



Health Protection Report

weekly report

Volume 4 Number 5 Published on: 5 February 2010

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[Anthrax alert for heroin users in London](#)

The HPA and NHS London have confirmed that a drug-injecting heroin user has tested positive for anthrax and is being treated in a London hospital, the first case of anthrax seen in an injecting drug user in England since similar cases were first seen in Scotland in December 2009.

Nineteen cases have so far been confirmed in Scotland. Similarities to the cases in Scotland suggest that the heroin, or a contaminated cutting agent mixed with the heroin, is the likely source of infection.

Further information

HPA press notice. [Anthrax alert for heroin users in London](#), 5 February 2010.

Department of Health Central Alerting System. [Confirmed case of anthrax infection in an injecting drug user in England](#), 5 February 2010.

Confirmed measles cases in England and Wales: update to end-December 2009

Only one case of confirmed measles was reported in December 2009, bringing the provisional total of laboratory confirmed cases for 2009 to 1144, lower than the previous year's total of 1370. This case was confirmed in an infant not yet eligible for routine immunisation who had recent history of travelling to India.

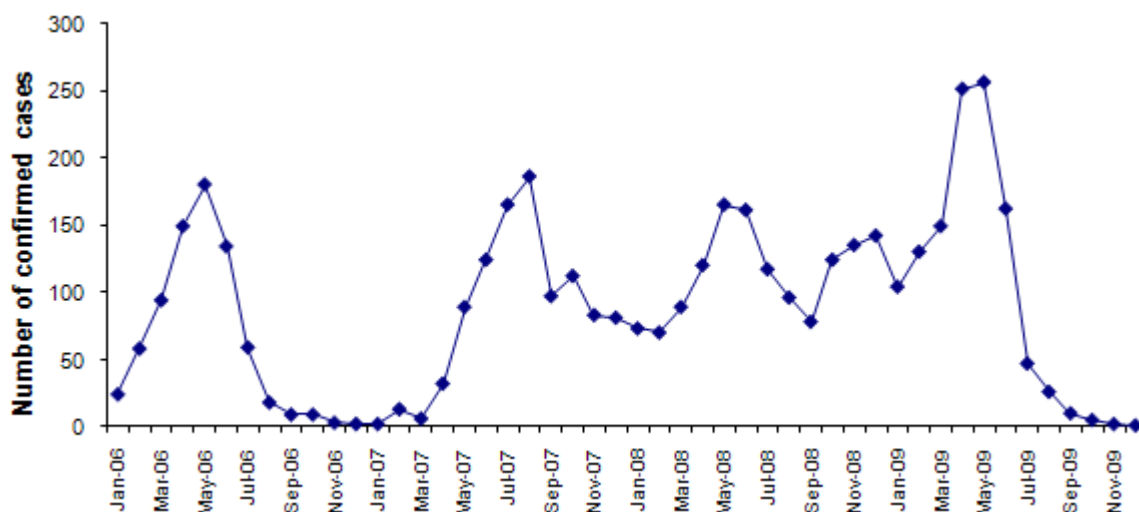
Despite this low level, it is important to continuing monitoring measles activity and prompt notification and testing of cases is essential.

In addition, in December, six measles cases were confirmed in Northern Ireland. These cases have links to an ongoing outbreak in the Republic of Ireland and with an identical measles D4 genotype [1].

Confirmed cases of measles by region and month of onset, England and Wales: January to December 2009

Month	Lond-on	East Mids	East of Engl'd	North East	North West	South East	South West	West Mids	Wales	York & Humb	Total
Jan 09	38	8	6	1	8	21	3	13	–	7	105
Feb 09	41	–	3	–	3	54	1	22	–	5	129
Mar 09	20	3	7	2	28	49	3	13	21	3	149
Apr 09	22	7	12	50	23	61	12	24	40	1	252
May 09	26	13	24	43	11	50	10	18	47	15	257
Jun 09	30	10	20	16	4	34	10	4	29	4	161
July 09	15	6	–	3	–	5	–	–	13	5	47
Aug 09	4	–	2	6	1	–	1	–	5	7	26
Sept 09	2	–	–	1	1	1	1	–	1	3	10
Oct 09	–	–	–	–	–	–	2	1	2	–	5
Nov 09	–	–	–	–	–	–	–	–	1	1	2
Dec 09	–	–	–	–	–	1	–	–	–	–	1
Total 2009	198	47	74	122	79	276	43	95	159	51	1144

