



Health Protection Report

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News

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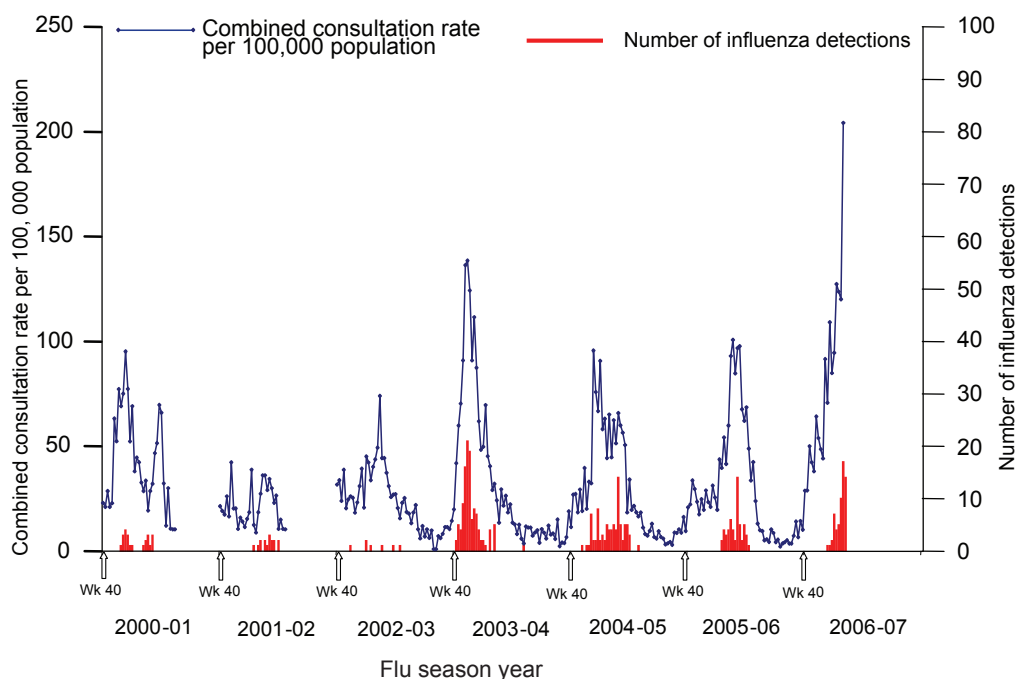
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- Increased rates of influenza in Northern Ireland
- Influenza A outbreaks among military recruits at several camps in South East England
- First report on the Chemical Incident Surveillance System for England and Wales

Increased rates of influenza in Northern Ireland

Northern Ireland has seen the highest sentinel consultation influenza rates since enhanced surveillance of influenza in Northern Ireland (ESINI) commenced in 2000. Rates have increased markedly during the past two weeks of the current season and a combined consultation rate of 213 per 100,000 population was reported for week 06. Increased consultation rates have been reported by the majority of sentinel practices. Consultation rates have risen particularly in the 0 to 4 years and 5 to 14 years age groups. Total call rates to the primary care out-of-hours centres have also increased by around 30% between weeks 03 and 06 [1]. In five of the last seven years, peak sentinel consultation rates for influenza and influenza-like illness were less than 100 per 100,000 population (figure). During the 2003/04 season, rates peaked at 139 per 100,000 population.

Figure Sentinel GP combined consultation rate for 'flu and 'flu-like illness 2000-01 to 2006-07 versus number of influenza (A or B) virus detections*



* PCR or antigen detection only

Influenza A viral detections have also recently increased with 14 reports from week 06 (seven from sentinel GPs and seven from hospitalized patients). There have been 67 influenza A viral detections this season and of the 20 typed to date all have been identified as influenza A/H3.

Influenza A activity is now widespread throughout Northern Ireland and has been increasing since the New Year. The Department of Health, Social Services and Public Safety issued an alert [2] to clinicians on 8 January indicating that guidance on use of influenza antiviral now applies.

As this is only the seventh year of ESINI, and for most of this time there has been little or modest influenza activity, it has not been possible to determine thresholds to distinguish between the upper limits of expected seasonal activity and what is higher than expected. Thresholds in use elsewhere in the UK are not applicable as the Northern Ireland base rates for consultations for influenza/influenza-like illness are generally higher than elsewhere. This may be partly due to differences in health-seeking behaviour as 18% of the Northern Ireland population has consulted their GP within the previous 14 days, compared to 13% in England [3]. In addition, services such as NHS Direct or NHS24 do not operate in Northern Ireland.

