Acknowledgements

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Cover painting: “Better Health”
Story: people are calling out for help. They have sickness caused by bacteria and blood borne viruses. Some sickness causes discharge. When treatment happens and information is shared, people feel better and can tell others.
Artist: Nola Jimarin of Naiyu Community.

1st Edition February 2006
2nd Edition June 2008
3rd Edition January 2012

Centre of Disease Control
Department of Health, Northern Territory 2016

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General enquiries about this publication should be directed to:
Sexual Health and Blood Borne Virus Unit (SHBBVU)
Department of Health
PO Box 40596
Casuarina NT 0811

Phone: 08 8922 8874
Fax: 08 8922 8809

Contact details for the Syphilis Register, Centre for Disease Control

<table>
<thead>
<tr>
<th>Top End</th>
<th>Central Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual Health and Blood Borne Virus Unit Centre for Disease Control Ground Floor, Building 4 Royal Darwin Hospital, Rocklands Drive Tiwi Darwin Phone: 08 8922 8044 Fax: 08 8922 8310</td>
<td>Sexual Health and Blood Borne Virus Unit Centre for Disease Control Gap Road Alice Springs Phone: 08 8951 7549 Fax: 08 8951 7900</td>
</tr>
</tbody>
</table>

Contact details

<table>
<thead>
<tr>
<th>Sexual Health Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Darwin: 08 8922 8874 Alice Springs: 08 8951 7549 Katherine: 08 8973 9049 Tennant Creek: 08 8962 4259 Nhulunbuy: 08 8987 0357</td>
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# NT Guidelines for the Management of Sexually Transmitted Infections in a Primary Health Care Setting

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The following guideline is a combined version of sexually transmitted infection (STI) and blood borne virus (BBV) testing, treatment and management sections of the Central Australian Rural Practitioners Association (CARPA) Standard Treatment Manual (STM), 6th Edition and Women's Business Manual (WBM), 5th Edition.


This guideline is designed to be used as a comprehensive reference guide for sexual health service delivery for primary health care clinicians. All clinicians should refer to the above guidelines for more detailed information in STI/BBV testing and management.
1 Introduction

People living in remote communities are reported to be at increased risk of bacterial sexually transmitted infections (STI), such as, gonorrhoea, chlamydia and trichomonas. Notification data for the Northern Territory shows the highest rates of STIs are in 15 to 34 year olds with the greatest burden among those aged 15 to 25 years. Therefore, the Sexual Health and Blood Borne Virus Unit (SHBBVU), recommends prioritising this population for opportunistic screening. STI/BBV testing in individuals less than 15 years should always include a risk assessment to assess whether mandatory reporting is required.

Refer to: Northern Territory Guidelines on the Management of Sexual Health Issues in Children and Young People.
2 STI/BBV testing and management in the remote NT setting

Implementing a comprehensive sexual health program

For many remote communities of the Northern Territory, the levels of STIs remain extremely high. Notification data for 2014 shows that over 75% of all STIs in the Northern Territory are in remote areas. A successful and sustainable comprehensive sexual health program requires sexual health to be integrated as a core component of service delivery within remote primary health care facilities.

Evidence suggests implementing a comprehensive sexual health program, including opportunistic STI screening integrated into routine primary health care practice, can lead to early case detection and timely treatment and follow up of individuals diagnosed with STIs.

There are recommended components for effective STI control:

- STI testing in the community population, aged 15 to 34 years, annually to improve case detection, as most clients will be asymptomatic
- Treating individuals with STI symptoms at first consult to prevent complications and onward transmission
- Treating individuals quickly if the test is positive to reduce disease transmission
- Follow up at 3 months, after treatment, and re-test, as reinfection is common in people initially diagnosed with a positive test. Reinfection is commonly due to incomplete contact tracing of sexual partners or a new partner not previously treated/standardized.
- Testing and treating named sexual partners, prioritising the regular partner promptly as the individual initially diagnosed and treated for an STI can easily be re-infected if their partner is not treated within the same time frame
- Brief safer sex and STI prevention advice with each consult to raise community awareness of STI/BBV transmission and prevention

