Chlamydia

**TEST IF:**
- They are sexually active under 25 years
  - OR more than 2 partners in last year
  - OR have had an STI in past 12 months
  - OR a sexual partner with an STI.
- They are at increased risk of complications of an STI, e.g. pre-termination of pregnancy (TOP) / intrauterine device (IUD) insertion.
- They have signs or symptoms suggestive of chlamydia:
  - **Females:** Vaginal discharge / dysuria / pelvic pain / intermenstrual bleeding (IMB) / post coital bleeding (PCB).
  - **Males:** Dysuria (urethritis) / urethral or anal discharge / testicular pain.
- If they request a sexual health check.

**RECOMMENDED TESTS**
- **Females:** A cervical swab if undertaking a speculum examination (symptoms or clinical scenario dictates).
  - Self-collected vaginal swab if asymptomatic, examination declined and no other tests required.
  - **Note:** A first catch urine has lower sensitivity in females than cervical or vaginal swabs.
- **Males:** A first catch urine (first 30ml of stream), preferably at least 1 hour after last passed urine, but if the patient is unlikely to come back then it is still worthwhile to obtain a sample at the time.
- **MSM:** An additional anal swab if receptive anal intercourse.

Treat immediately if high index of suspicion, e.g. symptoms and/or signs, or contact of index case.
- Start treatment for patient and sexual partner(s) without waiting for lab results.

**TREATMENT**
- Azithromycin 1g stat – pregnancy category B1.
- OR doxycycline 100mg twice daily for 7 days (NOT in pregnancy).
- OR amoxicillin 500mg 3 times daily for 7 days – alternative in pregnancy.
- Advise no unprotected sex for 7 days after their treatment and/or 1 week after their partner(s) have completed treatment.

**PARTNER NOTIFICATION**
- Be clear about language: ‘partner’ implies relationship – all sexual contacts in the last 2 months should be advised so they can have a sexual health check and treatment.
- Contact(s) should have a sexual health check and if asymptomatic treat empirically for chlamydia with azithromycin 1g stat.
- Contacts should be treated without waiting for their test results; if positive, then refer to specific guideline.
- Most choose to tell contacts themselves, giving written information is helpful.
- Notifying all contacts may not be possible e.g. if there insufficient information or a threat of violence.

**FOLLOW-UP**
- By phone or in person, 1 week later.
- No unprotected sex in the week post treatment?
- Completed/tolerated medication?
- Notifiable contacts informed?
- Any risk of re-infection?
- Test of cure only needed if pregnant or if a second line treatment has been used.
- Diagnostic tests can detect traces of dead organisms – wait at least 5 weeks before retesting.
- Re-infection is very common; offer repeat sexual health check in 3 months.

Further guideline information – [www.nzshs.org](http://www.nzshs.org) or phone the local sexual health service.

This Best Practice Guide has been produced by NZSHS, and is adapted from the CMDHB Best Practice Guideline. Every effort has been taken to ensure that the information in this guideline is correct at the time of publishing (July 2012).

Produced with funding by the Ministry of Health
**Introduction**

- **Causative agent** is *Chlamydia trachomatis*.
- Infects endocervix, urethra, rectum and occasionally pharynx and eye.
- **Transmission** is through:
  - Contact with infected genital secretions.
  - Sexual practices such as fingering which allow inoculation of infected secretions onto mucous membranes.
  - From mother to baby at delivery.
- Approximately 70% of women and 50% of men are asymptomatic.
- **Chlamydia is most commonly diagnosed in:**
  - Adolescents and young sexually active adults aged < 25.
  - People who have multiple sexual partners or a new sexual partner.
  - People who have not consistently used condoms.

**Test**

- Patient with possible signs or symptoms of a chlamydia infection.
- Sexual contact of chlamydia or other STI.
- Women having antenatal screening.
- Pre-TOP and IUD insertion.
- Men with epididymo-orchitis.
- Women with a presumptive diagnosis of pelvic inflammatory disease (PID).
- Patients aged < 25 years old and sexually active should be offered testing opportunistically when accessing healthcare.
- Patients outside this age-group should be offered testing according to assessment of risk, presence of ano-genital symptoms, or if the patient requests a sexual health check.

**Symptoms and signs**

*Chlamydia infection commonly has no signs or symptoms.*

**Females**

- Vaginal discharge, dysuria, lower abdominal pain, abnormal or inter-menstrual bleeding.
- Mucopurulent cervicitis with easily induced bleeding and/or signs of PID.
- Urinalysis may show sterile pyuria.

**Males**

- Urethral discharge, dysuria, urethral irritation, testicular pain/swelling.
- On examination, urethral discharge (clear, milky or mucopurulent) may be visible.
- Signs of epididymo-orchitis.

