

Gonorrhoea

Last updated: 1 September 2014

Public Health Priority:

Routine

Case management:

Enter confirmed cases on NCIMS within five working days of notification

Contact management:

Responsibility of treating doctor

1. Reason for surveillance

- To monitor the epidemiology of the disease to inform prevention strategies
- To monitor the susceptibility of isolates to ensure continuing appropriate and effective management.

2. Case definition

A confirmed case requires laboratory definitive evidence.

Laboratory evidence

- Isolation of *Neisseria gonorrhoeae*
- Detection of *Neisseria gonorrhoeae* by nucleic acid testing

Clinical evidence

Not applicable.

Epidemiological evidence

Not applicable.

Factors to be considered in case identification

Gonococcal susceptibility surveillance is essential because of emerging and changing antibiotic resistance. All isolates of gonococci should be sent to the Australian Gonococcal Surveillance Program (AGSP) reference laboratory for susceptibility testing. In NSW the reference laboratory is South Eastern Area Laboratory Service (SEALS).

Reinfection period

Diagnoses received 29 days or more after the calculated onset date will be considered re-infections and will be notified separately ^{i,ii,iii,iv,v}

3. Notification criteria and procedure

Gonorrhoea is to be notified by:

- Laboratories (ideal reporting by routine mail).

Only confirmed cases should be entered onto NCIMS.

4. The disease

Infectious agent

The bacterium *Neisseria gonorrhoeae*.

Mode of transmission

Contact with exudate from mucous membranes of infected people, almost always as a result of sexual activity or during childbirth. Non-sexual transmission to infants and young children has been reported.

Timeline

The typical incubation period is 2 to 7 days, sometimes longer.

Gonorrhoea may be communicable from the time of infection for several months in untreated persons. Effective therapy ends communicability within a matter of hours. Inappropriate treatment can result in the patient remaining infectious. Asymptomatic persons are generally as infectious as those with symptoms. The attack rate among women exposed to infected men is generally higher than that of men exposed to infected women.

Clinical presentation

Infection may be asymptomatic (ano-rectal and pharyngeal is usually asymptomatic). The usual clinical presentation in males is a purulent urethral discharge with dysuria. In females it may be asymptomatic, or present as an abnormal vaginal discharge, abnormal menses, pelvic pain and dysuria.

5. Managing single notifications

Response times

Data entry

Within 5 working days of notification enter confirmed cases on NCIMS.

Response procedure

Cases under 16 years

- Where a case of gonorrhoea is reported in a child <16 years old, the PHU must send a letter to the doctor who requested the test to undertake an assessment of the risk of harm according to the mandatory reporting guidelines and obligations under the Children and Young Persons (Care and Protection) Act, 1998 and resources for clinical management (Therapeutic Guidelines).
- Where a case of gonorrhoea is reported in a child aged 12 years or under, the PHU must also directly contact the doctor (eg by telephone) to ensure that mandatory reporting obligations have been addressed. If no contact can be made, the PHU should contact the Child Well Being Unit (1300 480 420) or make a direct report to the Department of Community Services.
- The PHU should make reasonable attempts to record in NCIMS the Indigenous status of all cases under 16 years, for example by checking the LHD patient management system and/or calling the diagnosing doctor.
- All actions should be documented in the NCIMS record.

Case management

Investigation and treatment

In general, the attending medical practitioner is responsible for treatment. The treatment will depend on whether the disease was acquired in Australia or overseas. Penicillins should not be used for routine treatment of gonorrhoea in NSW. Since late 1999, ceftriaxone has been recommended as the treatment of choice. Because of the changing patterns of sensitivity to antibiotics, specialist advice should be sought. Treatment effective against chlamydial infection should be considered in communities where co-infection is prevalent. See Therapeutic Guidelines: Antibiotic for details.

Education

In general, the case's doctor provides counselling, testing and treatment. The medical practitioner should provide information to the case about the nature of the infection and the mode of transmission.

Contact management

Identification of contacts

Sexual contacts of the patient while infectious (up to the preceding six months) are at risk of infection.

Investigation and treatment

The treating doctor is responsible for contact tracing. PHU's should work with Sexual Health Service staff to assist where requested by the doctor. Contacts require counselling, examination and testing, and empirical treatment. See Therapeutic Guidelines: Antibiotic for details.

6. Managing special situations

Case clustering

In some situations involving case clustering or changes in epidemiology, enhanced data about risks and exposures may be requested.

ⁱ Bachmann LH, Desmond RA, et al. Duration of persistence of gonococcal DNA detected by ligase chain reaction in men and women following recommended therapy for uncomplicated gonorrhoea. *J Clin Microbiol* 2002;40(10):3596-601.

ⁱⁱ Bowden FJ, Tabrizi SN, et al. Infectious diseases. 6: Sexually transmitted infections: new diagnostic approaches and treatments. *Med J Aust* 2002;176(11):551-7.

ⁱⁱⁱ Handsfield HH and Sparling PF. Chapter 209 *Neisseria gonorrhoeae*. In Mandell G, Bennett J and Dolin R, eds. *Principles and Practice of Infectious diseases*. 6th ed. Philadelphia, Elsevier Churchill Livingstone. 2005 Vol 2: 2514-2529.

^{iv} Mehta SD, Erbeding EJ, et al. Gonorrhoea reinfection in heterosexual STD clinic attendees: longitudinal analysis of risks for first reinfection. *Sex Transm Infect* 2003;79(2):124-8.

^v Moodley P, Martin IM, et al. Typing of *Neisseria gonorrhoeae* reveals rapid reinfection in rural South Africa. *J Clin Microbiol* 2002;40(12):4567-70.