

5 January 2016
Volume 50 No. 2016/01
ISSN 1753-4224 (Online)

CONTENTS

CURRENT NOTES

- End of Ebola transmission in Guinea 1
- Updated National Clinical Guidelines for the treatment of HCV in adults 1
- Lambing advice to pregnant women 2
- Continued flood warnings across Scotland 3
- 2015 second hottest year on record for Europe 3

SURVEILLANCE REPORTS

- Measles, mumps, rubella and whooping cough illness and routine childhood vaccine uptake 4
- Shingles (Herpes zoster) vaccine uptake for 2014/15 12

CURRENT NOTES

End of Ebola transmission in Guinea

50/0101 On 29 December, the World Health Organisation (WHO) declared the end of Ebola virus transmission in the Republic of Guinea, 42 days after the last person confirmed to have Ebola virus disease tested negative for the second time. Guinea was at this point entering a 90-day period of heightened surveillance to ensure that any new cases are identified quickly before they can spread to other people.

The end of Ebola transmission in Guinea marks an important milestone in the Ebola outbreak in West Africa. The original chain of transmission started two years ago in Gueckedou, Guinea in late December 2013 and drove the outbreak which spread to neighbouring Liberia and Sierra Leone and, ultimately, by land and air travel to seven other countries.

In addition to the original chain of transmission, there have been 10 new small Ebola outbreaks (or 'flares') between March and November 2015. These appear to have been due to the re-emergence of a persistent virus from the survivor population.

Among the challenges survivors have faced is that after recovering from Ebola virus disease and clearing the virus from their bloodstream, the virus may persist in the semen of some male survivors for as long as 9-12 months.

WHO and its partners are working with the Governments of Liberia, Sierra Leone and Guinea to help ensure that survivors have access to medical and psychosocial care, screening for persistent virus, as well as counselling and education to help them reintegrate into family and community life, reduce stigma and minimize the risk of Ebola virus transmission.

At the same time, 2016 will see the three most-affected countries implementing a full health sector recovery agenda to restart and strengthen key public health programmes, especially maternal and child health, while continuing to maintain the capacity to detect, prevent and respond to any flare-up of Ebola. [Source: WHO Media Centre 29 December 2015. <http://www.who.int/mediacentre/news/releases/2015/guinea-stops-ebola/en/>]

Updated National Clinical Guidelines for the treatment of HCV in adults

50/0102 Healthcare Improvement Scotland (HIS) and National Services Scotland (NSS) have in December 2015 published an

updated National Clinical Guidelines for the treatment of Hepatitis C virus (HCV) in adults. This updates the previous guidelines published in September 2015.

HCV is a bloodborne virus leading to cirrhosis of the liver and hepatocellular carcinoma and affects up to 1% of the Scottish population. The Scottish government under the HCV action plan and succeeded by the sexual health and blood borne virus strategic framework have provided a world leading structure for the prevention, diagnosis, treatment and care of HCV. Rapid advances in HCV therapeutics have led to an array of anti-HCV drugs that now offer cure to more than 90% of those infected with HCV.

The purpose of these guidelines is to provide guidance to NHS board drug and therapeutics committees on the recommended place in treatment of available HCV drugs taking into consideration SMC guidance, clinical effectiveness and price.

The guidelines are available from <http://www.hps.scot.nhs.uk/bbvsti/guidelinedetail.aspx?id=65376&subjectid=93>.

Lambing advice to pregnant women

50/0103 On 29 December, the Scottish Chief Medical Officer (CMO) issued annual advice warning pregnant women of the need to avoid close contact with animals that are giving, or have recently given birth.

For a number of years, the Scottish Government, along with other UK health departments, has advised pregnant women who come into close contact with sheep during lambing or other farm animals that are giving birth may risk their own health, and that of their unborn child, from infections that such animals can carry such as *Chlamydia*, *Toxoplasma*, *Listeria* and Q fever.

Although the number of pregnancies affected by contact with infected animals is extremely small, it is very important that pregnant women understand the risks and take appropriate precautions. It should be noted these risks are not confined to the spring, and do not only apply to sheep, but also to cattle and goats that have recently given birth. All can carry similar infections.

To avoid the possible risk of infection, pregnant women should:

- not help to lamb or milk ewes, or to provide assistance with a cow that is calving or a nanny goat that is kidding;
- avoid contact with aborted or new-born lambs, calves or kids or with the afterbirth, birthing fluids or materials (e.g. bedding) contaminated by such birth products;
- avoid handling (including washing) clothing, boots or any materials that may have come into contact with animals that have recently given birth, their young or afterbirths. Potentially contaminated clothing will be safe to handle after being washed on a hot cycle;
- ensure contacts or partners who have attended lambing ewes or other animals giving birth take appropriate health and hygiene precautions, including the wearing of personal protective equipment and clothing and adequate washing to remove any potential contamination.

The Chief Medical Officer also advised pregnant women experiencing a fever, or flu-like symptoms, who think they might have acquired an infection from a farm-like environment to seek immediate medical advice.

