



CDR WEEKLY

the Communicable Disease Report Weekly

Current Issue: Volume 16 Number 26 **Published on:** 29 June 2006

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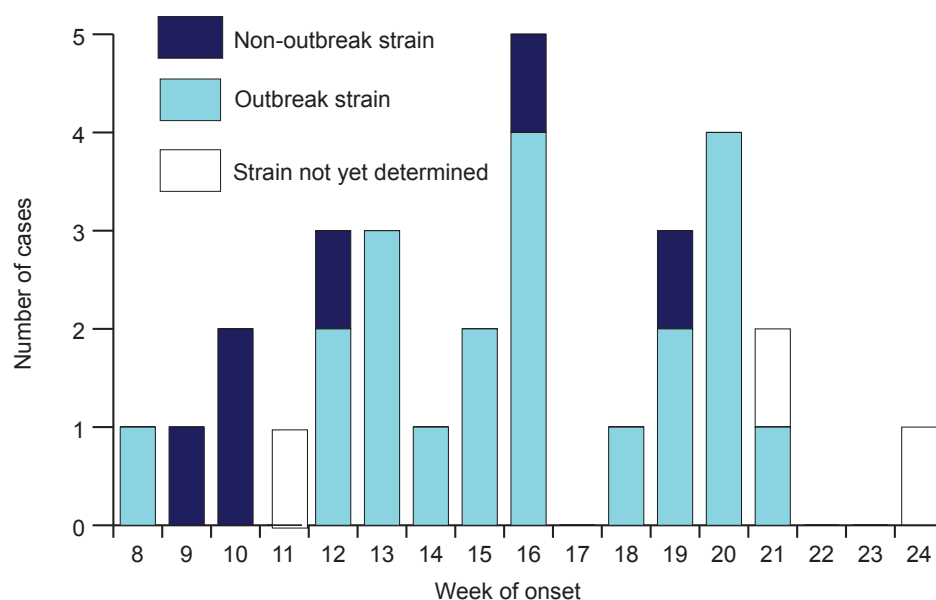
Since the 1 March 2006, the Health Protection Agency (HPA) Centre for Infections (Cfi) has received a total of 59 isolates of *Salmonella* Montevideo (from human cases) infection in England and Wales. Fifty-three (90%) of these isolates are fully sensitive to the panel of antimicrobial drugs used by the Cfi Laboratory of Enteric Pathogens (LEP). For the purposes of this investigation, a case is defined as a resident of England and Wales with a confirmed, fully sensitive *S. Montevideo* infection received by the HPA Cfi on or after the 1 March 2006 with the pulsed field gel electrophoresis (PFGE) profile designated *SmdvX07*.

Five cases reporting foreign travel and two secondary cases were excluded. Of the remaining 46 cases, 31 (67%) share the *SmdvX07* profile and 11 (24%) differ from this type. Molecular characterisation of the remaining isolates is underway.

The median age of the outbreak cases (*SmdvX07*) cases is 2 years (range 0 to 52 years). The median age of the non-*SmdvX07* cases is 30 years (range 0 to 96 years). Three outbreak (*SmdvX07*) cases (10%; one infant, one child, and one adult) were admitted to hospital. Two non-outbreak, non-*SmdvX07* cases were admitted to hospital.

Onset dates available for 30 cases demonstrate that the majority of recent cases fit the outbreak profile (figure). The epidemic curve is suggestive of a continuous source exposure.

Figure Epidemic curve by week of onset (N=30)



From January 2006, there has been a small number of cases of *S. Montevideo* infection occurring in other Enter-net participating countries. Some have reported infections in children aged under 6 years, but none have reported

an increase over the same period in 2005. The *SmdvX07* PFGE image (the outbreak strain) has been sent to all participating countries to ascertain whether their recent cases conform to this profile.