Number of laboratory confirmed cases in England and Wales by month of onset: January 2006 to December 2009



An age breakdown of cases for 2009 to the end of December by region is available at: http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1223019390211.

Reference

1. Child hospitalised in measles outbreak. Available at: <http://www.irishtimes.com/newspaper/breaking/2009/1123/breaking79.htm>.

EFSA report on human campylobacteriosis caused by poultry meat in the EU

The European Food Safety Authority (EFSA) has published an opinion from its Biological Hazards (BIOHAZ) Panel on the extent to which poultry meat contributes to human cases of campylobacteriosis across the European Union. Campylobacteriosis is the most frequently reported zoonotic illness in the EU. More than 200,00 cases were reported in 24 member states in 2007. The opinion confirms that the handling, preparation and consumption of poultry meat is the major cause, probably accounting directly for 20 to 30% of reported human cases.

The panel recommends more effective EU surveillance, noting a significant level of under-ascertainment and under-reporting. Most surveillance schemes for food-borne diseases depend on patients with symptoms of the disease consulting a primary care physician and subsequently being correctly diagnosed. It also recommends research to improve source attribution and to evaluate the effectiveness of interventions.

Reference

1. EFSA Panel on Biological Hazards (BIOHAZ). *Scientific opinion on quantification of the risk posed by broiler meat to human campylobacteriosis in the EU*. *EFSA Journal* **8**(1): 1437. Available from: www.efsa.europa.eu.

Pandemic (H1N1) 2009 influenza: health impact assessment for sub-Saharan Africa

Global situation

Although in the temperate zone of the northern hemisphere overall pandemic influenza activity continues to decline or remain low in most regions since peaking during late October and November 2009, several areas continue to have evidence of active but declining transmission, particularly in North Africa and in limited areas of Eastern Europe and East Asia, according to the WHO's latest update of the global situation [1].

The WHO noted that:

- ▶ In **North Africa**, pandemic influenza transmission remains active and geographically widespread but overall activity has been declining since peaking during late December 2009 and early January 2010. During January 2010, a substantial decline in the number of pandemic virus isolations and new cases was observed in Morocco and Egypt, respectively;
- ▶ In **South and Southeast Asia**, pandemic influenza transmission remains active but geographically localized to regional. The overall intensity of respiratory diseases activity was reported to be low to moderate in most places. In India, influenza activity continued to decline in all regions of the country, however, the most active areas of transmission currently are in the western states. An overall peak in the number of pandemic H1N1 cases was recorded in India during mid December 2009, and the majority of these cases were identified in the northern and western states of India. In Thailand, overall ILI activity remained low, however focal increase in activity were observed in several central and northern provinces;
- ▶ In **East Asia**, pandemic influenza transmission remains active and geographically widespread across the region, however, overall activity continued to decline. In Japan, overall influenza activity continues to decline but transmission remains higher on the southern island of Okinawa than in other places. In the Republic of Korea (South Korea), rates of ILI continued to decline to near baseline after a substantial wave of activity which peaked during early to mid November 2009. ... In northern and southern China, rates of ILI have returned to levels seen during recent seasons; however, approximately 30% of respiratory specimens tested were positive for influenza suggesting that active transmission of influenza viruses persists. Active transmission of pandemic influenza virus also persists in Hong Kong SAR (China), although at significantly lower levels than an earlier peak of activity during September and October 2009;
- ▶ In **Europe**, transmission of pandemic influenza virus remains active in a limited number of countries as overall activity remained low in most places. At least seven countries testing more than 20 sentinel respiratory samples reported that more than 20% of samples had tested positive for influenza (Albania, Bulgaria, the Czech Republic, Georgia, Greece, Luxembourg, and Romania); however, in all seven, rates of illness remained well below earlier peaks of activity. Small increases in ILI/ARI have been reported over the past two reporting weeks in Slovakia, Belarus, and the Russian Federation. The overall rate of sentinel respiratory samples testing positive for influenza fell to 14% after reaching a peak of 45% during early November 2009;
- ▶ In the **Americas**, both in the tropical and northern temperate zones, overall pandemic influenza activity continued to decline or remain low in most places. In Central America and Caribbean, pandemic influenza virus transmission persists but overall activity remains low or unchanged in most places;
- ▶ In **temperate regions of the southern hemisphere**, sporadic cases of pandemic influenza continued to be reported without evidence of sustained community transmission.