Farmers and livestock keepers have a responsibility to minimise the risks to pregnant women, including members of their family, the public and professional staff visiting farms. [Source: Scottish Government News 29 December 2015. <http://news.scotland.gov.uk/News/Lambing-advice-to-pregnant-women-20dc.aspx>]

Continued flood warnings across Scotland

50/0104 With many people now returning to work after the festive break, the Scottish Government's resilience committee met again on 4 January to discuss the response to the adverse weather conditions.

The weather warning was expected to downgrade to a Yellow Warning just after midnight on Tuesday January 5 until 12 noon that day. A Yellow Warning for rain for South West Scotland, Lothian and Borders also remained in place until 2355 hours on Tuesday.

The Scottish Environment Protection Agency (SEPA) has advised that flood warnings remain in place for a number of areas in the north east, in particular Kintore, Inverurie, Braemar, Aberdeen and Brechin. Some transport disruption due to the ongoing conditions was anticipated and operating companies would be monitoring the trunk roads carefully.

While the rain was expected to ease through Tuesday, the Met Office was forecasting a further weather front with rain coming up through Scotland from Thursday, and the likely impact on land and coastal areas will continue to be monitored.

SEPA's Floodline number can be used for the most up-to-date information in all areas by phone or text on 0345 988 1188. The SEPA website also details the latest Flood Alerts and Warnings for the whole of Scotland, including information about preparing for flooding at <http://www.floodlinescotland.org.uk/your-home>. [Source: Scottish Government News Release, 4 January 2016. <http://news.scotland.gov.uk/News/Warnings-in-place-as-rain-continues-2103.aspx>]

2015 second hottest year on record for Europe

50/0105 The year 2015 will be the second hottest on record in Europe, with mean annual temperatures just above the 2007 average and below the record set in 2014, according to an analysis by one of the regional climate centres of the World Meteorological Organization (WMO).

Much of eastern Europe was exceptionally warm, with temperatures higher than in 2014. Only in parts of Ireland were temperatures lower than the 1981-2010 long-term average, according to the Climate Indicator Bulletin from WMO's European Regional Climate Centre node on Climate Data operated by the Royal Netherlands Meteorological Institute, KMNI.

Globally, 2015 remains on track to be the hottest year on record, according to WMO's provisional statement on the status of the climate in 2015. Final figures will be released in early 2016.

The Climate Indicator Bulletin is based on a large number of measurements and gives an overview of the 2015 temperature evolution in Europe. The mean annual temperature in 2015, as an absolute value, was 11.099° Celsius, compared to 11.234°C in 2014 and 11.079°C in 2007.

The temperature anomalies (with respect to the 1981-2010 long-term average) show large contrasts over Europe in all seasons. [Source: WMO News, 23 December 2015. <https://www.wmo.int/media/content/2015-second-hottest-year-record-europe>]

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

Prepared by: Ross Cameron and Alison Smith-Palmer, Immunisation Team

This quarterly report presents laboratory-confirmed cases of vaccine preventable diseases measles, mumps, rubella and whooping cough for the quarter ending week 48, 2015 and childhood vaccine uptake figures for the quarter ending 30 September 2015. Due to a change in notification reporting procedure, the publication schedule of the notifications tables is currently under review and these tables will not be presented in this report.

Measles

There have been no laboratory-confirmed cases of measles so far in 2015, compared to ten laboratory-confirmed cases up to week 48 in 2014 (Table 1). The majority of cases reported in 2014 were sporadic and eight of ten cases were unvaccinated (those who have not received the recommended two doses of MMR vaccine); vaccine status for one case was unknown. The last laboratory-confirmed measles case in Scotland was in October 2014.

TABLE 1: Vaccine preventable diseases: laboratory-confirmed cases to week 48/2015

Weeks	Number of reports received				Cumulative totals	
	Weeks 30-36/2015	weeks 37-40/2015	weeks 41-44/2015	weeks 45-48/2015	2015 to week 48	2014 to week 48
Measles	0	0	0	0	0	10
Mumps	31	14	0	10	806	224
Rubella	0	0	0	0	0	0
<i>Bordetella pertussis</i>	98	91	84	71	820	469

The large measles outbreak in Berlin, Germany is now over and no new outbreaks of measles have been reported in European countries since the last European Centre for Disease Control (ECDC) report in July.¹ Measles cases are under scrutiny in Europe, as measles is targeted for elimination by the World Health Organisation (WHO). The ECDC publishes a monthly summary of measles activity,¹ for which Health Protection Scotland submits national data.

Mumps

In the first 48 weeks of 2015, there were 806 laboratory-confirmed cases of mumps, a significant increase from 224 laboratory-confirmed cases seen in the first 48 weeks in 2014 (Table 1).

The high number of laboratory-confirmed cases reported in Scotland in the first 48 weeks of 2015 was due to an outbreak of mumps linked to cases both in educational establishments and the community. The outbreak is now over and the numbers of cases reported each week have returned to levels seen before the outbreak began in September 2014.

Of those laboratory-confirmed cases who had documented ages, the median age was 22 years (range <1-84 years) and 63% were in the 15-24 year age band. Correspondence with CPHMs in the affected boards highlighted that a significant proportion of cases had received one or two doses of MMR and the observed increase in cases may represent poor initial immune response to the mumps component of the MMR vaccine and/or waning immunity within the fully and/or partially vaccinated population. Older individuals (>25 years) in this outbreak may have been affected as they are often under-immunised against mumps virus as they have not routinely been offered two doses of the MMR vaccine (measles, mumps and rubella). These individuals may have been part of the schools catch-up campaign in 1994 in which they received the MR vaccine (measles and rubella) which does not contain a component against mumps.