Retrospective examination of all *S. Montevideo* isolates received by LEP during 2006 revealed that there were nine anonymised isolates referred to the HPA Cfl for identification and serotyping between February and May 2006. These were from food related items, but no further information was given. As part of the outbreak investigations, these isolates were examined using PFGE and their profile was found to conform to that of *SmdvX07*. As a result, the Food Standards Agency were informed. Further PFGE work is being carried out on other non-human isolates.

The known food animal reservoirs of *S. Montevideo* are poultry, sheep, and cattle. An outbreak related to contaminated cooked chicken has previously been reported in England [1]. *S. Montevideo* has also been linked to outbreaks associated with consumption of sesame seed based products [2] and tomatoes [3] elsewhere in the world. A definitive epidemiological link has not been established between the current increase in *S. Montevideo* infection and the consumption of any food.

The HPA is continuing its epidemiological and microbiological investigation into this increase and are assisting local authority investigations of food manufacturing premises in the West Midlands, and South West HPA Regions.

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HPA view on FSA Food Alert announcing the recall of a number of confectionery products

The UK Food Standards Agency issued a Food Alert on 23 June 2006 [1] announcing the recall of a number of confectionery products due to potential contamination with *Salmonella* Montevideo. The Health Protection Agency is of the view that processed ready to eat foods should be free from salmonella species and their presence, even in small numbers, results in such foods being of unacceptable or potentially hazardous quality [2]. Published guidelines also recommend absence of salmonella species in confectionery products such as chocolate [3,4].

References

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Cluster of heterosexual transmission of HIV in Cornwall – update

On 11 May 2006, the *CDR Weekly* reported that the HPA South West and NHS Trusts in Cornwall were investigating a cluster of heterosexual HIV transmission in St Ives, Cornwall, an area of low incidence of HIV [1].

The initial response involved the outbreak control team reviewing the information available, which led to a public announcement in April 2006 to recommend that people who had engaged in unprotected sexual relations in the area were tested for HIV. There was both local and national media interest. People were offered tests in special clinics run by the Genito-urinary Medicine service in St Ives and Truro.

Public health response

The public health response to a local outbreak of heterosexually acquired HIV infection is complex. The decision to alert the public was difficult and carefully considered. The aim was to ensure that people who may have been at risk of exposure had access to an HIV test while preserving confidentiality.

Issues taken into consideration when making this decision included:

- The inability to obtain full sexual histories and undertake complete contact tracing
- The wide age range of cases (20s to 50s)
- Evidence that there had been a risk to the local population over a six to eight year period
- The local perception that the risk of heterosexual HIV transmission is low
- Information about local sexual health networks

The awareness campaign resulted in approximately 450 calls to the NHS Direct helpline and 300 people tested. All 300 tests have been negative. The outbreak control team is still concerned that some of those most at risk of infection may not have come forward for testing, and has issued a second press release to communicate the impact of the campaign, so far, and to remind the public of the testing facilities available.

Further information

For further information contact Dr Brian Guttridge, Consultant in Communicable Disease Control (CCDC), South West Peninsula Health Protection Unit, email: <Brian.Guttridge@centralpct.cornwall.nhs.uk>.

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1.HPA. Cluster of heterosexual HIV transmission in Cornwall. *Commun Dis Rep CDR Wkly* [serial online] 11 May 2006 [cited 2 May 2006]; **16**(19): news. Available at <<http://www.hpa.org.uk/cdr/archives/2006/cdr1906.pdf>>.

HIV/Sexually Transmitted Infections (STIs)

Last updated: 29 June 2006, Volume 16, No. 26 Next update: 27 July 2006

Increasing rates of *Chlamydia trachomatis* and the role of screening

Increasing rates of *Chlamydia trachomatis* and the role of screening

Substantial increases in the number of cases of *Chlamydia trachomatis* have been observed in the United Kingdom over the past ten years (figure 1). The number of cases diagnosed in genitourinary medicine (GUM) clinics has risen from 32,288 cases in 1995 to 104,155 in 2004, a rise of over 220% [1]. Approximately two-thirds of these cases are in young men and women in the 16 to 24 years age group [1]. Highest rates of diagnoses in 2004 were in men aged between 20 and 24 years (1026/100,000), and in women aged between 20 and 24 years (1139/100,000) and women aged between 16 and 19 years (1310/100 000) (figure 2).