UK situation at 4 February 2010

Key points of the Health Protection Agency's Weekly National Influenza Report of 4 February (week 5) [2] covering the UK situation were as follows:

- ▶ Pandemic (H1N1) 2009 influenza activity was generally decreasing across the UK;
- ▶ In week 04 (ending 31 January), the weekly influenza-like illness consultation rate decreased or remained stable in England, Wales and N. Ireland and increased slightly in Scotland;

- ▶ The National Pandemic Flu Service continued to issue antiviral drugs to people in England. The number of assessments and antiviral collections through this service decreased over the past week. The service will continue until 11 February 2010 [3], after which date antivirals will be authorised via health care professionals;
- ▶ A decrease in respiratory syncytial virus detections has been observed recently although GP consultation rates for acute bronchitis increased between week 3 and week 4, mainly in people aged under 5 years and 65 or over;
- ▶ The main influenza virus circulating in the UK continued to be the pandemic (H1N1) 2009 strain, with few influenza H1 (non-pandemic), H3 and B viruses detected. Thirty-eight of 5,174 pandemic viruses tested have been confirmed to carry a mutation which confers resistance to the antiviral drug oseltamivir; three are phenotypically resistant to the drug but retain sensitivity to zanamivir;
- ▶ The weekly number of pandemic influenza cases reported as admitted to hospital has decreased recently. The cumulative number of deaths reported due to pandemic (H1N1) 2009 in the UK is 411;
- ▶ The UK pandemic influenza vaccination programme continues for people at high risk of severe disease, health-care workers and healthy children aged between six months and five years. For further information see the Department of Health website.

Health impact assessment for sub-Saharan Africa

The potential impact of pandemic (H1N1) 2009 on the least developed countries of sub-Saharan Africa is the subject of an HPA report [4] that considers the special vulnerability of populations in the region to severe disease outcomes consequent to widespread pandemic influenza transmission. It notes that while many countries in the region have yet to experience any significant pandemic activity, “it seems feasible that the pandemic virus will spread through sub-Saharan Africa at some point in the near future, possibly following seasonal influenza patterns with increased activity during the next rainy season” .

This modelling and risk assessment of the potential effects of pandemic (H1N1) influenza 2009 in sub-Saharan Africa was commissioned by the UK Government in response to the immediate needs of UNSIC in preparing for the needs of developing countries for the next wave of the pandemic. The purpose of this report is, given the current evidence base, to assess the impact of pandemic (H1N1) 2009 on the least developed countries in sub-Saharan Africa and to estimate the possible impact of the pandemic on progress towards achieving the health related Millennium Development Goals. The report notes that surveillance systems are weak in many parts of Africa and that there are little data on the impact of the pandemic in the region. The limited evidence base that is available (including comprehensive data from South Africa obtained during the southern hemisphere winter) is used as the basis for extrapolations from data collected in developed countries.