Enhanced surveillance of influenza in Northern Ireland (ESINI) commenced in October 2000 and is now in its seventh year. Is based on a network of 22 sentinel general practices and currently covers 7.3% of the population. Sixteen practices also undertake nasal and pharyngeal swabbing of those with symptoms consistent with clinical influenza. Initially, the surveillance scheme operated from early October (week 40) to early May (week 20) but, since October 2002, has been operational throughout the year.

References

1. Enhanced surveillance of influenza in Northern Ireland – weekly report. [online] [accessed 15 February 2007] Belfast: CDSC Northern Ireland, 2007. Available at <<http://www.cdscni.org.uk/publications/Week05-2007.pdf>>.
2. Department of Health for Northern Ireland. Increase in consultation rates of flu-like illness in Northern Ireland. HSS(MD)1/2007. Belfast: Department of Health for Northern Ireland, 8 January 2007. Available at <http://www.dhsspsni.gov.uk/hss_md__1-2007.pdf>.
3. Sir J Appleby. Independent review of health and social care services in Northern Ireland. 2005. Belfast: Department of Health for Northern Ireland – DHSSPS, August 2005. Available at <http://www.dhsspsni.gov.uk/show_publications?txtid=13662>.

Influenza A outbreaks among military recruits at several camps in South East England

The Surrey and Sussex Health Protection Unit was alerted to an outbreak of diarrhoeal illness at Army Recruit Training Division (ARTD) Pirbright on 23 January. Enquiries were made of Army colleagues. They reported that they were dealing with an outbreak consistent with an influenza-like illness (ILI), although there had been some cases with gastrointestinal symptoms. The first cases had been seen on 15 January. There had been approximately 40 male recruits seen with ILI; 15 had been admitted to the medical centre and two had been admitted to the local NHS hospital with symptoms of meningeal irritation. There had also been a number of female recruits with gastrointestinal symptoms consistent with a viral aetiology. Arrangements were made for the collection of throat and nasal specimens as well as stool specimens from those experiencing gastrointestinal symptoms which were processed at the local HPA collaborating laboratory.

The epidemic curves are shown in the figure. The outbreak among Winchester recruits started about one week later than in Pirbright. There was joint training of Pirbright and Winchester recruits during this week suggesting that the ILI outbreak started amongst Pirbright recruits and spread to Winchester. There were also 29 Pirbright and four Winchester recruits diagnosed with symptoms of gastroenteritis consistent with norovirus. This pattern of co-circulation of influenza and norovirus was seen during the influenza B outbreaks affecting school aged children in early 2006. The outbreak was explosive, typical of influenza, and lasted about three weeks. The crude attack rates are shown in the table. All sub-units (about 60 recruits per sub-unit) in Pirbright were affected but not equally. Attack rates were similar in recruits of both sexes. Towards the end of January there were also reports of ILI in other army training facilities and specimens were collected from symptomatic recruits in Sandhurst.

Figure Cases of Influenza-like illness (ILI) and diarrhoea and vomiting (D&V) by date, ATR Pirbright (ATR(P)) and ATR Winchester (ATR(W))

