



Health Protection Report

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Salmonella Bareilly cases under investigation – an update

An outbreak of *Salmonella* Bareilly infection associated with contaminated bean sprouts, that has seen cases identified throughout the United Kingdom [1], is continuing.

The Health Protection Agency's Centre for Infections (CfI) – which normally sees fewer than 10 cases in a typical month – has identified 190 *S. Bareilly* cases in England, Wales (five of the cases) and Northern Ireland (two cases) since the beginning of August to date. Health Protection Scotland has identified 21 confirmed cases in the same period.

The HPA and the Food Standards Agency (FSA) have reiterated that bean sprouts that are not clearly labelled “ready-to-eat” are safe provided they are washed and cooked thoroughly before consumption; also that those preparing meals – either in catering establishments or in the home – should keep raw bean sprouts separate from other salad products to prevent cross-contamination.

FSA advice the safe preparation and cooking of bean sprouts is available at: <http://www.food.gov.uk/>

Reference

1. *Salmonella* Bareilly cases under investigation. *Health Protection Report* 4(39), 1 October 2010.
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Successful bivalent vaccine trial marks progress towards polio eradication

The results of a randomised control trial of a new bivalent polio vaccine – carried out in India and reported in the *Lancet* [1] – represent significant progress towards achievement of the WHO's goal of global polio eradication.

Poliomyelitis remains endemic in four countries – India, Pakistan, Afghanistan and Nigeria – although most cases reported in 2010 have been associated with an outbreak in Tajikistan [2]. As of August 2010, there were 638 cases worldwide, 95 in endemic countries and 543 in non-endemic countries [3].

The trial reported in the *Lancet* found that the new bivalent oral vaccine – that targets both the types of poliovirus that are endemic in northern India (serotypes 1 and 3) with a single dose – induced a stronger immune response than the traditional trivalent vaccine and a similar immune response to the latest monovalent vaccines [4].

References

1. Sutter RW, John TJ, Jain H, Agarkhedkar S, Ramanan PV, Verma H, et al. "Immunogenicity of bivalent types 1 and 3 oral poliovirus vaccine: a randomised, double-blind, controlled trial", *The Lancet*, published online 26 October, 2010. Available (subscription required) at: [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(10\)61230-5/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(10)61230-5/fulltext).
2. Polio outbreak in Tajikistan. *HPR* 4(17), 30 April 2010.
3. "Poliomyelitis eradication: another step forward", *The Lancet* (Comment), published online 26 November, 2010. Available (subscription required) at: [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(10\)61427-4/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(10)61427-4/fulltext).
4. WHO. "New bivalent polio vaccine playing key role in global polio eradication", 25 October 2010, Polio Global Eradication Initiative website: <http://www.polioeradication.org/tabid/167/iid/77/Default.aspx>.

Hepatitis B and C surveillance and prevention in Europe

Although there is scope for further harmonisation of prevention strategies relating to hepatitis B and C within the EU, and for enhanced surveillance to be strengthened at the European level, there is no rationale for such harmonisation to extend to screening and/or vaccination policy. This was among the conclusions of an international conference, held earlier this month in Brussels, that considered issues raised in two related technical reports from the European Centre for Disease Prevention and Control (ECDC).

The two reports were: (i) a literature survey covering hepatitis B (HBV) and hepatitis C (HCV) prevalence in Europe, the associated burden of disease, and screening policies in place and their effectiveness [1]; and (ii) a “mapping” survey of current national surveillance systems and prevention programmes for HBV and HCV in the EU/EEA [2].

Among the aims of the literature survey was to determine whether increased possibilities for secondary prevention interventions, such as antiviral treatments, might warrant more active efforts to identify chronic HBV and HCV carriers so they could be offered treatment [1]. The survey reviewed: the prevalence of HBV and HCV in the general population and in sub-groups (eg blood donors, pregnant women, drug users, migrants); what the associated burden of cirrhosis and hepatocellular carcinoma might be; and the extent and effectiveness of current screening programmes.

In general, the survey of EU surveillance and prevention strategies concluded that there would be some benefit from further harmonisation at the European level as far as surveillance systems was concerned.

All EU member states have national surveillance systems for HBV and HCV in place, with very similar objectives, but these systems “are very heterogeneous”, the ECDC found. “Differences exist with respect to case definitions; the inclusion of possible, probable and confirmed cases; the inclusion of acute, chronic and asymptomatic cases; and on the question whether a distinction can be made between these types. ... Studies on surveillance, sero-epidemiology and coverage need to be harmonised and thus become comparable”.