The focus of the report was on the Millennium Development Goals related to childhood and maternal mortality in the least resourced countries of sub-Saharan Africa whilst taking into account co-morbidities such as HIV/AIDS and TB in addition to the overall poorer health outcomes seen in populations throughout this region. In developed countries, pregnancy has been found to be a significant risk factor for complications and death due to the pandemic strain of influenza currently circulating. For developing countries, this will result in a higher maternal mortality rate during the pandemic period. It is possible that the impact of the pandemic could increase the maternal mortality rate, during the pandemic, to a level not seen for 15 to 20 years. Pandemic (H1N1) 2009 has had the greatest impact on children in developed countries and it is likely that this will remain the case in the developing world. People of all ages with HIV/AIDS and TB will also be at greater risk should they be infected with pandemic influenza.

The recommendations proposed by the authors stress the importance of urgently addressing the need to share information between countries. As the next influenza season begins, studies to monitor the impact of the disease on these populations must be proactively developed and ready for immediate implementation. Access to vaccine, antivirals and antibiotics for those who most need them should be enhanced. The authors urge that steps should be taken to build the necessary surveillance infrastructures in these countries. Reliable surveillance systems are crucial to provide a better understanding of current and future health threats due to influenza as well as other emerging diseases.

The report concludes that pandemic contingency planning should take account of 100-200 deaths per million population potentially occurring in sub-Saharan Africa, compared with the 10 deaths per million seen in

developed countries. More specific conclusions are reached relating to mortality rates in pregnant women, children, and patients with TB and HIV/AIDS.

References

1. WHO. Update no. 86 of 5 February 2010 (<http://www.who.int/csr/don/en/>).
2. HPA. Weekly National Influenza Report: week 5 (4 February 2010, PDF 462 KB), HPA website: www.hpa.org.uk/swineflu/surveillance&epidemiology.
3. Department of Health Central Alerting System. [Pandemic H1N1 \(2009\) Influenza](#), 27 January 2010.
4. HPA Global Health. "Assessment of the impact of pandemic (H1N1) 2009 influenza in sub-Saharan Africa", produced with the help of the South Africa National Institute for Communicable Diseases, the Medical Research Council Centre for Outbreak Analysis and Modelling at Imperial College London and the London School of Hygiene and Tropical Medicine, 30 January 2010. Downloadable at: http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1256639797918?p=1254510470266.

Radiation

Volume 4 Number 5 Published on: 5 February 2010

AGNIR report on health effects of ultrasound

The independent Advisory Group on Non-Ionising Radiation (AGNIR), which reports to the Health Protection Agency (HPA), has reviewed the latest scientific evidence on the health effects of ultrasound (frequencies above 20 kilohertz) and infrasound (below 20 Hz) [1].

Reference

1. HPA website: [Home](#) › [Publications](#) › [Radiation](#) › [Documents of the HPA: RCE series](#) › [Health Effects of Exposure to Ultrasound and Infrasound](#).
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Infection reports

Volume 4 Number 5 Published on: 5 February 2010

Respiratory

Laboratory reports of respiratory infections made to Cfl from HPA and NHS laboratories in England and Wales: weeks 1-4/2010

Data are recorded by week of report, but include only specimens taken in the last eight weeks (ie recent specimens).

Table 1. Reports of influenza infection made to Cfl, by week of report: weeks 1-4/2010

Week	Week 1	Week 2	Week 3	Week 4	Total
Week ending	10/1/10	17/1/10	24/1/10	31/1/10	
Influenza A	171	107	91	40	409
Isolation	14	7	4	4	29
*DIF	42	32	32	10	116
PCR	90	61	32	17	200
†Other	25	7	23	9	64
Influenza B	2	1	4	1	8
Isolation	–	–	–	–	–
*DIF	–	–	–	1	1
PCR	2	1	2	–	5
†Other	–	–	2	–	2
Influenza (untyped)	–	–	–	–	–
Isolation	–	–	–	–	–
*DIF	–	–	–	–	–
PCR	–	–	–	–	–
†Other	–	–	–	–	–

* DIF = Direct immunofluorescence.

