 (weeks 9-24), there were 486 mumps notifications, bringing the total so far in 2012 to 587. This is an increase from 416 in the first 24 weeks of 2011 (Table 1). In this reporting period, there have been 266 laboratory confirmed cases of mumps, which constitutes the majority of the 301 cases in 2012 to date. This is an increase from 181 laboratory confirmed cases of mumps in the first 24 weeks of 2011 (Table 2).

During the current quarter of 2012 there have been two outbreaks of mumps in Scotland. The first is an outbreak at Glasgow University, which began in the first quarter of 2012 and is now over. For this outbreak, laboratory confirmation of mumps was not being carried out for every notified case and it is therefore likely that the number of laboratory confirmed cases will be an underestimate of the true incidence during this period. The second outbreak is in the Arbroath area of Tayside. For the second outbreak, which is ongoing, cases are being notified and laboratory confirmed.

Since 2004 there has been an ongoing widespread outbreak of mumps which has affected all areas of the UK. Although cases have decreased overall since the peak in 2005, mumps cases continue to occur steadily in Scotland. This outbreak is mainly affecting the young adult age group (aged 15-24 years), who are often under immunised against mumps as they have not routinely been offered two doses of MMR vaccine.

Rubella

In the second quarter of 2012, there were 22 notifications of rubella, bringing the number in 2012 to 27. There has been one laboratory confirmed case in the current reporting period, bringing the total number so far in 2012 to three. All three cases have been associated with travel abroad, and were unvaccinated.

TABLE 1: Vaccine preventable diseases: measles, mumps, rubella, whooping cough. Notifications to week 24/2012

Weeks	Number of notifications received				Cumulative totals to week		Cumulative year totals	
	weeks 9-12/2012	weeks 13-16/2012	weeks 17-20/2012	weeks 21-24/2012	2012 to week 24	2011 to week 24	2011	2010
Measles	4	5	13	8	44	55	83	91
Mumps	118	114	125	129	587	416	609	698
Rubella	7	2	8	5	27	12	21	37
Whooping cough	37	153	233	193	649	26	87	49

TABLE 2: Vaccine preventable diseases: measles, mumps, rubella, *Bordetella pertussis*. Laboratory reports to week 24/2012

Weeks	Number of notifications received				Cumulative totals to week		Cumulative year totals	
	weeks 9-12/2012	weeks 13-16/2012	weeks 17-20/2012	weeks 21-24/2012	2012 to week 24	2011 to week 24	2011	2010
Measles	1	3	4	0	8	23	24	10
Mumps	42	66	71	87	301	181	235	484
Rubella	0	0	1	0	3	0	0	1
Whooping cough	48	92	159	150	508	36	119	82

Whooping cough (Pertussis)

HPS has noted an increase in both clinical notifications and laboratory reports of pertussis in 2012. In the first 24 weeks of 2012 there have been 649 notifications of whooping cough compared to 26 during the same period on 2011. There have moreover been 508 laboratory confirmed cases of *Bordetella pertussis* in the first 24 weeks of 2012, compared with 36 during the same period in 2011. Young infants are most severely affected by this highly contagious infection and are more likely to develop complications, which can require hospital treatment. Of the 508 laboratory confirmed cases reported during the first 24 weeks of 2012, 48 (9.4%) were in infants aged under one year, compared to eight cases in this age group during the same period in 2011 and a total of 26 cases in this age group during the whole of 2011.

The observed increase in Scotland is consistent with a rise in whooping cough across England and Wales, and also with the generally cyclic nature of whooping cough in the community. Cases of whooping cough tend to increase every three or four years, although the number of cases in Scotland exceeds the number reported in the last peak year of 2008. HPS is working with boards across NHSScotland and our counterparts across the UK to manage this increase in cases.Childhood vaccines uptake

Vaccine uptake remains generally high in Scotland. Quarterly uptake figures for children reaching ages 12 months, 24 months and five years by 31 March 2012 are shown in Tables 3, 4 and 5 respectively. Annual uptake of primary immunisation showing trends over time in uptake at 24 months is shown in Figure 1 and for uptake at five years in Figure 2. These are prepared by NSS ISD (National Services Scotland – Information Services Division) and were released on June 29 2012.[1] There is further