To achieve effective STI control the remote sexual health program team works with primary health care services to implement a NT wide sexual health program which includes some of the following activities:

- Clinical updates in relation to STI/BBV for remote health services
- Providing feedback on STI testing, positivity and management in the form of data reports and undertake audits for quality improvement/teaching purposes
- Regular education and training in STI/BBV to primary health care staff to improve knowledge on testing and management
- Conducting annual sexual health systems assessment to gauge staff perceptions of sexual health service delivery
- Ensuring STI templates on electronic patient record systems reflect best practice in STI/BBV testing and management
- Participating in community STI/BBV screens if requested
- Consulting with community members and the local clinic team, having input to community STI/BBV activity planning activities
- Participating in the development and distribution of appropriate sexual health promotion resources designed to raise community awareness of STI/BBV prevention
- Providing telephone and on line information to remote health services on managing STI/BBV upon request
- Contributing to joint SHBBV activities with remote team workers across the entire NT
3 Sexual history taking in a primary health care setting

3.1 Background

Sexually transmitted infections (STIs) are often missed as many individuals may be asymptomatic or have only minor symptoms that are ignored and cleared quickly (CARPA STM, p308; WBM, p250). Taking a sexual history is useful in diagnosis, treatment and management of a client and assists the clinician to provide appropriate advice on minimising risk to the individual concerned. The amount of detail a clinician asks about sexual behaviour should depend upon the context of the consultation.

Taking a comprehensive sexual history is recommended for clients who present with the following:

- Symptoms of an STI
- Positive laboratory test for an STI
- Sexual contact of a person with an STI
- Requesting a check-up for an STI

The majority of electronic patient record systems used by primary health centres across the NT (e.g. Communicare, PCIS) have STI templates which prompt clinicians to record and collect standardised sexual health history, investigations, treatment and follow up. However, the following information can help the clinician when taking a full sexual history.

3.2 Sexual history taking and risk assessment

When conducting a full STI/BBV consult, collect the following information from the client:

- Number of regular and casual sexual partners in last 6 months
- Any new sexual partners past 3 months
- Gender of sexual partners (male, female or both)
- Past history of STI
- Hepatitis B status
- Condom use

Additional information for women:
- Menstrual history – date of last period/normal cycle/any changes
- Contraception history
- Pap smear history

3.3 Signs and symptoms

The following lists are typical signs and symptoms of STIs in men and women.

Ask about onset, duration and changes over time.

Men:

- Pain on passing urine
- Discharge from penis
- Testicular discomfort (scrotal pain)

If a male has any of the above - refer to syndromic treatment p27 or CARPA STM, p320-322.
Women:

- Abnormal vaginal discharge
- Symptoms suggestive of pelvic inflammatory disease (PID):
  - Lower abdominal pain
  - Abnormal menstrual bleeding (bleeding in-between period/bleeding after sex)
  - Pain with sex

If a female has any of the above—refer to syndromic treatment p18 or WBM, p261-270.2

Both:

- Genital/peri-anal lumps/ulcers
- Rash – genital/body

If a male or female presents with genital ulcer or lump, refer to syndromic treatment (men p27; women p18).

- Discuss how STI/BBVs are spread and the importance of regular testing, treatment and follow up if STI/BBV diagnosed
- Discuss safe sex and the use of condoms
- Advise that if they have an STI, recent partners in the past 3 months will need to be checked and treated

3.4 Informed consent

Informed consent from the client should be obtained for any tests done, including HIV testing.11

Always ask the client to return in person for their test results.

3.5 Contact tracing discussion

- Explain the reasons why partners need a check-up and treatment (to prevent repeat infection, complications such as miscarriages and infertility)
- Explain that many STIs have no symptoms and partners may not be aware they are infected
- Explain how confidentiality will be maintained and the methods of informing their partner/s:
  - Ask patients to tell their partner/s to come to the clinic for a check-up and treatment
  - OR
  - Ask for the names of their partner/s and the clinic staff can follow them up, names of contacts will never be recorded in the index case’s medical record and contacts are not told who named them.