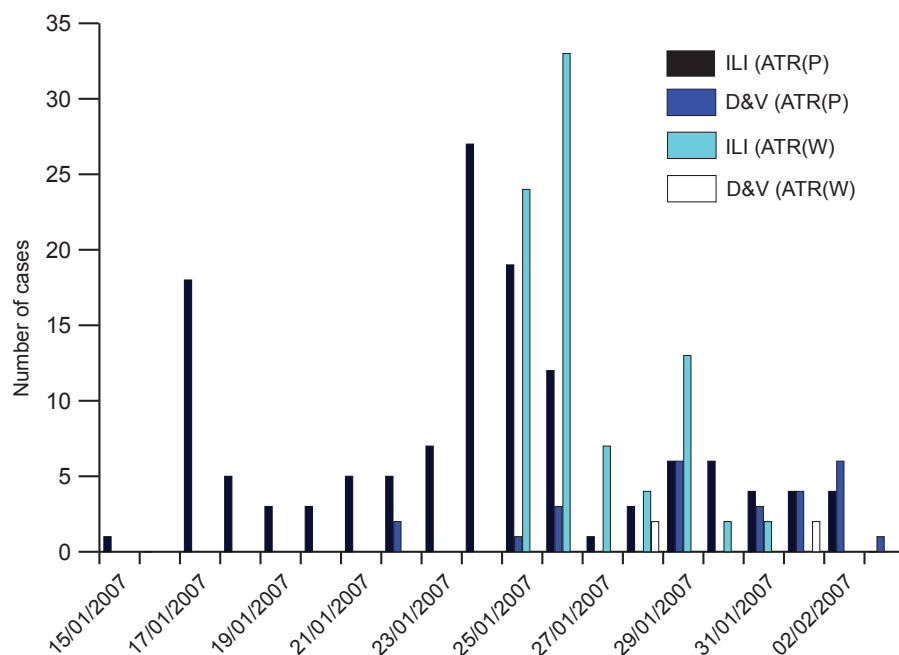


Table Crude attack rates of influenza-like illness (ILI) and diarrhoea and vomiting (D&V) in ATR Pirbright and ATR Winchester

| ATR | Total recruits | Males | Females | Cases of ILI (Attack Rate %) | |
|----------------|----------------|-------------|------------|------------------------------|------------------|
| | | | | Males | Females |
| Pirbright | 1619 | 1300 | 319 | 135 (10.4) | 43 (13.5) |
| Winchester | 505 | 505 | – | 84 (16.6) | – |
| Overall | 2124 | 1800 | 319 | 219 (12.1) | 43 (13.5) |

Nasal swabs and aspirates were collected for immunofluorescence studies from 16 recruits with acute symptoms. All specimens were negative for influenza, parainfluenza, adenovirus and RSV. The importance of continuing viral cultures was illustrated by the fact that all specimens were negative after six days, but after ten days culture, eight out of the first 21 specimens received from Pirbright did grow influenza A. Stool specimens had also been received from six individuals – these were negative for viral and bacterial pathogens. Three of five throat swabs received from Sandhurst also grew Influenza A after ten days incubation. Specimens have been sent to the HPA Respiratory and Systemic Infection Laboratory in Colindale for sub-typing..

The Army activated the local outbreak control plan. The medical centre remained open to routine appointments and a separate building was set up for the triage and admission and quarantine of recruits with ILI. Medical staff were equipped with appropriate PPE. Over 300 recruits from the two Army barracks were triaged during the outbreak. Once recovered the recruits were re-assessed in the medical centre, the majority were then sent on sick leave for 7 to 14 days. All medical facilities received terminal cleaning using a hypochlorite solution 48 hours after the outbreak was over. The Army follows the national policy for influenza vaccination. None of the recruits had received influenza vaccine in the current season. The outbreak had a substantial impact on military activities and disrupted the operational routine. Many recruits were still on sick leave two weeks after the outbreak was declared over. Although this group of previously healthy working adults is not at increased risk for serious complications, influenza is not a trivial illness in this group and work absenteeism in a military establishment may hinder the preparedness of military units.

It is interesting to speculate whether the rigorous infection control measures combined with the use of quarantine contributed to the relatively low attack rate among the recruits.

First report on the Chemical Incident Surveillance System for England and Wales

The Health Protection Agency has published a report summarising the programme of chemical incident surveillance England and Wales for 2005 [1]. This research was carried out by the Chemical Hazards and Poisons Division (CHaPD).

The Report provides a summary of the distribution, characteristics and public health impacts of chemical incidents that occurred in England and Wales in 2005. One thousand and forty chemical incidents were recorded for England and Wales in 2005, compared to 871 recorded in 2004. The incidents ranged from the largest explosion in post-war Europe at the Buncefield oil depot, to domestic spillages of mercury. The reported occurrence of chemical incidents was highest during the months of April and May, and although incidents were reported in every region, the areas in which they were reported most frequently were in London (25%) and the South East (16%). The chemicals involved in the highest number of incidents were products of combustion (attributable to fires) which accounted for 27% of all reports. In residential properties, metals were frequently reported as the cause of the incident, and one in six incidents involved a leak or spill of mercury.

A series of improvements to the surveillance programme for chemical incidents was made by CHaPD in 2005 and these are highlighted in the report. These changes have increased and enhanced the collection of data associated with chemical incidents. This has allowed for a more comprehensive analysis of the incidents as well as strengthening the Agency's resilience and preparedness for chemical emergencies.

Hard copies are available from: Information Office, CRCE, HPA Chilton, Didcot, Oxon OX11 0RQ. tel: 01235 822742 or 01235 822603, email: chiltoninformationoffice@hpa.org.uk

References

1. HPA Chemical Hazards and Poisons Division. Chemical Incidents in England and Wales 2005 report. Didcot: HPA, 2007. ISBN 0 85951 584 2. Available at <http://www.hpa.org.uk/publications/PublicationDisplay.asp?PublicationID=94>.