FIGURE 1: Quarterly primary and booster immunisation uptake rates by 24 months - reports to 31 March 2012

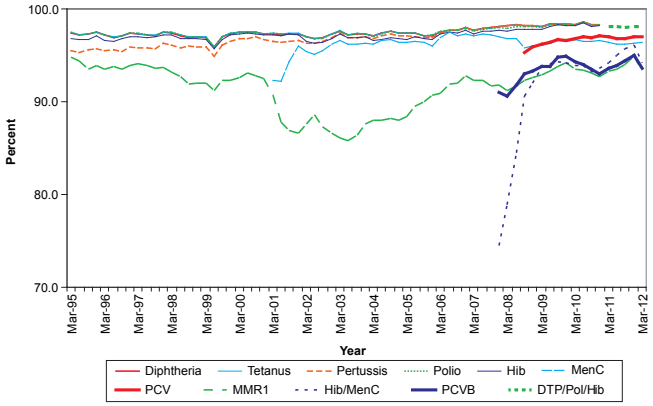


FIGURE 2: MMR1 and booster immunisation uptake rates, by five years of age, by quarter, Scotland

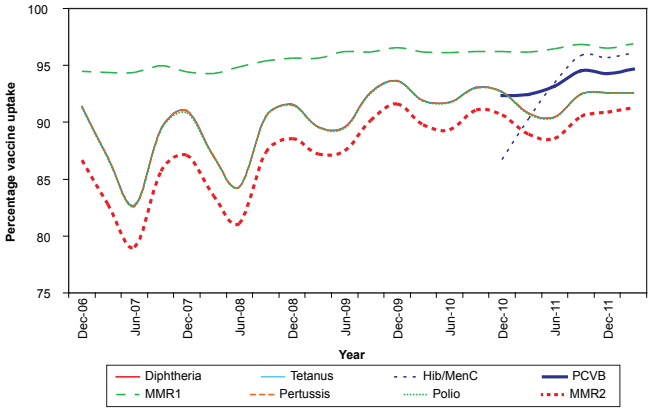


TABLE 3: Primary immunisation uptake rates by 12 months old. Evaluation quarter: 1 January to 31 March 2012. Born 1 January to 31 March 2011.

NHS board of residence[1]	Number in Cohort[2]	% completed primary course by 12 months		
		DTP/Pol/Hib[3]	MenC	PCV
Ayrshire & Arran	949	98.2	98.1	98.1
Borders	258	98.8	97.3	98.1
Dumfries & Galloway	357	98.3	98.3	98.0
Fife	1 026	97.8	97.7	97.7
Forth Valley	769	97.7	97.5	97.7
Grampian	1 513	98.0	97.6	97.9
Greater Glasgow & Clyde	3 310	96.8	96.7	97.4
Highland	728	94.6	94.6	95.3
Lanarkshire	1 541	98.6	98.8	99.0
Lothian	2 342	98.0	97.1	97.9
Orkney[4]	45	91.1	91.1	91.1
Shetland	53	96.2	96.2	96.2
Tayside	1 016	99.0	98.5	98.7
Western Isles	39	100.0	100.0	100.0
NHS Board unknown[5]	2	..	..	..
Scotland	**13 948**	**97.7**	**97.4**	**97.8**

Source: SIRS
Date: May 2012

1. NHS board of residence as recorded on SIRS.
2. Children reaching 12 months of age during the evaluation quarter 1 January to 31 March 2012 (i.e. born 1 January to 31 March 2011).
3. The 5 in 1 vaccine (comprising DTP/Pol/Hib) was introduced in September 2004. For children vaccinated in Scotland this is now recorded as a single vaccine. For children who recived primary immunisations outwith Scotland, where the vaccination may not have been given as one injection, only those who have received three doses of each vaccine (Diphtheria, Tetanus, Pertussis, Polio and Hib) are counted as completing the primary course.
4. NHS Orkney have identified data recording issues which have resulted in their uptake rates being under reported. NHS Orkney are working to rectify these recording issues.
5. For records recorded on SIRS under the former NHS Argyll & Clyde (which was dissolved on 31 March 2006), NHS board of residence is derived from the child's home postcode. There are a small number of records which do not have a postcode recorded and therefore the health board is unknown.