Figure 1 Number of new episodes of uncomplicated genital chlamydial infection by sex, United Kingdom: 1995-2004

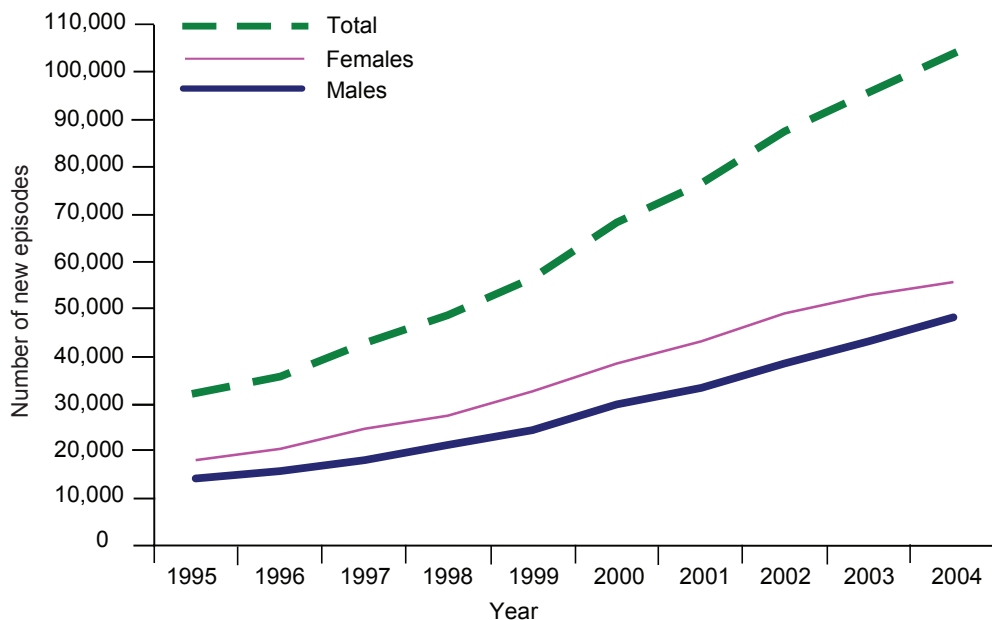
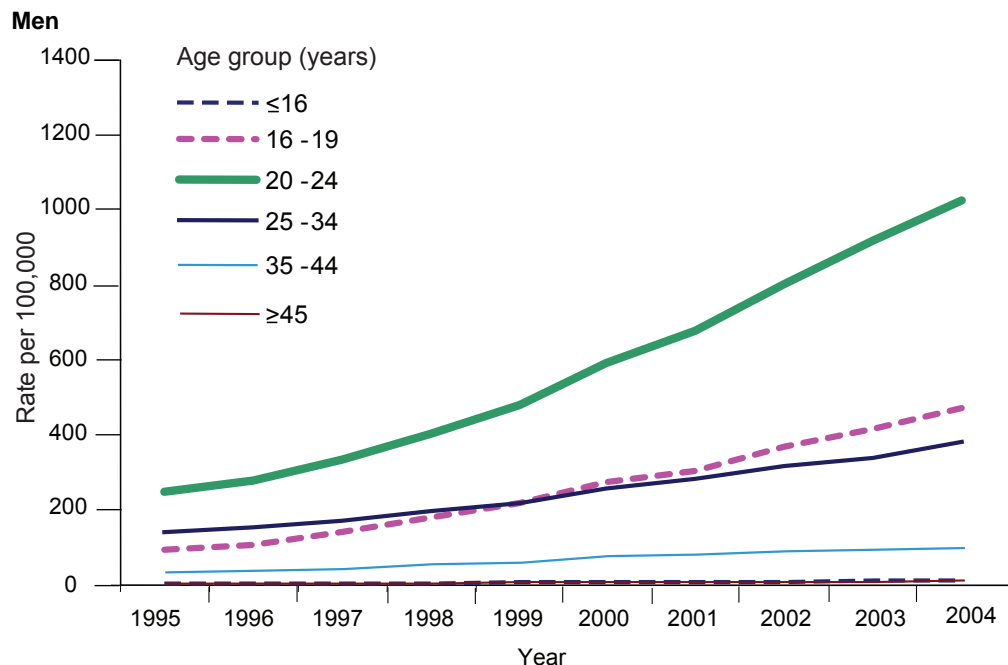
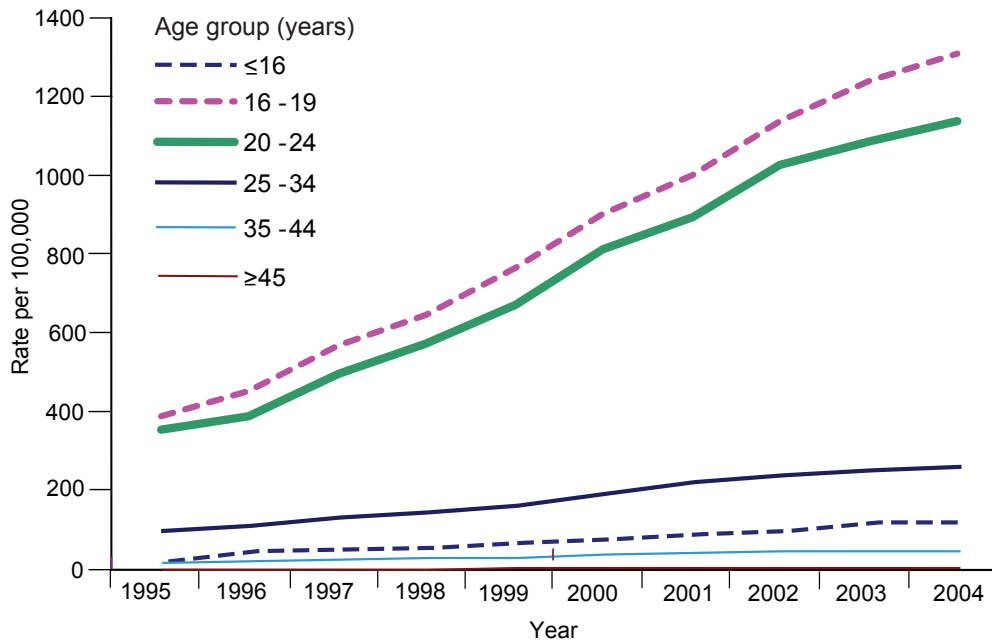


