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News

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Influenza A in nursing homes in the north west

In recent weeks confirmed outbreaks of influenza A occurred in four nursing homes in one Primary Care Trust (PCT) area in Cheshire, north west England. All nursing homes reported high uptake of seasonal flu vaccine among the residents.

The first outbreak occurred in a relatively large nursing home (nursing home 1) with three separate units. On 14 March, fourteen cases of 'influenza-like illness (ILI)' were reported among 12 residents and two staff members in one unit of the home. The unit was closed to admissions, nose and throat swabs were taken from affected residents, and appropriate infection control advice was given. The test (swab) results were reported on the 17 March 2006, and four of the five swabs were positive for influenza A by PCR. An outbreak team meeting was convened; the GP examined most of the residents in the home and found 39 residents with ILI symptoms across the three units (see table). Those whose symptoms had started in the preceding 48 hours were treated with Oseltamivir for five days, and the residents who had not been unwell received prophylactic doses of Oseltamivir for ten days.

Influenza A outbreaks in nursing homes 2, 3, and 4 started on 18 March, 24 March, and 1 April 2006 respectively. Following completion of a prophylactic course of Oseltamivir, one resident (nursing home 4) became ill with flu like symptoms, and was started on a further course of Oseltamivir at the treatment dose. Treatment and prophylaxis with Oseltamivir began immediately in all the affected nursing homes. Following the outbreak control team meeting all the care homes in the area were telephoned by the PCT as part of the process of active surveillance. In addition, information on the outbreaks was sent to all care homes and GPs in the area to request that any suspected patient with ILI is reported to the local infection control and public health teams during and outside normal working hours.

Table Influenza A outbreaks in four nursing homes

	Residents					Staff with ILI*	Comments
		Influenza-Like Illness		Attack Rate %	Lab (swab) Results		
Nursing Home	Date of onset	Yes	No				
1	27/02/2006	40	47	46%	4/5 +ve for flu A	2	No new cases since 20 March
2	18/03/2006	14†	18	44%	2/5 +ve for Inf A; 1+ve for flu A & B	8	No new cases since 2 April
3	24/03/2006	26	32	45%	3/5 +ve for flu A	1	No new cases since 6 April
4	01/04/2006	7	27	21%	3/5 +ve for flu A	6	One new case with date of onset 18 April

*iLi = influenza-like illness.
† One resident who had had symptoms of ILI died on 30 March 2006.

In these outbreaks, active surveillance revealed cases that may have otherwise remained undetected, and therefore it is possible that some outbreaks in nursing homes and the wider community are not reported.

These outbreaks have occurred relatively late in the flu season, which may reflect the timing of vaccination or waning immunity in an elderly and vulnerable population (1). Further investigation is underway to clarify this issue. These outbreaks may have implications for the development of influenza vaccines to ensure appropriate levels of protection among at-risk groups.

The decision to continue the use of prophylactic Oseltamivir beyond ten days when new cases arise among staff or residents, and the use of prophylactic Oseltamivir for staff caring for vulnerable and elderly residents with chronic diseases needs clarification.

Health protection teams and microbiologists should remain alert to the possibility of further outbreaks and ensure that respiratory samples are sent to HPA/NHS laboratories. It is essential that virus isolation is attempted in all specimens from outbreaks, to enable full typing of isolates and to detect strain variation through antigenic drift. At present laboratories are trying to ensure the sensitivity of cells for flu as a priority.

Reference

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HPA publishes review of Port Health

The Health Protection Agency has published the report of a joint HPA and Home Office review of health activity at international travel terminals – known collectively as 'port health' (1). The Project Group conducting the review considered the literature, took oral evidence from key organisations and individuals, and conducted surveys of a wider group. The final report was presented to the Steering Group and through the members of the Steering Group, to relevant Government Ministers.