3.6 Storage of specimens

Culture specimens for gonorrhoea should be stored at room temperature. The bacteria will die if refrigerated or if heated above 40°C. NAAT specimens (swabs) can be kept at room temperature.

Ideally, urine specimens for STI tests should be split: 1 to remain at room temperature for culture and the other to go in the fridge for NAAT. If this is not possible, and transport time to the laboratory is within 7 days, the urine can be kept at room temperature and kept as the one specimen. Gonorrhoea culture always needs to be specified on the pathology request form.
4 STI checks in men

Most STIs are asymptomatic or present with minor symptoms which can clear quickly; therefore, integrating STI testing into primary health care is an important strategy for early detection and prompt management of STIs.

For example:
- As part of another consult (opportunistic)
- Adult health check
- Community screen
- STI symptoms or risk factors suggest STI
- Client requests testing or treatment

4.1 Full STI check

When time allows, offering a full STI check is best practice. A full STI check is essential for the following (Table 1):

- Annual STI check
- Adult health check
- Positive STI/BBV test
- Client with STI symptoms
- Client requests testing or treatment
- Contact of STI
- 3 month test for reinfection

In men, check for following symptoms:
- Pain on passing urine
- Discharge from penis
- Testicular discomfort (scrotal pain)
- Genital sores/lumps
- Genital/body rash

If symptoms are present physical examination is recommended.

Check for:
- Rash (including hands and feet)
- Hair loss
- Mouth for ulcers
- Enlarged or tender lymph nodes in groin
- Sores, lesions, rashes or discharge from/on penis, scrotum, anus

The majority of electronic information systems used in primary health care have STI templates to prompt the clinician regarding information to record for the above consults. The clinician can also refer to sexual history taking section, in this guideline.

4.1.1 Full STI check investigations

- First catch urine and test for chlamydia, gonorrhoea, trichomonas NAAT and gonorrhoea culture

OR

- If discharge is present – penile swabs for chlamydia, gonorrhoea, trichomonas NAAT and gonorrhoea culture (2 swabs to be taken)

PLUS
- HIV serology
- Syphilis serology
- Hepatitis B serology if status of the client is unknown or not immune
  If genital sore/s present
- Dry swab from the base of sore for syphilis/herpes/donovanosis NAAT

4.1.2 *Man who has sex with men (MSM)*
If male clients disclose they have same sex partners there is no need to ask about sexual practices but important to add the following tests.
- Anal swabs x 2 AND throat swabs x 2 for chlamydia, gonorrhoea NAAT tests and Gonorrhoea culture (2 swabs from each site).

4.2 **Brief STI check**
A full STI check is best practice, however, to increase detection of asymptomatic infection when there is no time to take serology or client declines, a brief STI check can be offered when:
- Part of another consult
- Community or targeted screen
- Aged less than 35 years and urine sample collected for other reasons
A full sexual health history is not necessary when conducting a brief STI check, however, inform the client, if tests positive, further information and testing for other STIs would be needed. Ideally, a 3 month test for reinfection should be a full STI check.

4.2.1 **Brief STI check investigations**
First catch urine and test for chlamydia, gonorrhoea, trichomonas NAAT and gonorrhoea culture. Always advise the client to return for results in 1 week.

4.3 **If symptoms of STI**
Refer to syndromic management (treatment and follow up of presenting symptoms (p27) in this guideline if symptoms are present e.g. pain on passing urine and discharge from penis.