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 with smaller outbreaks occurring in 2009, 2012 and 2014 and 2015.

Rubella

There have been no laboratory-confirmed cases of rubella up to week 48 of 2015 as was the situation in the same period last year (Table 1). The last laboratory-confirmed case of rubella reported to HPS was in April 2013.

Rubella cases are under scrutiny in Europe, as the virus is targeted for elimination by WHO. No new outbreaks of rubella have occurred since the last ECDC report but a high number of rubella cases are still being reported from Poland following a large outbreak in 2013.¹ ECDC publishes a monthly summary of rubella activity,¹ for which Health Protection Scotland submits national data.

Whooping cough (Pertussis)

The incidence of pertussis increased dramatically in 2012 and has remained well above historical levels; this is similar to the pattern seen in England and Wales. In the first 48 weeks of 2015 there were 820 laboratory-confirmed cases of *Bordetella pertussis* reported to HPS, an increase of 351 (75%) compared to the same period in 2014 when there were 469 reports. Despite this increase, the number of reports in weeks 1-48 of 2015 remains lower than during the peak of the increase in 2012 and 2013 when there were 1739 and 1145 reports respectively during the same period. Although laboratory reports of pertussis are lower than during 2012 and 2013, they are higher than the historical trends in 2010 and 2011, showing that pertussis is continuing to circulate in the community.

Young infants are the group most likely to develop complications from infection with *Bordetella pertussis*, which can require hospitalisation and in severe cases can be fatal. In response to the increase in pertussis and in order to protect young infants in the first few weeks of life before they are old enough to start the routine childhood immunisation programme at eight weeks, a vaccination programme was introduced in October 2012 to offer pertussis vaccination to all pregnant women between 28 and 38 weeks gestation (inclusive). Vaccination of this group aims to boost immunity in the pregnant woman which then passes across the placenta to the unborn child and should provide protection during the early weeks of life. As pertussis continues to circulate in Scotland well above historical levels, immunisation of pregnant women continues to be important.

As the immunity young infants will receive from the mother provides protection only for the first few weeks of life, it is important that infants are vaccinated as part of the routine childhood schedule in order to ensure longer term protection.

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 30 September 2015 are shown in Tables 2, 3 and 4 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 National Services Scotland Information Services Division (NSS ISD) and were released on 15 December 2015.² There is further commentary on these uptake figures in the ISD statistics publication. ISD recently streamlined this publication so that uptake rates for each vaccine are only reported at the most relevant age stages and therefore tables and figures in the report have been altered.

Vaccine uptake rates by 12 months of age for completing primary courses of meningococcal serogroup C conjugate vaccine (Men C) and pneumococcal conjugate vaccine (PCV) remain high and stable across Scotland at 97.9% and 97.2% respectively. Since 1 July 2013, an oral vaccine against rotavirus has been included in the routine childhood immunisation programme with doses at two and three months of age. Rotavirus vaccine uptake for this quarter is 93.0% which is a slight decrease from 93.2% in the preceding quarter. See Table 2 and Figure 1.

TABLE 2: Primary course immunisation uptake rates by 12 months of age, for the quarter 1 July to 30 September 2015, for those born 1 July to 30 September 2014

NHS board of residence ¹	Number in cohort ²	DTP/Pol/Hib	Men C	PCV	Rotavirus
Ayrshire & Arran	957	98.2	99.2	98.3	92.8
Borders	249	99.2	100.0	99.2	94.4
Dumfries & Galloway	347	97.7	98.3	97.4	94.8
Fife	1,020	96.6	98.1	96.7	95.0
Forth Valley	865	97.5	97.8	97.6	94.3
Grampian	1,616	97.0	97.3	96.8	92.5
Greater Glasgow & Clyde	3,454	97.0	97.6	97.2	91.8
Highland	835	95.4	96.8	95.8	90.8
Lanarkshire	1,957	98.3	98.7	98.2	93.4
Lothian	2,602	97.2	97.8	97.3	93.7
Orkney	58	93.1	94.8	93.1	91.4
Shetland ³	71	88.7	91.5	87.3	81.7
Tayside	1,135	97.4	97.9	97.4	94.3
Western Isles	62	88.7	93.5	88.7	91.9
NHS board unknown	2	..	..	..	..
Scotland	15,230	97.2	97.9	97.2	93.0

Date: 16 November 2015

Source: SIRS

1. NHS boards based on the boundaries as at 1 April 2014. NHS board of residence on the Scottish Immunisation & Recall System (SIRS) is recorded in the pre-April 2006 configuration of NHS board boundaries. Data have been mapped to reflect the boundaries as at 1 April 2014 using the child's home postcode. A small number of records do not include a postcode and the NHS board is therefore unknown.
 2. Children reaching 12 months of age during the evaluation quarter 1 April to 30 June 2015 (i.e. born 1 April to 30 June 2014).
 3. NHS Shetland has identified a data recording issue which has resulted in their uptake rates being under-reported.
- .. Not Applicable.