.. Not Applicable.

Key:

DTP/Pol/Hib = Diphtheria, Tetanus, Pertussis, Polio and Hib (three doses).
MenC = Meningococcal serogroup C conjugate vaccine (two doses).
PCV = Pneumococcal conjugate vaccine (two doses).

TABLE 4: Primary and booster immunisation uptake rates by 24 months old. Evaluation quarter: 1 January to 31 March 2012. Born 1 January to 31 March 2010.

NHS board of residence[1]	Number in Cohort[2]	% completed primary course by 24 months				% completed booster course by 24 months	
		DTP/Pol/ Hib[3]	MenC	PCV	MMR1	Hib/MenC	PCVB
Ayrshire & Arran	910	99.0	97.6	98.0	96.4	97.7	97.0
Borders	262	99.2	98.5	98.5	96.9	97.3	98.1
Dumfries & Galloway	376	99.2	99.2	99.2	96.5	96.0	96.3
Fife	1 038	98.1	96.5	97.1	93.7	95.1	94.4
Forth Valley	817	99.0	97.4	97.7	95.7	96.7	96.8
Grampian	1 498	97.9	95.9	96.6	95.1	94.8	95.5
Greater Glasgow & Clyde	3 383	98.1	95.9	96.4	94.3	93.5	95.1
Highland	766	96.6	95.4	95.4	92.4	92.4	92.4
Lanarkshire	1 587	99.1	98.2	98.4	96.3	97.8	97.9
Lothian	2 390	97.7	95.1	96.0	94.4	95.1	94.6
Orkney[4]	55	89.1	89.1	89.1	83.6	78.2	83.6
Shetland	65	100.0	98.5	98.5	84.6	89.2	89.2
Tayside	1 048	98.4	96.1	96.8	94.8	96.4	95.5
Western Isles	53	98.1	98.1	98.1	94.3	96.2	96.2
NHS board unknown[5]	4	..	..	..	..	..	..
Scotland	**14 252**	**98.2**	**96.4**	**96.9**	**94.8**	**95.2**	**95.4**

Source: SIRS
Date: May 2012

1. NHS board of residence as recorded on SIRS.
2. Children reaching 24 months of age during the evaluation quarter 1 January to 31 March 2012 (i.e. born 1 January to 31 March 2010).
3. The 5 in 1 vaccine (comprising DTP/Pol/Hib) was introduced in September 2004. For children vaccinated in Scotland this is now recorded as a single vaccine. For children who recived primary immunisations outwith Scotland, where the vaccination may not have been given as one injection, only those who have received three doses of each vaccine (Diphtheria, Tetanus, Pertussis, Polio and Hib) are counted as completing the primary course.
4. NHS Orkney have identified data recording issues which have resulted in their uptake rates being under reported. NHS Orkney are working to rectify these recording issues.
5. For records recorded on SIRS under the former NHS Argyll & Clyde (which was dissolved on 31 March 2006), NHS board of residence is derived from the child's home postcode. There are a small number of records which do not have a postcode recorded and therefore the health board is unknown.

.. Not Applicable.

Key:

DTP/Pol/Hib = Diphtheria, Tetanus, Pertussis, Polio and Hib (three doses).
MenC = Meningococcal serogroup C conjugate vaccine (two doses under 12 months).
PCV = Pneumococcal conjugate vaccine (two doses under 12 months).
MMR1 = Measles, mumps, and rubella vaccine (one dose).
Hib/MenC = Hib/MenC Booster (one dose over 11 months).
PCVB = Pneumococcal conjugate vaccine booster (one dose over 12 months).

commentary on these uptake figures in the ISD statistics publication.