Figure 2 Rates of uncomplicated genital chlamydial infection by sex and age group, United Kingdom: 1995-2004



Women



Several factors have probably had an impact on the rising number of diagnoses. These include: increases in high-risk sexual behaviours among young people associated with sexually transmitted infection (STI) transmission, eg, unprotected sex with multiple partners [2], the introduction of very sensitive laboratory tests, in particular Nucleic Acid Amplification Tests (NAATs) [3,4]. Greater use of non-invasive methods of collecting specimens, such as urine samples and vulva vaginal swabs, and more recently the introduction of screening among asymptomatic sexually active young people has also contributed to the rise in diagnoses.

Genital chlamydial infection is of public health importance because untreated infection can have serious consequences. Women may develop pelvic inflammatory disease which can lead to ectopic pregnancy and infertility. In men, complications can include urethritis, epididymitis, and Reiter's syndrome (chlamydia associated arthritis). Chlamydia has also been associated with an increased risk of HIV transmission and acquisition [5].

Once diagnosed chlamydia is easily treated once detected, but the majority of cases are asymptomatic. It is for this reason that screening has been suggested as a method of secondary prevention for the control of this STI.

Estimations of chlamydia prevalence within the United Kingdom vary considerably by age and clinical setting [6]. In the age group most affected by genital chlamydial infection (ie, those aged under 25 years), prevalence estimates (excluding data from GUM) of chlamydia in the community range between 3.2% to 12.3% [5]. Given that there were approximately 5 million sexually active young people aged between 15 and 24 years in England in 2004 [2], these prevalence estimates translate to between 160,000 and 615,000 cases of genital chlamydial infection in England for this age group. By comparison, approximately 62,000 cases of chlamydia were diagnosed at GUM clinics in those aged between 15 and 24 years. Although some of these additional cases may have been diagnosed elsewhere, such as, in primary care [6], it is estimated that the majority have not been detected and are thus untreated.

Chlamydia screening was first introduced at a national level in Sweden following a reduction of chlamydia infections and ectopic pregnancies associated with screening in Uppsala County [8]. Similarly in the United States, screening for Chlamydia has been associated with declines in infections as well as the incidence of pelvic inflammatory disease (PID) [9]. A number of other countries have since begun to develop and implement strategies for chlamydia screening.

The National Chlamydia Screening Programme (NCSP) in England began in April 2003, as part of the Department of Health's National Strategy for Sexual Health and HIV. Screening is offered to sexually active young men and women aged under 25 years in a variety of healthcare and non-healthcare settings outside of GUM clinics. The Programme currently covers about one-third of all Primary Care Trusts (PCTs) in England with a target of national coverage by the end of March 2007. An investment of £80 million has been made available to take this forward.

The first year (April 2003 to March 2004) of the programme saw approximately 18,000 screens [10] undertaken and this figure rose dramatically to over 62,000 screens in the second year (from April 2004 to March 2005) [11]. During this time approximately one in ten of the population screened were positive, highlighting the high disease burden in persons who, without the NCSP, would probably not have been tested. If, as the programme suggests, one in ten of the population are positive for chlamydia then it is possible that there are 500,000 cases of chlamydia in those aged between 15 and 24 years. These are the infections which can be targeted through the NCSP.

A core component of the NCSP is patient management and partner notification. Almost 100% of positive cases identified in the first two years were treated and rates of partner treatment are comparable to the British Association for Sexual Health and HIV (BASHH) recommended standard for GUM attendees. Interestingly this management is increasingly taking place in community settings demonstrating that treatment outside of GUM can and does occur without compromising completion rates for positives.

The NCSP is a major long term public health programme, but the hard work already observed must be continued and intensified so that it can reach its potential in having a substantial impact on the sexual health of young people.

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Diary of events

Last updated: 29 June 2006

TB Research and Development Day – Wednesday 19 July 2006

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The TB Research and Development Day organised by the HPA TB Programme Board will be held at the Centre for Infections on Wednesday 19 July 2006 from 9.30am to 4.15pm. The event is CPD accredited.

The R&D Day is organised to provide a platform to network and improve the effectiveness and coordination of research on tuberculosis carried out within the HPA by:

- Providing an update on current TB research activity across the HPA
- Considering current and potential future sources of funding
- Comparing the current HPA research portfolio with priorities identified in the Chief Medical Officer's National Action Plan and NICE guidance, and identify gaps
- Encouraging staff – best poster award presentation

The Day is open to all Agency staff involved or have an interest in TB R & D. If you are interested in attending TB R&D Day, please contact Dr. Irene Gonsalvez, Scientific Secretariat, HPA TB Programme Board, Expert Advice Support Office: email: irene.gonsalvez@hpa.org.uk (tel: 020 8327 6687