**Positive test – refer to specific disease treatment in this guideline.**
### Table 1. STI checks for men

<table>
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<tr>
<th>STI check</th>
<th>When to offer</th>
<th>Test required</th>
</tr>
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<tbody>
<tr>
<td>Full STI check</td>
<td>• Annual STI check&lt;br&gt;• Adult health check&lt;br&gt;• Positive STI/BBV test&lt;br&gt;• Symptoms&lt;br&gt;• Requesting a test&lt;br&gt;• Contact of STI&lt;br&gt;• Test for reinfection</td>
<td>Urine (first catch)&lt;br&gt;• Chlamydia, gonorrhoea, trichomonas NAAT and gonorrhoea culture&lt;br&gt;OR&lt;br&gt;If discharge present: Urethral swabs:&lt;br&gt;• Chlamydia, gonorrhoea, trichomonas NAAT x1&lt;br&gt;• Gonorrhoea culture x1&lt;br&gt;PLUS&lt;br&gt;• HIV serology&lt;br&gt;• Syphilis serology&lt;br&gt;• Hepatitis B serology if status of the client is unknown or not immune&lt;br&gt;If genital sore/s present&lt;br&gt;• Dry swab base of sore for syphilis/herpes/donovanosis NAAT</td>
</tr>
<tr>
<td>Man who has sex with men (MSM)</td>
<td>• Discloses same sex partners</td>
<td>• Full STI check (as above)&lt;br&gt;Anal swabs:&lt;br&gt;• Chlamydia &amp; gonorrhoea, NAAT x1&lt;br&gt;• Gonorrhoea culture x1&lt;br&gt;Throat swabs:&lt;br&gt;• Chlamydia &amp; gonorrhoea, NAAT x1&lt;br&gt;• gonorrhoea culture x1</td>
</tr>
<tr>
<td>Brief STI check</td>
<td>• Part of another consult&lt;br&gt;• Community or targeted screen&lt;br&gt;• Aged less than 35 years and urine sample collected for other reasons</td>
<td>Urine (first catch)&lt;br&gt;• Chlamydia, gonorrhoea, trichomonas NAAT and gonorrhoea culture</td>
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</table>

### 4.4 Presumptive treatment

Presumptive treatment is treatment given when a client has no symptoms (CARPA STM p310; WBM p252).¹ ²

In communities with high STI prevalence rates (sustained high rates of STIs) consider presumptive treatment for the following clients tested for STIs if:

- Aged 15 to 25 years with other risk factors
- High risk and unlikely to return for results
- Client asks for treatment or thinks he has put himself at risk
- Aged 15 to 35 years with leucocytes 1+ or more in urine (males only)

Leucocytes in urine can be a predictor of an STI in men aged 35 or less.

For more detail on STI checks in men, management of positive test and syndromic management, refer to CARPA STM, Sexual Health, 308-325.¹
5 **STI checks in women**

Most STIs are asymptomatic or present with minor symptoms which can clear quickly; therefore, integrating STI testing into primary health care can be an important strategy for early detection and prompt management of STIs.

For example:
- As part of another consult (opportunistic) e.g. woman asking for contraception or pregnancy test
- Adult health check
- Community screen
- Client with STI symptoms or risk factors suggesting STI
- Client requests testing or treatment
- Antenatal screening

### 5.1 Full STI check

When time allows, offering a full STI check is best practice. A full STI check is essential for the following (Table 2):
- Annual STI check
- Adult health check
- Positive STI/BBV test
- Symptoms
- First antenatal check
- Client requests testing or treatment
- STI contact

In women, check for symptoms:
- Last menstrual period, any abnormal bleeding
- Lower abdominal pain
- Pain with sex
- Abnormal vaginal discharge, itching, soreness
- Genital sores/lumps
- Genital/body rash

If symptoms are present physical examination is recommended.

Check for:
- Rash (including hands and feet)
- Hair loss
- Mouth for ulcers
- Enlarged or tender lymph nodes in groin
- Sores, other lesions or rashes on Groin, vulva, anus

The majority of electronic patient record systems used in primary health care have STI templates to prompt the clinician regarding information to record for the above consults. The clinician can also refer to sexual history taking section, in this guideline.