† 'Other' = Antibody detection, single high titre or 'method not specified'.

Table 2. Respiratory viral detections by any method (culture, direct immunofluorescence, PCR, single high serology titre, etc), by week of report: weeks 1-4/2010

Week	Week 1	Week 2	Week 3	Week 4	Total
Week ending	10/1/10	17/1/10	24/1/10	31/1/10	
Adenovirus [†]	73	43	53	36	205
Coronavirus	3	–	1	3	7
Parainfluenza [†]	24	22	16	24	86
Rhinovirus	154	126	100	68	448
Respiratory Syncytial Virus (RSV)	1128	793	465	352	2738

* Respiratory samples only. Excludes diagnoses made by electron microscopy (EM).

† Includes parainfluenza types 1, 2, 3, 4 and untyped

Table 3. Respiratory viral detections by age group: data for weeks 1-4/2010

Age group (years)	<1 year	1-4 years	5-14 years	15-44 years	45-64 years	≥65 years	Un-known	Total
Adenovirus [†]	57	71	17	35	19	6	–	205
Coronavirus	1	3	–	1	1	1	–	7
Influenza A	41	38	40	191	77	21	1	409
Influenza B	2	2	1	2	-	1	–	8
Parainfluenza [†]	27	16	6	10	13	14	–	86
Rhinovirus	220	83	25	49	45	23	3	448
Respiratory syncytial virus (RSV)	2028	349	50	71	117	98	25	2738

* Respiratory samples only.

† Includes parainfluenza types 1, 2, 3, 4 and untyped.

Table 4. Laboratory reports of infections associated with atypical pneumonia, by week of report: weeks 1-4/2010

Week	Week 1	Week 2	Week 3	Week 4	Total
Week ending	10/1/10	17/1/10	24/1/10	31/1/10	
<i>Coxiella burnettii</i>	–	–	–	1	1
Respiratory <i>Chlamydia</i> sp.*	3	2	2	1	8
<i>Mycoplasma pneumoniae</i>	23	18	12	14	67
Legionella sp.	–	–	–	–	–

* Includes *Chlamydia psittaci*, *Chlamydia pneumoniae*, and *Chlamydia* sp detected from blood, serum, and respiratory specimens.

Table 5a. Reports of Legionnaires' disease cases in England and Wales, by week of report: weeks 1-4/2010

Week	Week 1	Week 2	Week 3	Week 4	Total
Week ending	10/1/10	17/1/10	24/1/10	31/1/10	
Nosocomial	2	–	–	1	3
Community	4	3	5	5	17
Travel abroad	1	–	3	–	4
Travel UK	1	1	–	2	4
Total	8	4	8	8	28
Male	6	4	5	7	22
Female	2	–	3	1	6

(*) Non-pneumonic case(s).

Twenty-eight cases were reported with pneumonia; 22 males aged 41-77yrs and six females aged 54-69yrs. Seventeen cases had community acquired infection. Nineteen cases had onset of symptoms in 2009 and the remaining nine in 2010. There was one death in a male aged 71yrs who had onset of symptoms in 2009.

Eight cases were travel associated: Dominican Republic (1), South Africa (1), United Arab Emirates (2) and United Kingdom (4).

Table 5b Reports of Legionnaires' disease cases by region of report in England and Wales: weeks 1-4/2010

Region/country	Nosocomial	Community	Travel abroad	Travel UK	Total
North East	–	–	–	–	–
Yorks & Humber	–	2	–	1	3
East Midlands	–	1	1	1	3
East of England	3	1	–	1	5
London	–	2	–	–	2
South East	–	5	1	1	7
South West	–	2	–	–	2
West Midlands	–	1	–	–	1
North West	–	1	1	–	2
Wales	–	2	1	–	3
Other	–	–	–	–	–
Total	3	17	4	4	28

(*) Non-pneumonic case(s)