*Note: Rectal infections in both sexes are usually asymptomatic, but may present with anal discharge, anal bleeding or proctitis.*

**Complications**

- PID (and subsequent infertility, pelvic pain, ectopic pregnancy).
- Epididymo-orchitis.
- Sexually acquired reactive arthritis and/or conjunctivitis.
- Fitz-Hugh Curtis syndrome (peri-hepatitis).

**Diagnostic tests**

**Nucleic acid amplification tests (NAATS)**

- New Zealand laboratories use mainly PCR (polymerase chain reaction) and SDA (strand displacement amplification) NAATs.
  - These tests are highly sensitive and specific.
  - Suitable for samples from endocervix, vagina, urethra, and first catch urine (early morning urine not required).
  - NAATs can be used for testing the eye, pharynx and rectum.
Recommended specimens

**Females**
- If doing a speculum examination – do an endocervical swab.
- If patient is asymptomatic, or if an examination is not required or is declined, then a self-collected vaginal swab has similar sensitivity to an endocervical specimen – instruct the woman to insert the swab 4cm (thumb's length) into vagina, rotate, and then replace into the swab container.
- First catch urines are less sensitive than cervical and vaginal swabs in females and are therefore not the specimen of choice, but can be used if an asymptomatic patient declines examination and declines to do a self-collected vaginal swab.

**Males**
- First catch urine.
- First 15-30ml of urinary stream, preferably at least 1 hour after patient has last passed urine, but if the patient is unlikely to come back then it is still worthwhile to obtain a sample at the time.

**Men and females who have receptive anal sex**
- Anorectal swab – swabs for males and females can be collected by gently inserting the swab 4cm into the anal canal, rotating, and then replacing into the swab container.

*Note:* Rectal infection is also transmitted through fingering/toy insertion or oral-anal sex.

**Management**

**Treatment regimens**

**Uncomplicated chlamydial infections (excluding pregnancy):**
- **Azithromycin 1g stat** OR
- **Doxycycline 100mg twice daily for 7 days**
- Advise no unprotected sex for 1 week after initiation of treatment and until 1 week after partner(s) have completed treatment.

**Pregnant or breastfeeding:**
- **Azithromycin 1g stat** (pregnancy category B1).

*Alternative regimen:*
- **Amoxicillin 500mg 3 times daily for 7 days** (pregnancy category A).

**Complicated chlamydial infections (includes PID and epididymitis):**

See relevant guidelines for further detail.
- **Doxycycline 100mg twice daily for 14 days** plus **ceftriaxone 500mg stat im** (plus metronidazole 400mg twice daily for 14 days in PID).
- **Symptomatic rectal chlamydial infection (e.g. proctitis)** should be referred to or discussed with the nearest specialist sexual health service.

*Note:* Roxithromycin is not suitable for treatment of chlamydia.

**Partner notification and management of sexual partners**

**Partner notification**
- Be clear about language: ‘partner’ implies relationship – all sexual contacts in the last 2 months should be advised so they can have a sexual health check and treatment.
- Contacts should be treated without waiting for their test results; if positive, then their recent contacts need to be informed.
- Most choose to tell contacts themselves.
- Giving written information is helpful.
- Notifying all contacts may not be possible, e.g. if there insufficient information or a threat of violence.

**Management of sexual partners/contacts**
- Perform a full sexual health check.
- Do not wait for test results – treat empirically for chlamydia.
- Advise them to use condoms or abstain from sex for 7 days until results of tests are available.
- If chlamydia positive – partner notification as above.
Follow-up

- The index case should be followed up by phone or in person 7 days after treatment to ensure symptom resolution, give results, check that all partners/contacts have been notified and to check compliance with treatment.
- All patients should be asked to re-attend for a sexual health check in 3 months (test of re-infection).
- Re-treatment is required if there has been any unprotected sex with untreated sexual contacts/partners during the follow-up interval.

Test of cure

- **Not routinely required** for patients who are asymptomatic after completion of a first-line treatment course – azithromycin or doxycycline.
- **Required in those treated with a second-line treatment** – amoxycillin, and should be done at least 5 weeks after initiation of treatment.
- **Pregnant women should have a test of cure (TOC) at least 5 weeks after initiation of treatment** and should be retested at the beginning of the third trimester as a test of re-infection.
  - Pregnant women who are < 25 years and those at risk for chlamydia (a new or > 1 sexual partner during their pregnancy) are at increased risk of re-infection with chlamydia.

Referral guidelines

**Referral to or discussion with a specialist sexual health service is recommended for:**

- Screening and treatment of sexual partners if clinician wishes.
- Allergy to standard treatment options.
- Complicated clinical situations for management advice.