Key:

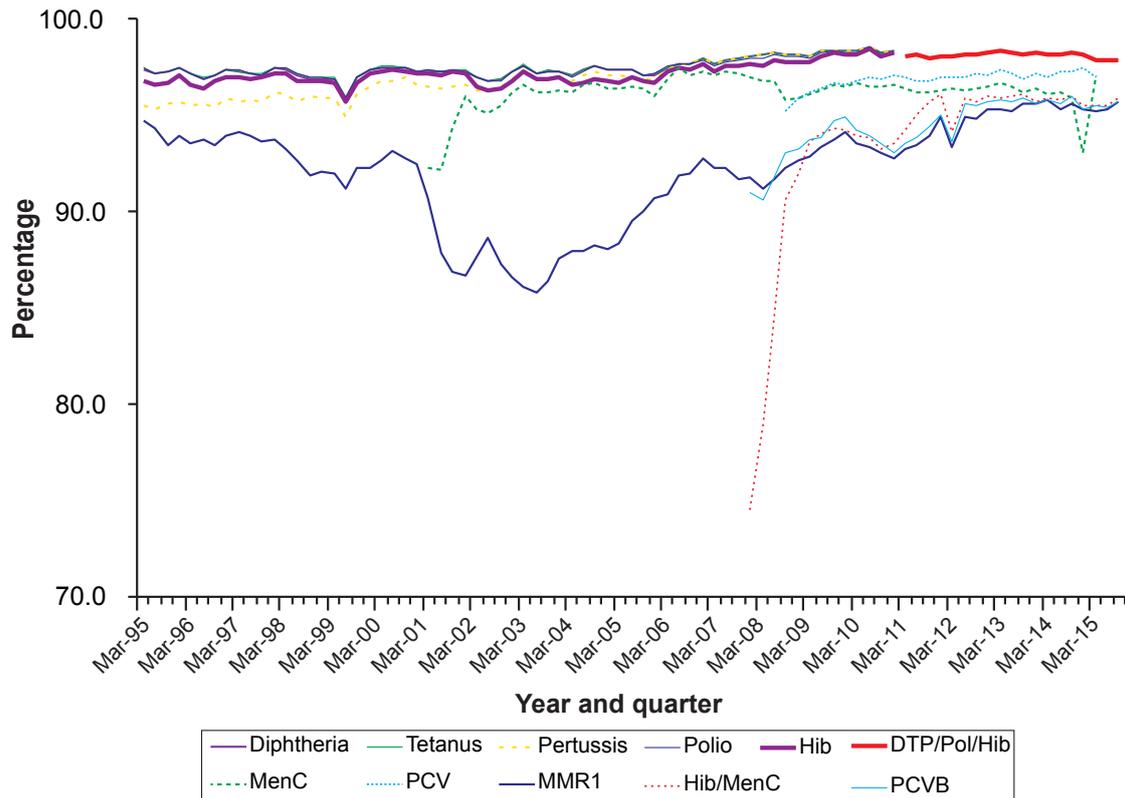
DTP/Pol/Hib = The 5-in-1 vaccine (three doses) which protects against diphtheria, tetanus, pertussis, polio and *Haemophilus influenzae* type b (Hib). For children who received primary immunisations outside the UK, where the vaccine may not be given as one injection, only those who received three doses of each vaccine (diphtheria, tetanus, pertussis, polio and Hib) are counted as completing the primary course.

MenC = meningococcal serogroup C conjugate vaccine (one dose).

PCV = pneumococcal conjugate vaccine (two doses).

Rotavirus = rotavirus vaccine (two doses under 24 weeks).

FIGURE 1: Quarterly primary and booster immunisation uptake rates by 24 months - reports to 30th September 2015



For the third quarter of 2015, the uptake rate by 24 months of age for completing the primary course of diphtheria, tetanus, pertussis, polio and *Haemophilus influenzae* type B (Hib) across Scotland remains high and stable at 97.9%. Uptake of one dose of measles-mumps-rubella vaccine (MMR) by 24 months was 95.7% (compared with 95.3% 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 95.9% for the Hib/MenC booster and 95.7% for the PCV booster (compared to 95.6% and 95.4% for the previous quarter respectively). See Table 3 and Figure 1.

TABLE 3: Primary and booster immunisation uptake rates by 24 months old, for the quarter 1 July to 30 September 2015, for those born 1 July to 30 September 2013

TABLE 3a: Percentage uptake of completed primary course by 24 months

NHS board of residence¹	Number in cohort²	DTP/Pol/Hib %	MMR1 %
Ayrshire & Arran	974	98.6	96.7
Borders	281	98.2	97.9
Dumfries & Galloway	325	99.4	97.8
Fife	1,007	97.6	94.2
Forth Valley	826	98.4	96.1
Grampian	1,718	97.7	95.1
Greater Glasgow & Clyde	3,298	97.9	95.5
Highland	853	95.8	93.3
Lanarkshire	1,818	98.7	97.5
Lothian	2,584	97.6	95.5
Orkney	52	98.1	96.2
Shetland	59	94.9	83.1
Tayside	1,030	98.4	96.0
Western Isles	84	96.4	94.0
NHS Board unknown	3	..	..
Scotland	14,912	97.9	95.7