In the light of the report, the Health Protection Agency, Department of Health, and the Home Office are to take forward a number of actions to strengthen and improve current arrangements at ports and airports. These include that the Agency should take the overall operational lead to ensure appropriate operation arrangements for port health, for medical examinations under the Immigration Act. The Agency should also work with partners to ensure that there are clear arrangements at each international travel terminal for contacting the different health services that may need to be involved (*eg*, NHS emergency services), and where it thinks there is a case for this, to encourage Strategic Health Authorities and Primary Care Trusts to review and develop services.

The Department of Health will continue to lead work on legislation to implement the International Health Regulations 2005 and evaluate the effectiveness of routine tuberculosis (TB) checks on immigrants who are high risk for TB. The Department will also seek an opportunity to modernise the legislation on medical examinations under the Immigration Act 1971, and work with the Health Protection Agency and Home Office to produce and publish on relevant websites a short, clear note of the accountabilities for the different health activities carried out at international travel terminals.

The Home Office will take forward a proposal that the accommodation needed for medical examinations under the Immigration Act should be provided free of charge under immigration legislation. It will update the immigration directorate instructions, agreeing the health-related material with DH. It will monitor the impact that advice from those who carry out medical examinations has on the entry decisions taken by immigration officers, and set up formal arrangements for the healthcare of immigration detainees at international travel terminals. It will also be prepared to include in future legislation a provision to modernise the legislation on medical examinations under the Immigration Act.

References

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Chikungunya virus in travellers to the Indian Ocean

Since 1 December 2005, the Health Protection Agency's Special Pathogens Reference Unit has confirmed two cases of chikungunya virus infection in patients recently returned from Mauritius (1). An additional seven suspected cases have been identified; two with recent travel to Mauritius, four to the Seychelles and one to Madagascar (Suspected cases are those where there is serological evidence that exposure to chikungunya virus has occurred, and there is supporting epidemiological/clinical information.). There were a further three possible cases but with no travel history provided, and three additional possible cases with a history of travel to countries other than the Indian Ocean. This is compared to only two possible cases reported in the same period last year, both with a history of travel to countries other than the Indian Ocean.

It is likely, therefore, that this increase in cases in the United Kingdom is connected with the outbreaks of chikungunya that have been occurring in the Indian Ocean islands in recent months (1, 2). Other European countries such as France, Germany, Switzerland, Italy, and Norway have also reported imported cases from islands in the Indian Ocean (3, 4). The most affected has been metropolitan France (mainland France and Corsica), where 307 cases were reported between 1 April 2005 and 28 February 2006, most of which were associated with travel to the Comoros and La Réunion (5).

The outbreaks appear to be abating in the Indian Ocean (2), but the risk for non-immune travellers may still exist for some time. Over 7000 British tourists travel to the Seychelles and Mauritius every month (6).

Health professionals need to continue to be aware of chikungunya infection when assessing travellers who have recently returned from islands in the Indian Ocean and the Indian sub-continent. All samples from suspected cases should be sent to the Special Pathogens Reference Unit for investigation with as much information as possible about the patient (including a detailed travel history), to assist in the diagnosis. Further information is available on the HPA website at <http://www.hpa.org.uk/srmd/other_ref_labs/spru.htm>.

There is no vaccine against chikungunya virus and, therefore, prevention for the traveller relies solely on the avoidance of mosquito bites, particularly during the daylight hours (early morning and late afternoon), when the vector mosquitoes (Aedes spp) are most active. More information about this can be obtained from the NaTHNaC website at <http://www.nathnac.org/pro/factsheets/iba.htm>.

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Bacteraemia

Last updated: **16 March 2006**, Volume 16, No 16
Next update due: **18 May 2006**

Klebsiella, Enterobacter, Serratia, and *Citrobacter* spp. bacteraemia, England, Wales, and Northern Ireland: 2000 to 2005