Bacteraemia

Last updated: 16 February 2006, Volume 1, No 7 Next update: 16 March 2007

Bacteraemia Routine Data Reports

- ▶ Public health initiatives and reporting guidelines for MRSA bacteraemia, *Clostridium difficile*, and glycopeptide-resistant enterococci (GRE)
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Public health initiatives and reporting guidelines for MRSA bacteraemia, *Clostridium difficile*, and glycopeptide-resistant enterococci (GRE)

The MRSA Mandatory Surveillance System (MESS) website has been in place since October 2005 to collect enhanced data on MRSA bacteraemia. In May 2006 an additional data collection page was added to the site to collect voluntary information on risk factors associated with MRSA bacteraemia.

Some of the developments planned for the MESS website and the quarterly collection of *Clostridium difficile*, *Staphylococcus aureus*, and glycopeptide-resistant enterococci (GRE) data include:

- ▶ **Changes to quarterly data collection system** – the submission of the quarterly data for January to March 2007 for blood cultures, *S. aureus*, GRE and *C. difficile* will be via a web-enabled surveillance system.
- ▶ **Developments to MESS 'Risk Factor' page** – clarifications to field definitions and possible additional fields on this page are in development. A new user manual is planned for the end of March.
- ▶ **'Non-trajectory' cases pro forma** – several Trusts have raised queries about whether certain MRSA bacteraemia cases should be counted against them in assessing whether they have met Department of Health targets. DH has agreed on a pro forma with the HPA, which will be used to resolve these queries. Copies will be sent to all trusts that have raised a query of this kind, and cases meeting defined criteria may, in certain exceptional circumstances, be removed from Trusts' trajectories.
- ▶ **The Renal Section of the MESS Website** – following a three month pilot study, the national launch of the renal section of the MESS website is planned for April 2007. Training materials and guidance will be distributed to MESS users in the coming weeks.
- ▶ **Introduction of online community** – the aim of the group will be to facilitate discussions of all issues related to healthcare-associated infections.

There are currently a number of developments planned for the MESS website and the quarterly collection of *Clostridium difficile*, *Staphylococcus aureus*, and GRE data. Further details of these changes can be found at:

<http://www.hpa.org.uk/infections/topics_az/staphylo/Reporting_Update_2007.htm>

Diary

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Inclusion of courses and events in the HPR diary pages is for the convenience of readers, and should not be taken to imply that the Health Protection Agency endorses these events.

For information about other conferences, courses, and events visit <http://www.hpa.org.uk/hpa/events>.

- ▶ [Emergency communicable disease control and other on-call duties – 23rd West Midlands on-call course](#)
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Emergency communicable disease control and other on-call duties – 23rd West Midlands on-call course

The Department of Public Health and Epidemiology, University of Birmingham and the Health Protection Agency (HPA), West Midlands, are holding a three-day course from Monday 19 to Wednesday 21 March 2007, aimed at those who undertake on-call health protection commitments.

The course is primarily aimed at those who have to cover on-call CCDC duties or may have to cover the CCDC in his/her absence including:

- ▶ Consultant Public Health Practitioners who cover out of hours rotas
- ▶ Consultants who undertake CCDC duties and wish to update or revise basic skills and knowledge in an interactive way
- ▶ Trainees in Public Health who cover out of hours rotas or who wish to specialise in communicable disease control
- ▶ Medical microbiologists or infectious disease physicians who may wish to apply for jobs with CCDC responsibilities
- ▶ Health protection Nurses
- ▶ Others who undertake on-call duties, CCDC duties or similar work

The course is fairly intensive in order to limit the amount of study leave needed, but is largely interactive in style and held in high quality facilities in order to maximise learning and interest. Previous courses have been highly evaluated by previous attendees. The course is recognised for CPD, and a certificate of attendance will be issued.

The course fee of £700 (residential) and £600 (non-residential) and includes a copy of the 2nd edition of The Communicable Disease Control Handbook by Dr J Hawker et al.

On-site residential accommodation is limited and early booking is advised as it will be on a first come first served basis - residential accommodation will be available from Sunday 18 March. For a booking form and further information please go to: <http://pcpoh.bham.ac.uk/publichealth/programmes/cdsc/booking2007.pdf>

or contact Mrs Mary Wheeler, Health Protection Research & Development Unit, Department of Public Health & Epidemiology, University of Birmingham, Edgbaston, Birmingham B15 2TT, UK tel: +44 (0)121 414 3404 fax: +44 (0)121 414 6216, or email: <m.y.wheeler@bham.ac.uk>