TABLE 3b: Percentage uptake of completed booster course by 24 months

NHS board of residence¹	Number in cohort²	Hib/MenC	PCVB
Ayrshire & Arran	974	97.0	96.7
Borders	281	97.2	98.2
Dumfries & Galloway	325	98.5	98.5
Fife	1,007	94.7	94.5
Forth Valley	826	96.5	95.9
Grampian	1,718	94.7	94.8
Greater Glasgow & Clyde	3,298	95.9	95.6
Highland	853	93.8	93.0
Lanarkshire	1,818	98.3	98.3
Lothian	2,584	95.2	95.1
Orkney	52	96.2	96.2
Shetland	59	89.8	88.1
Tayside	1,030	96.4	96.0
Western Isles	84	94.0	91.7
NHS board unknown	3	..	..
Scotland	14,912	95.9	95.7

Date: 16 November 2015

Source: SIRS

1. NHS boards based on the boundaries as at 1 April 2014. NHS board of residence on the Scottish Immunisation & Recall System (SIRS) is recorded in the pre-April 2006 configuration of NHS board boundaries. Data have been mapped to reflect the boundaries as at 1 April 2014 using the child's home postcode. A small number of records do not include a postcode and the NHS board is therefore unknown.
 2. Children reaching 24 months of age during the evaluation quarter 1 April to 30 June 2015 (i.e. born 1 April to 30 June 2013).
- .. Not Applicable.

Key:

DTP/Pol/Hib = The 5-in-1 vaccine (three doses) which protects against diphtheria, tetanus, pertussis, polio and *Haemophilus influenzae* type b (Hib). For children who received primary immunisations outside the UK, where the vaccine may not be given as one injection, only those who received three doses of each vaccine (diphtheria, tetanus, pertussis, polio and Hib) are counted as completing the primary course.

MMR1 = measles, mumps, and rubella vaccine (one dose over 12 months).

Hib/MenC = Hib/MenC booster (one dose over 12 months).

PCVB = pneumococcal conjugate vaccine booster (one dose over 12 months).

For those reaching five years of age, uptake of at least one dose of MMR (MMR1) was 97.0% (a slight decrease from 97.5% 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), (Table 4 and Figure 2). Uptake of two doses of MMR (MMR2) was 93.2% (down from 93.5% in the previous quarter) and remains below the 95% uptake target.

TABLE 4: Primary and booster immunisation uptake rates by five years old, for the quarter 1 July to 30 September 2015, for those born 1 July to 30 September 2010

TABLE 4a: Percentage uptake of completed primary course by five years

NHS board of residence ¹	Number in cohort ²	DTP/Pol/Hib %	MMR1 %
Ayrshire & Arran	1,003	99.0	96.9
Borders	295	99.0	97.3
Dumfries & Galloway	348	99.1	95.1
Fife	1,108	97.9	96.5
Forth Valley	823	99.1	98.1
Grampian	1,683	97.9	97.0
Greater Glasgow & Clyde	3,317	97.9	97.5
Highland	832	97.7	96.0
Lanarkshire	1,962	98.1	96.5
Lothian	2,521	98.2	97.2
Orkney	56	98.2	96.4
Shetland	72	95.8	95.8
Tayside	1,135	98.9	98.0
Western Isles	76	97.4	93.4
NHS board unknown	6	..	..
Scotland	15,237	98.2	97.0

TABLE 4b: Percentage uptake of completed booster course by five years

NHS board of residence ¹	Number in cohort ²	Hib/MenC %	DTP/Pol %	MMR2 %
Ayrshire & Arran	1,003	97.8	94.9	94.5
Borders	295	97.3	98.3	97.6
Dumfries & Galloway	348	95.7	97.1	97.1
Fife	1,108	95.8	89.3	88.9
Forth Valley	823	97.4	93.9	93.2
Grampian	1,683	93.9	95.1	93.8
Greater Glasgow & Clyde	3,317	95.6	94.2	93.3
Highland	832	95.8	93.6	92.4
Lanarkshire	1,962	96.9	95.9	94.8
Lothian	2,521	96.3	92.7	91.9
Orkney	56	94.6	92.9	92.9
Shetland	72	93.1	83.3	81.9
Tayside	1,135	97.0	94.4	94.0
Western Isles	76	92.1	90.8	90.8
NHS board unknown	6	..	..	..
Scotland	15,237	96.1	94.0	93.2

Date: 16 November 2015

Source: SIRS

1. NHS boards based on the boundaries as at 1 April 2014. NHS board of residence on the Scottish Immunisation & Recall System (SIRS) is recorded in the pre-April 2006 configuration of NHS board boundaries. Data have been mapped to reflect the boundaries as at 1 April 2014 using the child's home postcode. A small number of records do not include a postcode and the NHS board is therefore unknown.
 2. Children reaching five years of age during the evaluation quarter 1 April to 30 June 2015 (i.e. born 1 April to 30 June 2010).
- .. Not Applicable.

Key:

DTP/Pol/Hib = The 5-in-1 vaccine (three doses) which protects against diphtheria, tetanus, pertussis, polio and *Haemophilus influenzae* type b (Hib). For children who received primary immunisations outside the UK, where the vaccine may not be given as one injection, only those who received three doses of each vaccine (diphtheria, tetanus, pertussis, polio and Hib) are counted as completing the primary course.