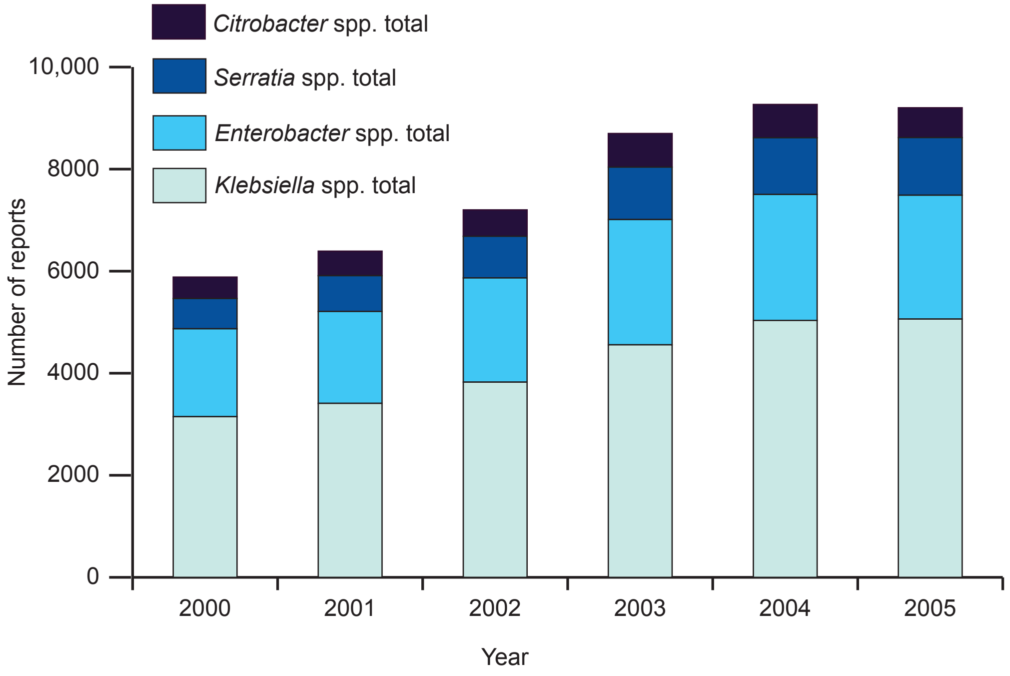
There has been an overall increase in *Klebsiella*, *Enterobacter*, *Serratia*, and *Citrobacter* spp. bacteraemia reports between 2000 and 2004, which may be due to a combination of increased prevalence and increased ascertainment (table 1 and figure 1). In 2005 there was a slight decrease on 2004 reporting. Reports for 2005 are provisional as of 13 March 2006 and are expected to increase due to late reporting.

Table 1 *Klebsiella*, *Enterobacter*, *Serratia*, and *Citrobacter* spp. bacteraemia reports 2000 to 2005*

	2000	2001	2002	2003	2004	2005
Klebsiella spp. total	3149	3410	3826	4557	5035	5062
Enterobacter spp. total	1722	1801	2042	2455	2469	2427
Serratia spp. total	593	701	816	1027	1111	1129
Citrobacter spp. total	420	480	517	659	652	584
Total	**5884**	**6392**	**7201**	**8698**	**9267**	**9202**

*Data extracted 13 March 2006

Figure 1 *Klebsiella*, *Enterobacter*, *Serratia*, and *Citrobacter* spp. bacteraemia reports 2000-2005*



*Data extracted 13 th March 2006

Ciprofloxacin, ceftazidime, and cefotaxime resistances appear to have increased in *Klebsiella* spp. between 2000 and 2005. Ceftazidime and cefotaxime resistances appear to have increased in *Enterobacter* spp. between 2000 and 2005. There has been an improvement in the proportions of reports containing susceptibility data in 2004 and 2005 compared to 2003.

In all four species, the number of reports was highest in males and prevalence increased with age so that the 65 years and over age group contained the greatest number of reports.

The analyses presented are based on data extracted from the HPA's voluntary surveillance database on the 13 March 2006 for the period from 200 to 2005. The data presented here differs in some instances from data in earlier publications due to the addition of late reports to the database. Further data tables and graphs concerning these species can be viewed on the HPA website at: <http://www.hpa.org.uk/infections/topics_az/bacteraemia/kesc_menu.htm>.