Health Protection Agency

CDR WEEKLY

Current Issue: Volume **13** Number **45** **Published on**: 6 November 2003

MAIN STORIES THIS WEEK

REPORTS BY INFECTION

Respiratory

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News

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Next update due: **13 November 2003**

Current influenza activity in the United Kingdom

Clinical indicators of influenza activity continue to rise in England, Scotland, and Northern Ireland and are now above base-line levels in Scotland. The Royal College of General Practitioners (RCGP) reporting rate for influenza-like illness in England is highest in the north and in the 0 to 4 year age group. In England, young children make up the majority of infections reported from hospital sources while most detections from virological surveillance in GP practices are in the 15 to 44 year age group. Current information suggests that we are moving into the influenza season.

Three sudden deaths in young children in Scotland have been attributed to influenza A in the last eight weeks. The deaths occurred in children between two and eight years of age from different areas in central and southern Scotland during early September and October. Influenza A infection has so far been confirmed in two of these cases. In England there were two sudden deaths in young children with confirmed influenza A infection , one aged 18 months and the other aged 11 years. Both were reported from the same hospital in central England during October. Characterization of the influenza A viruses from two of the deaths in Scotland and also the two in England has confirmed the strain as A/Fujian/411/2002 (H3N2)-like (1). No underlying risk factors have so far been identified for any of the reported deaths in both Scotland and England.

Young children are especially susceptible to influenza because most will have little or no history of exposure to influenza viruses and have limited protective immunity. The relatively low levels of influenza activity that have been seen in recent years may also have contributed to this. The illness may be severe in a small proportion of children, particulary the young.

In the light of the increase in influenza activity, the Chief Medical Officers (CMOs) in England and Scotland have written to all GPs to make them aware of the current situation and reminding them of:

- The current immunization programme including the immunisaion of ‘at risk’ groups of all ages over 6 months of age.
- The National Institute of Clinical excellence (NICE) guidance on the use of antivirals for influenza in ‘at risk’ groups comes into effect now that influenza A is circulating in the community.

The CMO (England) communication on influenza can be viewed at: <http://www.doh.gov.uk/cmo/index.htm>

Information has been sent to virology laboratories in England and Wales through HPA Local and Regional Services (LARS), and through the clinical virology network, so that the diagnosis of influenza in sick children is considered early and that suitable samples are taken. The Acute Respiratory Infections Section (ARIS) of the HPA Communicable Disease Surveillance Centre would be grateful for information about potential incidents and/or outbreaks of influenza, including deaths in children. Virological specimens should be referred to the Respiratory Virus Unit of the Specialist Microbiology Reference Division (SRMD) at Colindale.

For the latest influenza from Scotland please visit the Scottish Centre for Infection and Environmental Health (SCIEH) website at < http://www.show.scot.nhs.uk/scieh/>

The HPA has issued a press release about influenza vaccination which can be viewed at:
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References

1. HPA. Influenza update. *Commun Dis Rep CDR Wkly* [serial online] 2003 [cited 6 November 2003]; **13** (41) news. Available at <http://www.hpa.org.uk/cdr/PDFfiles/2003/cdr4103.pdf>.

Related Links

HPA. Influenza update - winter 2003/2004.*Commun Dis Rep CDR Wkly* [serial online] 2003 [cited 6 November 2003]; **13** (40) news. Available at <http://www.hpa.org.uk/cdr/PDFfiles/2003/cdr4003.pdf>.

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Outbreak of norovirus infection on a cruise liner

An outbreak of norovirus infection has been reported from the P&O cruise liner Aurora. The Liner departed from Southampton for a cruise of the Mediterranean on 20 October 2003 with a complement of nearly 1,800 passengers and over 800 crew. The first cases of gastroenteritis among passengers were identified on day 2 of the cruise this was followed by a sharp increase in illness reported to the ship's medical team on day 6. Over 500 people have been affected since the start of the outbreak; symptoms include projectile vomiting and diarrhoea, with 86% reporting vomiting. Most people recovered after two days of illness. This epidemiological and clinical pattern is typical of norovirus outbreaks in semi-closed settings such as cruise ships, hotels, schools and healthcare institutions. Norovirus was identified in patient specimens by the medical team on the ship using a commercial enzyme linked immunosorbent assay.

P&O Cruises have been working with Southampton City Council Port Health Authority and the Hampshire and Isle of Wight Health Protection Unit on the implementation of control measures. As the home port for the vessel, Southampton Port Health Services have been kept fully informed of the progress of the outbreak and the control measures employed. The primary responsibility of the Port Health Service is to protect the public health and port health and medical officers will board the vessel when she docks to verify that procedures and policies have been correctly implemented in response to the outbreak.

Each year a small number of norovirus outbreaks on cruise ships are reported to health authorities around the world, particularly affecting ships sailing in the Mediterranean and Caribbean. Norovirus is the most common cause of gastroenteritis in the developed world it has been estimated from population studies in England and the Netherlands that between 1 and 3% of the population will be affected each year (1,2). The Gastrointestinal Diseases Department have records of 2877 laboratory confirmed outbreaks of norovirus infection in England and Wales since 1992.

References

1. Infectious Intestinal Disease Study Team. *A report of the study of infectious intestinal disease in England*. London: The Stationery Office, 2000.