MMR1 = measles, mumps, and rubella vaccine (one dose over 12 months).

Hib/MenC = Hib/MenC booster (one dose over 12 months).

DTP/Pol = diphtheria, tetanus, pertussis and polio containing vaccine (fourth dose). In the UK this is given as a single injection (the 4-in-1 vaccine).

MMR2 = measles, mumps, and rubella vaccine (second dose).

Shingles (Herpes zoster) vaccine uptake for 2014/15

Prepared by: Heather Murdoch, Vaccine Preventable Diseases

Introduction

Varicella-zoster virus (VZV) causes two distinct diseases: initial infection, usually during childhood, results in chickenpox, following which VZV enters a latent state in the dorsal root ganglia, with reactivation resulting in shingles (herpes zoster). While reactivation can occur at any age, the incidence increases with age. Shingles is characterised by a painful vesicular skin rash.^{1,2} The main complication of shingles is post-herpetic neuralgia (PHN), a long-lasting neuropathic pain after rash has resolved. PHN can persist for months or years and is often debilitating.^{3,4} While there is no universally accepted clinical definition, it is often defined as pain that persists for ≥ 90 days after the onset of rash.⁵ In Scotland, approximately 7,000 people aged 70 years and over develop shingles each year. Of these, between 700-1,400 develop PHN and approximately 600 shingles hospitalisation episodes are recorded per year. The risk and severity of PHN increases strikingly with age and is estimated to double with each decade.⁶ Other significant complications include herpes zoster ophthalmicus (HZO), which is defined by shingles involvement in the ophthalmic division of the trigeminal nerve.⁷

In September 2013 the Scottish Government launched the first national shingles immunisation campaign using Zostavax, which is a live attenuated vaccine.⁸ It is derived from the Oka strain of VZV and has significantly higher antigen content than the varicella vaccine. Since it is a live vaccine, Zostavax is contra-indicated for patients who have a known primary or acquired immunodeficiency state or patients who are receiving current immunosuppressive therapy including high-dose corticosteroids, biological therapies or combination therapies.⁸

In 2014/15, the second year of the programme, the vaccine was offered to non-immunocompromised adults aged 70 years and also rolled out as part of an ongoing catch-up programme to 78 and 79 year olds. Those who had turned 70 in the first year of the programme but who had not yet received the vaccine also remained eligible (see CMO letter CMO(2014)21 at [www.sehd.scot.nhs.uk/cmo/CMO\(2014\)21.pdf](http://www.sehd.scot.nhs.uk/cmo/CMO(2014)21.pdf)).

Vaccine uptake

Cumulative vaccine uptake data was extracted automatically from approximately 99% of GP practices in Scotland.

Shingles vaccine uptake in 2014/15 for Scotland and by NHS board is shown in Table 1. Uptake in those aged 70 years (routine cohort) was 58.7% compared with 59.7% in 2013/14 and ranged from 48.0% to 64.9% across NHS boards. Uptake in those aged 78 years was 54.9% (no comparable data from 2013/14) and ranged from 29.9% to 76.6% by NHS board. Uptake in those aged 79 years was 55.0% compared with 55.6% in 2013/14 and ranged from 44.7% to 65.1% by NHS board.

TABLE 1: Vaccine uptake for 2014/15 for the routine and catch-up cohorts by NHS board and all Scotland

NHS board	Age this season								
	70			78			79		
	Cohort	Dose 1 HZ (number)	% Dose 1 HZ	Cohort	Dose 1 HZ (number)	% Dose 1 HZ	Cohort	Dose 1 HZ (number)	% Dose 1 HZ
Ayrshire & Arran	4249	2216	52.2	2688	1361	50.6	2447	1195	48.8
Borders	1385	866	62.5	927	525	56.6	806	525	65.1
Dumfries & Galloway	1951	1203	61.7	1260	744	59.0	1153	661	57.3
Fife	3899	2234	57.3	2433	1421	58.4	2208	1251	56.7
Forth Valley	3042	1973	64.9	1963	1053	53.6	1826	1065	58.3
Grampian	4903	2948	60.1	3308	1934	58.5	3195	1926	60.3
Greater Glasgow & Clyde	9421	5672	60.2	6706	3483	51.9	6351	3193	50.3
Highland	3649	2089	57.2	2218	1313	59.2	2088	1252	60.0
Lanarkshire	6028	3674	60.9	3991	2225	55.8	3634	1965	54.1
Lothian	7089	3920	55.3	4837	2469	51.0	4385	2346	53.5
Orkney	246	152	61.8	145	111	76.6	132	85	64.4
Shetland	218	118	54.1	137	41	29.9	134	78	58.2
Tayside	4129	2443	59.2	2833	1694	59.8	2733	1579	57.8
Western Isles	304	146	48.0	191	88	46.1	217	97	44.7
Scotland	50513	29654	58.7	33637	18462	54.9	31309	17218	55.0