For the first quarter of 2012, uptake rates by 24 months of age for completing primary courses of diphtheria, tetanus, pertussis, polio, Hib (*Haemophilus influenzae* type B), MenC (Meningococcal serogroup C) and PCV (Pneumococcal conjugate vaccine) across Scotland remain high and stable between 96% and 99%. Uptake of one dose of MMR (measles, mumps and rubella vaccine) by 24 months was 94.8% (compared with 94.9% in the previous quarter). Uptake rates for the two booster vaccines by 24 months (Hib/MenC and PCV given at 12 and 13 months of age) were 95.2% for the Hib/MenC booster and 95.4% for the PCV booster (96.1% and 95.0% respectively for the previous quarter) (Figure 1).

For those reaching five years of age, uptake of at least one dose of MMR was 96.9% (compared with 96.5% in the previous quarter) and remains above the 95% target for children receiving at least one dose by the age of five (i.e. before starting school). Uptake of two doses of MMR was 91.3% - this is generally increasing but remains below the 95% target.

References

1. ISD Scotland website. Childhood Immunisations uptake rates, quarter ending 31 March 2012. Available at URL: http://www.isdscotland.org/Health-Topics/Child-Health/Immunisation/

TABLE 5: Primary and booster immunisation uptake rates by five years old. Evaluation Quarter: 1 January to 31 March 2012. Born 1 January to 31 March 2007

NHS board of residence[1]	Number in Cohort[2]	% completed primary course by 5 years[3]							% completed booster course by 5 years							
		D[3]	T[3]	P[3]	Pol[3]	Hib[3]	MenC	PCV	MMR1	Hib/ MenC	PCVB	D	T	P	Pol	MMR2
Ayrshire & Arran	916	99.2	99.2	99.2	99.2	99.0	96.5	96.3	98.0	97.6	97.5	94.3	94.3	94.3	94.3	93.1
Borders	282	98.9	98.9	98.9	98.9	98.6	96.5	96.1	98.2	98.2	95.0	96.5	96.5	96.5	96.5	94.7
Dumfries & Galloway	369	99.2	99.2	98.9	99.2	98.9	97.3	96.7	97.8	96.7	97.6	93.5	93.5	93.2	93.2	93.0
Fife	974	98.6	98.6	98.6	98.6	98.2	95.0	95.4	96.4	97.7	95.8	89.8	89.8	89.8	89.8	88.9
Forth Valley	878	98.9	98.9	98.9	98.9	98.5	96.1	95.9	97.7	97.8	95.7	94.1	94.1	94.1	94.1	93.4
Grampian	1 543	98.6	98.6	98.6	98.5	97.9	93.9	93.8	97.2	94.0	93.1	94.5	94.5	94.5	94.5	93.1
Greater Glasgow & Clyde	3 246	98.3	98.3	98.3	98.2	97.5	93.3	93.8	96.6	95.3	94.5	90.6	90.6	90.6	90.6	89.4
Highland	768	98.2	98.2	98.2	98.2	97.9	92.7	93.9	97.5	94.4	93.0	92.2	92.2	92.2	92.2	91.1
Lanarkshire	1 646	98.7	98.7	98.7	98.7	98.5	96.1	96.8	96.4	96.4	95.9	95.1	95.1	95.1	95.1	92.5
Lothian	2 187	98.9	98.9	98.9	98.9	98.4	93.6	94.4	97.0	97.2	93.5	92.8	92.8	92.8	92.7	91.8
Orkney[4]	62	98.4	98.4	98.4	98.4	98.4	95.2	95.2	98.4	93.5	91.9	90.3	90.3	90.3	90.3	90.3
Shetland	67	97.0	97.0	97.0	97.0	97.0	97.0	95.5	91.0	85.1	88.1	65.7	65.7	65.7	65.7	62.7
Tayside	984	98.7	98.7	98.7	98.7	98.4	94.0	94.9	95.5	96.1	94.5	92.4	92.4	92.4	92.3	90.3
Western Isles	74	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.6	100.0	94.6	94.6	94.6	94.6	94.6
NHS board unknown[5]	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scotland	**14 004**	**98.7**	**98.7**	**98.7**	**98.6**	**98.2**	**94.5**	**94.9**	**96.9**	**96.1**	**94.7**	**92.6**	**92.6**	**92.6**	**92.6**	**91.3**