On screening and vaccination, however, there is less scope for harmonisation. It was a main conclusion of the Brussels conference that, because significant differences exist between national situations vis a vis the prevalence of HBV and HCV in the general population, interventions need to be tailored to local and national situations.

The ECDC research had found that HBV vaccination programmes are conducted in all EU member states: 22 including HBV vaccination in their routine vaccination programmes and a further seven implementing selective vaccination programmes targeted at risk groups.

It was acknowledged at the Brussels conference that, while some member states have significant levels of infection in the general population, in others – including seven that do not have universal vaccination programmes: Denmark, Finland, Iceland, Netherlands, Norway, Sweden and the United Kingdom – HBV and HCV cases are for the most part confined to specific, high-risk groups. It is appropriate, therefore, that prevention activities should be targeted accordingly.

In one area, however, there was an urgent case for cost-effective screening to be implemented more consistently throughout the EU. ECDC director Marc Sprenger, in a summing-up presentation at the end of the conference, noted that the ECDC research had highlighted the fact that some EU member states are not offering antenatal screening for hepatitis B and are thus failing to prevent, or mitigate the consequences of, mother-to-child transmission.

References

1. ECDC. [Surveillance and prevention of hepatitis B and C in Europe](#), October 2010. Downloadable from ECDC website: ECDC Portal > English > Press Centre > News.

2. ECDC. Hepatitis B and C in the EU neighbourhood: prevalence, burden of disease and screening policies, October 2010. Downloadable from ECDC website: ECDC Portal > English > Press Centre > News.

3. Summit conference: hepatitis B and hepatitis C, Brussels, 14-15 October 2010, <http://www.hepsummit2010.org/>.

Radiation

Environmental Radon Newsletter (issue 64)

The HPA's Centre for Radiation, Chemical and Environmental Hazards has published *Environmental Radon Newsletter* 64 which comprises the following articles:

- ▶ New HPA radon advice published
- ▶ Radon risks
- ▶ Radon remedies - is my fan still going?
- ▶ Next UK radon forum - Tuesday 23 November 2010
- ▶ Subscribe direct and reader's survey

Reference

1. *Environmental Radon Newsletter* (issue 64), Autumn 2010. Downloadable from: <http://ukradon.org/ern>.

Chemicals and Poisons

Chemical Hazards and Poisons Report (issue 18)

The public health repercussions of large fires is a main theme of the latest issue of the HPA's *Chemical Hazards and Poisons Report* [1]. New emergency response arrangements were introduced in England and Wales following the 2005 Buncefield explosion, including the establishment of a multi-agency Air Quality Cell facility, coordinated by the Environment Agency and involving the HPA, the Food Standards Agency, the Met Office (the United Kingdom's national weather service) and the Health and Safety Laboratory. Four related articles describe:

- ▶ arrangements for convening, and operation of, the Air Quality Cell;
- ▶ HPA experience of the public health aspects of fires involving waste materials;
- ▶ two reports on recent fires at Mexborough, Doncaster, and Garforth, West Yorkshire.

Other articles in the current issue cover:

- ▶ an introduction to the forthcoming Chemical Incident Response Handbook;
- ▶ a hospital evacuation emergency response exercise in the south west of England;
- ▶ European epidemiological preparedness for public health emergencies;
- ▶ the Housing Health and Safety Rating System applied to homes in the private rented sector ;
- ▶ new UK regulations on private water supplies;
- ▶ water sustainability and the Millennium Development Goals.

Reference

1. *Chemical Hazards and Poisons Report* (issue 18), October 2010 [4.5 MB]. Downloadable from HPA website, see: Home > Publications > Chemicals and poisons > [Chemical Hazards and Poisons Reports](#).

Infection reports – respiratory archive 2010

Epidemiological report of the pandemic (H1N1) 2009 in the UK

E McLean and R Pebody et al.

This report, previously referred to in the News section of *HPR* when it was first published on the main HPA website [1], has been archived as an HPR Respiratory Supplement. It can be downloaded from the HPR respiratory infections archive page:

<http://www.hpa.org.uk/hpr/archives/Infections/2010/respiratory10.htm>.

Reference

1. HPA. Epidemiological report of pandemic (H1N1) 2009 in the UK. *Health Protection Report* 2010; 4(40): news. Available online at: <http://www.hpa.org.uk/hpr/archives/2010/news4010.htm#Flu>.