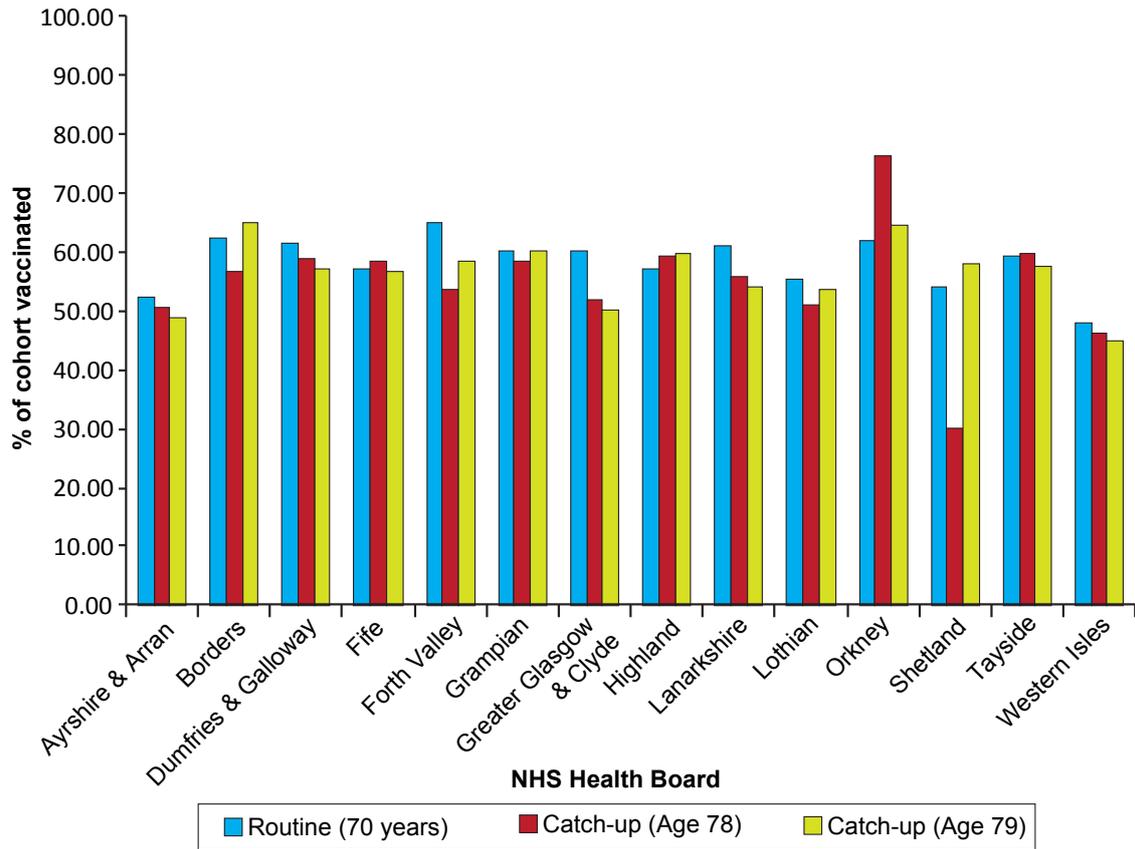
Please note that these vaccine uptake figures are based on automated extracts from 99% of Scottish GP practices. Data for practices in CamGlen and the Northern Corridor are reported under NHS Lanarkshire.

Source: Health Protection Scotland Herpes Zoster vaccine uptake automated extract as at 20 November 2014.

Produced by HPS 20 November 2014.

Please note that figures reported from the island NHS boards are based on very small numbers.

FIGURE 1: Cumulative vaccine uptake for 2014/15 for the routine and catch-up cohorts by NHS board



The overall rate of uptake in the age 78 and 79 cohorts for Scotland continues to be lower than that of the routine cohort with a difference of 3.8% (age 78) and 3.7% (age 79). Figure 1 presents a comparison of the vaccine uptake for the routine and catch-up cohorts by NHS board which shows the wide variation between NHS boards.

FIGURE 2: Vaccine uptake for individuals age 70, 78 and 79 years by month with percentage of GP practices reporting