Source: SIRS
Date: May 2012

1. NHS board of residence as recorded on SIRS.
2. Children reaching 5 years of age during the evaluation quarter 1 January to 31 March 2012 (i.e. born 1 January to 31 March 2007).
3. The 5 in 1 vaccine (comprising DTP/Pol/Hib) was introduced in September 2004. Although the vaccination is now given as one injection, at the time this cohort were vaccinated it was recorded separately on SIRS and therefore rates may differ slightly. This may be due to children who have received a single vaccine outwith Scotland or due to local recording practices.
4. NHS Orkney have identified data recording issues which have resulted in their uptake rates being under reported. NHS Orkney are working to rectify these recording issues.
5. For records recorded on SIRS under the former NHS Argyll & Clyde (which was dissolved on 31 March 2006), NHS board of residence is derived from the child's home postcode. There are a small number of records which do not have a postcode recorded and therefore the health board is unknown.

.. Not Applicable.

Key for primary courses:

D = Diphtheria vaccine (three doses).
T = Tetanus vaccine (three doses).
P = Pertussis vaccine (three doses).
Pol = Polio vacine (three doses).
Hib = *Haemophilus Influenzae* type b vaccine (threedoses).
MenC = Meningococcal serogroup C conjugate vaccine (two doses under 12 months).
MMR1 = Measles, mumps, and rubella vaccine (one dose).

Key for booster courses:

Hib/MenC = Hib/MenC Booster (one dose over 11 months).
PCVB = Pneumococcal Conjugate Vaccine Booster (one dose over 12 months).
D = Diphtheria vaccine (4th dose).
T = Tetanus vaccine (4th dose).
P = Pertussis vaccine (4th dose).
Pol = Polio vaccine (4th dose).
MMR2 = Measles, mumps, and rubella vaccine (2nd dose).

The last Vaccine uptake, measles, mumps, rubella, whooping cough Surveillance Report was in Issue 12/13
The next Vaccine uptake, measles, mumps, rubella, whooping cough Surveillance Report will be in Issue 12/39

Notifiable diseases

Part 2 (Notifiable Diseases, Organisms and Health Risk States) of the Public Health etc.(Scotland) Act came into effect on 1 January 2010 and sets out new duties for registered medical practitioners, NHS boards and directors of diagnostic laboratories. GP practices should familiarise themselves with the Scottish Government guidance on the new notification requirements at: http://www.scotland.gov.uk/Topics/Health/NHS-Scotland/publicact/Implementation/Timetable3333.

Registered medical practitioners report notifiable diseases based on 'clinical suspicion'. As such, notifications may not be subject to laboratory report confirmation. The published figures will record therefore how many diseases have been clinically suspected.

Patient notifications can, however, be reclassified. When, for example, a suspected (and notified) tuberculosis case is subsequently reported as negative by a laboratory (and found not to be a health protection risk) it would subsequently be removed from the disease totals.

Diseases to be notified by registered medical practitioners with effect from 1 January 2010:

Notifiable Diseases which come into effect on 1 January 2010

*Anthrax	*Meningococcal disease	*Severe Acute Respiratory Syndrome (SARS)
*Botulism	Mumps	*Smallpox
Brucellosis	*Necrotising fasciitis	Tetanus
*Cholera	*Paratyphoid	Tuberculosis (respiratory or non-respiratory) (**see Note 2**)
*Clinical syndrome due to *E. coli* O157 infection (**see note 1**)	*Pertussis (Whooping Cough)	*Tularemia
*Diphtheria	*Plague	*Typhoid
*Haemolytic Uraemic Syndrome (HUS)	*Poliomyelitis	*Viral haemorrhagic fevers
*Haemophilus influenzae Type b (Hib)	*Rabies	*West Nile fever
*Measles	Rubella	Yellow Fever

It is recommended that those diseases above marked with an * require urgent notification, i.e. within the same working day.

