

method of avoiding outbreaks of CPE gastroenteritis is safe food handling.

### Public health control measures

The immediate control of outbreaks of gastroenteritis in an institution is important to prevent the spread of infection to other residents, staff and visitors. In 2005, a toolkit titled 'Gastro Pack' was developed that provides information on the early recognition of an outbreak, implementation of control measures, management of affected people and communication strategies.<sup>8</sup> The Department of Health and Ageing have released a similar resource titled 'Gastro Info Kit', designed specifically for outbreaks in aged-care facilities.<sup>9</sup> Use of these guidelines should aid in the containment of gastroenteritis outbreaks in institutions.

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## Genital *Chlamydia trachomatis* infection

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*Chlamydia trachomatis* is one of three species of *Chlamydiae* that commonly cause disease in humans. It is responsible for ano-genital and conjunctival (conjunctivitis and trachoma) infections. Infant conjunctivitis and pneumonia can result from maternal genital infection.<sup>1</sup> *C. trachomatis* serovars D–K are responsible for most sexually-acquired genital infections. Serovar L<sub>2</sub> causes a severe proctolitis or genital ulcer lymphadenopathy syndrome known as lymphogranuloma venereum which is beginning to re-appear in Australia among men who have sex with men.<sup>2</sup>

Chlamydia is a notifiable condition in New South Wales (NSW) under the *Public Health Act 1991*. There were 14 947 laboratory-confirmed cases notified in 2009. Known as the 'silent disease', it is the most reported sexually transmissible infection (STI) in Australia, the United States, the United Kingdom and Canada. Due to the mainly asymptomatic nature of chlamydia, chronic infection and re-infection are common,<sup>3</sup> highlighting the importance of screening.<sup>4</sup> People aged less than 25 years have the highest rates of infection.

### Symptoms

Most infected people are asymptomatic (70% of women and 90% of men). Symptoms that may occur during acute infections include urethral discharge and discomfort on urination (dysuria). Men may also develop painful swollen testes (epididymitis). Women occasionally report dysuria or bleeding between periods. Deep pain during sexual intercourse and lower abdominal pain in women suggest pelvic inflammatory disease from ascending infection. Pelvic inflammatory disease increases the risk of subsequent

ectopic pregnancy and infertility.<sup>3</sup> Either gender can develop reactive arthritis, associated with mucocutaneous lesions.

### Testing

Ano-genital tract infection can be detected using self-collected vaginal or anal swabs or a urine specimen. Self-collected specimens have lowered the barriers to testing. A clinician may collect a cervical swab if a woman has symptoms or as part of a pap test. A variety of nucleic acid amplification tests are also used, with sensitivities in the range of 85–97% and specificities exceeding 99%.

### Treatment

Uncomplicated ano-genital infection is treated with a single oral dose of azithromycin.<sup>1</sup> Complicated infections (pelvic inflammatory disease and epididymitis) and lymphogranuloma venereum require treatment with doxycycline for a minimum of 14 days; other antibiotics are also often required.<sup>5</sup>

### Re-infection and contact tracing

While cure rates are high (>95%), re-infection rates are also high (approximately 30%). Therefore, people treated for chlamydia should be retested after 12 weeks of treatment. As infected sexual partners are typically asymptomatic, they often do not present for contact testing and treatment. The value and legality of dispensing a second dose of azithromycin for the patient to deliver to their partner(s) (patient-delivered partner therapy) has been recommended for review in Australia.<sup>6</sup>

### The Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance (ACCESS) Project

The Commonwealth-funded ACCESS Project has been established in response to increasing numbers of chlamydia notifications, with the possibility that much of the increase could be due to increased testing.<sup>7</sup> Priority populations requiring ongoing surveillance include Aboriginal and Torres Strait Islanders, young heterosexuals, men who have sex with men, and sex workers. An early impression determined through this pilot sentinel surveillance is that rates of chlamydia may not be rising as quickly as the notification data suggest.

### Fast-track treatment: using patient-delivered partner therapy to reduce chlamydia prevalence

Patient-delivered partner therapy has been considered because of the increasing number of diagnoses and the concern that current clinical treatment systems are not slowing the spread of disease. This process includes the patient providing advice to their partner about the nature of chlamydial infection, testing and treatment.

It is believed to work best when clients are selected; avoiding high-risk populations where other STIs and bloodborne viruses may be of concern (e.g. injecting drug users and men who have sex with men). The Centers for Disease Control and Prevention in the United States has included this option within its current guidelines for STI management.

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