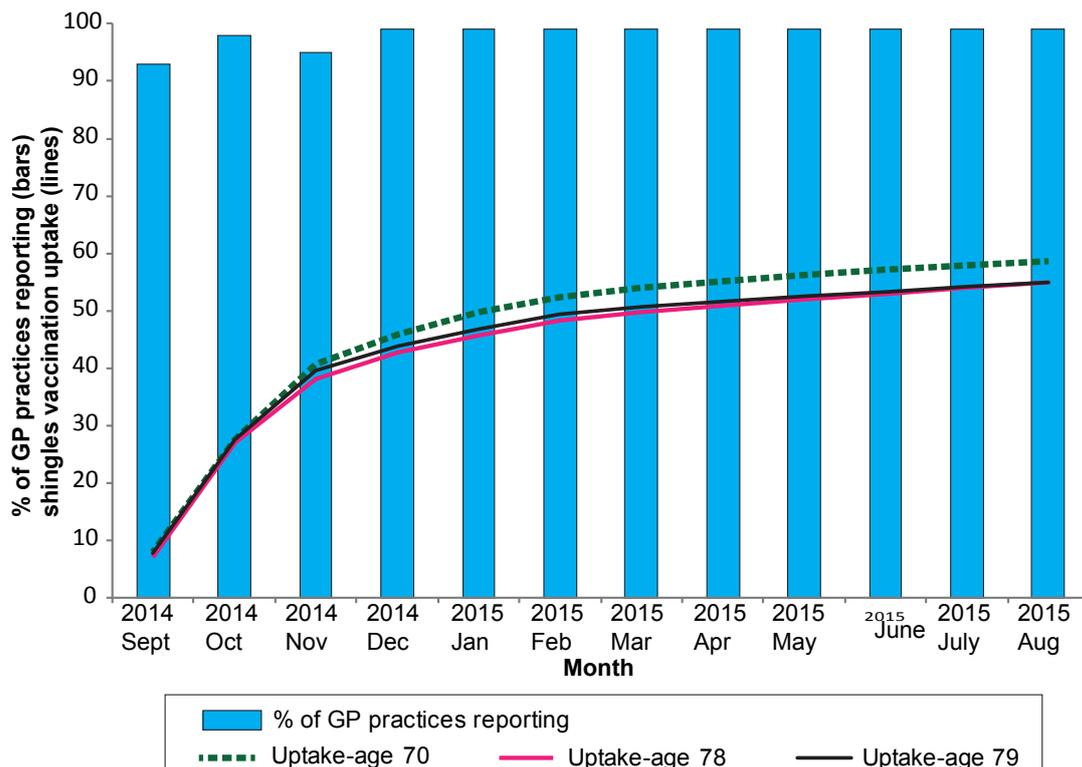


Figure 2 presents the cumulative increase in vaccine uptake by month alongside the percentage of GPs reporting and shows that the majority of vaccines, approximately 80%, were administered by the end of December, coinciding with the seasonal influenza vaccination programme.

A total of 4.1% of the vaccine was administered to individuals not currently within the vaccine programme age cohorts but who will become eligible in the future.

Data were available for vaccine uptake by gender across all the cohorts and showed that, for age 70, 78 and 79 year cohorts, males had a higher uptake rate (58.8%, 57.6% and 57.9%) than females (58.1%, 52.4% and 52.9%). The difference in vaccine uptake by gender is more marked in the catch-up age groups however there was a wide variation between NHS Boards.

Discussion

Vaccine uptake for 2014/15 for both the age 70 and 79 cohorts was broadly similar to 2013/14, with slightly lower vaccine uptake perhaps reflecting a GP software supplier issue which resulted in a lack of final extracts from a number of GP practices.

Similarly to 2013/14, vaccine uptake for the catch-up cohorts continues to be lower than that of the routine cohort with a difference of 3.8% (age 78) and 3.7% (age 79), however there is wide variation across NHS boards. There are also differences in vaccine uptake by gender with a lower uptake in females than males, which is particularly evident in the catch-up cohorts. This trend varies widely between boards, and is the subject of further investigation, as is the wide variation in uptake across GP practices. It is hoped that this will inform continued improvement in local practices' delivery of the shingles immunisation programme.

References

1. Willison CB, Morrison LK, Mendoza N, Tying SK. Shingles vaccine. *Expert Opin Biol Ther.* 2010;10(4):631-8.
2. Yawn BP, Gilden D. The global epidemiology of herpes zoster. *Neurology.* 2013;3;81(10):928- 30.
3. Lukas K, Edte A, Bertrand I. The impact of herpes zoster and post-herpetic neuralgia on quality of life: patient-reported outcomes in six European countries. *Z Gesundh Wiss.* 2012;20(4):441-51.
4. Weinke T, Edte A, Schmitt S, Lukas K. Impact of herpes zoster and post-herpetic neuralgia on patients' quality of life: a patient-reported outcomes survey. *Z Gesundh Wiss.* 2010;18(4):367-74.
5. Tontodonati M, Ursini T, Polilli E, et al. Post-herpetic neuralgia. *Int J Gen Med.* 2012;5:861-71.
6. Bresse X, Annemans L, Preaud E, Bloch K, Duru G, Gauthier A. Vaccination against herpes zoster and postherpetic neuralgia in France: a cost-effectiveness analysis. *Expert Rev Pharmacoecon Outcomes Res.* 2013;13(3):393-406.
7. Potts A, Williams GJ, Olson JA, Pollock KG, Murdoch H, Cameron JC. Herpes zoster ophthalmicus reduction: implementation of shingles vaccination in the UK. *Eye (Lond).* 2014;28(3):247-8.
8. Department of Health. Green Book Chapter 28a: Shingles (herpes zoster). 2013. Available from: <https://www.gov.uk/government/publications/shingles-herpes-zoster-the-green-book-chapter-28a>. (accessed 20 December 2015).

The last Shingles vaccine uptake Surveillance Report was in Issue [15/01](#)
The next Shingles vaccine uptake Surveillance Report will be in Issue TBC

NHS BOARD ABBREVIATIONS

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

Correspondence to: The Editor, *HPS Weekly Report*, Health Protection Scotland, Meridian Court, 5 Cadogan Street, Glasgow, G2 6QE, Scotland

T 0141-300 1100 **F** 0141-300 1172 **E** NSS.HPSWReditor@nhs.net **W** <http://www.ewr.hps.scot.nhs.uk/>

Printed in the UK. HPS is a division of the NHS National Services Scotland.

Registered as a newspaper at the Post Office. © Health Protection Scotland 2016