2. De Wit MAS, Koopmans MPG, Kortbeek LM, et al. Sensor, a population-based cohort study on gastroenteritis in the Netherlands: incidence and etiology. *Am J Epid* 2001; **154**: 666-74.

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Respiratory

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Next update due: **4 December 2003**

[Laboratory reports of respiratory infections made to CDSC from Health Protection Agency and NHS laboratories in England and Wales]

Laboratory reports of respiratory infections made to CDSC from Health Protection Agency and NHS laboratories in England and Wales

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

Table 1 Reports of influenza infection made to CDSC, by week of report, weeks 40-44/03

Week	**40/03**	**41/03**	**42/03**	**43/03**	**44/03**	**Total**
Week ending	**05/10/03**	**12/10/03**	**19/10/03**	**26/10/03**	**02/11/03**	
Influenza A	**4**	**1**	**14**	**24**	**10**	**53**
Isolation	–	–	1	1	1	**3**
DIF	–	2	3	9	–	**17**
Four-fold rise in paired sera	1	–	2	**2**	–	**4**
PCR	–	–		–	–	–
Other	2	1	8	12	6	**29**
Influenza B	–	–	**1**	**1**	**1**	**3**
Isolation	–	–	–	–	–	–
DIF	–	–	–	–	–	–
Four-fold rise in paired sera	–	–	–	–	–	–
PCR	–	–	–	–	–	–
Other	–	–	1	1	1	**3**
Influenza (untyped)	–	–	–	–	–	–
Isolation	–	–	–	–	–	–
DIF	–	–	–	–	–	–
Four-fold rise in paired sera	–	–	–	–	–	–
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, four-fold rise in paired sera, single high serology titre, genomic, electron microscopy, other method, other method unknown), by week of report, weeks 40-44/03

Week	40/03	41/03	42/03	43/03	44/03	Total
Week ending	05/10/03	12/10/03	19/10/03	26/10/03	02/11/03	
Adenovirus*	17	14	9	30	36	**106**
Coronavirus	–	–	–	–	–	–
Parainfluenza†	7	9	6	2	7	**31**
Rhinovirus	3	2	1	4	17	**27**
RespiratorySyncytial Virus (RSV)‡	6	9	2	13	34	**64**

*Respiratory samples only. Excludes diagnoses made by electron microscopy (EM)
†includes parainfluenza types 1, 2, 3, 4, and untyped
‡ excludes diagnosis made by electron microscopy (EM)

Table 3 Respiratory viral detections by age group, weeks 40-44/03

Age group (years)	<1 year	1-4 years	5-14 years	15-44 years	45-64 years	≥ 65 years	Unknown	Total
Adenovirus*	8	5	8	52	30	2	1	**100**
Coronavirus	–	–	–	–	–	–	–	–
Influenza A	12	2	5	16	12	6	–	**10**
Influenza B	–	–	–	**1**	–	2	–	–
Parainfluenza†	16	7	2	2	3	1	–	**17**
Rhinovirus	19	3	–	3	2	–	–	**6**
RespiratorySyncytial Virus (RSV) ‡	50	7	1	3	3	–	–	**19**

*Respiratory samples only. Excludes diagnoses made by electron microscopy (EM)
†includes parainfluenza types 1, 2, 3, 4, and untyped
‡ excludes diagnosis made by electron microscopy (EM)

Table 4 Laboratory reports of infections associated with atypical pneumonia by week of report

Week	40/03	41/03	42/03	43/03	44/03	Total
Week ending	05/10/03	12/10/03	19/10/03	26/10/03	02/11/03	
Coxiella burnettii	–	–	2	1	–	**3**
Respiratory *Chlamydia* sp.*	3	1	5	10	8	**27**
Mycoplasma pneumoniae	10	4	11	7	14	**42**
Legionella sp.†	9	5	9	6	–	**29**

*includes *Chlamydia psittaci*, *Chlamydia pneumonia*e, and *Chlamydia* sp detected from blood, serum and respiratory specimens
† non-pneumonic cases in brackets

Table 5 Reports of legionnaires' disease (pneumonic and non-pneumonic*) cases in England and Wales, by week of report

Week	**40/03**	**41/03**	**42/03**	**43/03**	**44/03**	**Total**
Week ending	**05/10/03**	**12/10/03**	**19/10/03**	**26/10/03**	**02/11/03**	
Nosocomial	–	1	–	1	–	**2**
Community	5	2	2	–	–	**9**
Travel abroad	4	2	6	5	–	**17**
Travel UK	–	–	1	–	–	**1**
Total	**9**	**5**	**9**	6	**–**	**29**
Male	9	4	7	4	–	**25**
Female	–	1	2	2	–	**5**

* non-pneumonic cases in brackets17 cases were reported with pneumonia.

Twenty-nine cases were reported with pneumonia: 24 males aged between 36 and 85 years and eight females aged between 51 and 62 years. Two cases were hospital acquired, one of which was partof an outbreak. Nine cases were of community-acquired infection. There were two deaths: M85y was hospital acquired and M70y was travel associated.

Eighteen cases were travel associated: Greece and Spain three each, Maltaand Italy two each, Bulgaria, Bulgaria and Turkey, England, England France and Spain, France, France and Spain, Holland, Turkey one each.