Note 1: *Escherichia coli* O157

Clinical suspicion should be aroused by (i) likely infectious bloody diarrhoea or (ii) acute onset non-bloody diarrhoea with a biologically plausible exposure and no alternative explanation. Examples of biologically plausible exposures include:

- contact with farm animals, their faeces or environment;
- drinking privately supplied or raw water;
- eating foods such as undercooked burgers or unpasteurised dairy products;
- contact with a confirmed or suspected case of VTEC infection.

Further guidance is available at: http://www.hps.scot.nhs.uk/giz/e.coli0157.aspx.

Where a case is notified as HUS (Haemolytic Uraemic Syndrome) it should NOT also be notified as 'Clinical syndrome due to *E. coli* O157 infection'.

Note 2: Tuberculosis

For the purposes of notification, respiratory TB or non-respiratory TB should be taken to have the same meanings as the World Health Organisation definitions of **pulmonary TB** and **non-pulmonary TB** respectively:

Pulmonary TB is tuberculosis of the lung parenchyma and/or the tracheobronchial tree.

Non-pulmonary TB is tuberculosis of any other site.

Where tuberculosis is clinically diagnosed in both pulmonary and non-pulmonary sites, this should be treated as pulmonary TB.

Registered medical practitioners have been advised to contact their local NHS Board Health Protection Team for advice should they have any doubts about the diagnosis of suspected cases.

Non-notifiable diseases

Registered medical practitioners are no longer required to notify the diseases listed below.

- Bacillary dysentery
- Chickenpox
- Food poisoning
- Scarlet fever
- Viral hepatitis

These diseases are now covered by a list of notifiable organisms details of which will be reported by laboratories to health protection teams.

Statutory Notification of Infectious Diseases
Week ended 29 June 2012

A *National Statistics* release

Infectious Disease	Current week	Previous week	Current week last year	Total from first week of year	
				2011	2012
Anthrax	-	-	-	-	-
Botulism	-	-	-	-	-
Brucellosis	-	-	-	1	-
Cholera	-	-	-	1	-
Clinical Syndrome *E. coli* O157	-	-	1	2	4
Diphtheria	-	-	-	-	-
Haemolytic Uraemic Syndrome (HUS)	-	-	-	-	-
Haemophilus Influenzae Type B (Hib)	-	-	-	1	-
Measles	1	-	1	60	45
Meningococcal Infection	1	3	-	66	44
Mumps	16	37	9	436	640
Necrotizing Fasciitis	-	-	-	8	-
Paratyphoid Fever	-	-	-	-	-
Pertussis	34	70	1	29	758
Plague	-	-	-	-	-
Poliomyelitis	-	-	-	-	-
Rabies	-	-	-	-	-
Rubella	-	-	1	14	27
Severe Acute Respiratory Syndrome (SARS)	-	-	-	-	-
Smallpox	-	-	-	-	-
Tetanus	-	-	-	-	-
Tuberculosis: Respiratory	1	2	19	164	108
Tuberculosis: Non-respiratory	-	3	6	64	53
Tularemia	-	-	-	-	-
Typhoid Fever	-	-	-	2	-
Viral Haemorrhagic Fevers	-	-	-	-	-
West Nile Fever	-	-	-	-	-
Yellow Fever	-	-	-	-	-
TOTAL	**53**	**115**	**38**	**848**	**1679**

Amendments: Add 2 Mumps (1 x LO wk 25, 1 x TY wk 25); 2 Pertussis (1 x AA wk 25, 1 x FV wk 25); 1 Tuberculosis : respiratory (1 x SH wk 22); 1 Tuberculosis : non-respiratory (1 x BR wk 25)

Source: Health Protection Scotland, NHS National Services Scotland

NHS BOARD ABBREVIATIONS

AA Ayrshire & Arran	GG Greater Glasgow & Clyde	LN Lanarkshire	SH Shetland	TY Tayside
BR Borders	FF Fife	GR Grampian	LO Lothian	WI Western Isles
DG Dumfries & Galloway	FV Forth Valley	HG Highland	OR Orkney	