### 5.1.1 Full STI check investigations

- Self-collected or clinician collected – lower vaginal swabs x2 and test for chlamydia, gonorrhoea, trichomonas NAAT and gonorrhoea culture (2 swabs to be taken)

OR

- First void urine and test for test for chlamydia, gonorrhoea, trichomonas NAAT and gonorrhoea culture
OR
• If examining with speculum – endocervical swabs x2 and test for chlamydia, gonorrhoea, trichomonas NAAT and gonorrhoea culture (2 swabs to be taken)

PLUS
• High vaginal swab for MCS if abnormal vaginal discharge
• HIV serology
• Syphilis serology
• Hepatitis B serology if status of the client is unknown or not immune

If genital sore/s present
• Dry swab base of sore for syphilis/herpes/donovanosis NAAT

5.2 Brief STI check

A full STI check is best practice, however, to increase detection of asymptomatic infection when there is no time to take serology or client declines, a brief STI check can be offered when:

• Part of another consult
• Community or targeted screen
• Aged less than 35 years and urine sample collected for other reasons

A full sexual health history is not necessary when conducting a brief STI check, however, inform the client, if tests positive, further information and testing would be needed. Ideally, a 3 month test for reinfection should be a full STI check.

Brief STI check investigations:

• Self-collected or clinician collected - lower vaginal swabs x2 and test for chlamydia, gonorrhoea, trichomonas NAAT and gonorrhoea culture (2 swabs to be taken)

OR
• First void urine (FVU) and test for test for chlamydia, gonorrhoea, trichomonas NAAT and gonorrhoea culture

OR
• If examining with speculum – endocervical swabs (ECS) x2 to test for chlamydia, gonorrhoea, trichomonas NAAT and gonorrhoea culture (2 swabs to be taken)

Always advise the client to return for results in 1 week.

5.3 If symptoms of STI

Refer to syndromic treatment and management in this guideline if symptoms are present (e.g. abnormal vaginal discharge, pelvic inflammatory disease).

Positive test – refer to specific disease treatment in this guideline.
### Table 2. STI checks for women

<table>
<thead>
<tr>
<th>STI check</th>
<th>When to offer</th>
<th>Test required</th>
</tr>
</thead>
</table>
| **Full STI check** | • Annual STI check  
• Adult health check  
• Positive STI/BBV test  
• Symptoms  
• First antenatal check  
• Requesting a test  
• STI contact  
• 3 month test for reinfection | Lower vaginal swabs:  
• Chlamydia, gonorrhoea, trichomonas NAAT x1  
• Gonorrhoea culture x1  
OR  
Urine (first void)  
• Chlamydia, gonorrhoea, trichomonas NAAT and gonorrhoea culture  
OR  
If examining with speculum – ECS swabs  
• Chlamydia, gonorrhoea, trichomonas NAAT x1  
• Gonorrhoea culture x1  
PLUS  
• High vaginal swab for MCS (if abnormal vaginal discharge)  
• HIV serology  
• Syphilis serology  
• Hepatitis B serology if status of the client is unknown or not immune  
If genital sore/s present  
• Dry swab base of sore for syphilis/herpes/donovanosis NAAT |
| **Brief STI check**   | • Part of another consult  
• Community or targeted screen  
• Aged less than 35 years and urine sample collected for other reasons | Lower vaginal swabs:  
• Chlamydia, gonorrhoea, trichomonas NAAT x1  
• Gonorrhoea culture x1  
OR  
Urine (first void)  
• Chlamydia, gonorrhoea, trichomonas NAAT and gonorrhoea culture  
OR  
If examining with speculum – ECS swabs  
• Chlamydia, gonorrhoea, trichomonas NAAT x1  
• Gonorrhoea culture x1 |

### 5.4 Presumptive treatment

Presumptive treatment is treatment given when a client has no symptoms. (CARPA STM p310; WBM p252).\(^1,2\)

In communities with high STI prevalence rates (sustained high rates of STIs) consider presumptive treatment for the following clients tested for STIs:

- Aged 15 to 25 years with other risk factors
- High risk and unlikely to return for results
- Client asks for treatment or thinks she has put herself at risk
For more detail on STI checks in women, management of positive test and syndromic management, refer to CARPA WBM, Sexual Health, 250-267.²
5.5 **Antenatal and postnatal checks**

STI/BBV screening is recommended for pregnant women at the following routine intervals:

- **First visit** – full STI check
- **28 and 36 weeks** – NAAT test for chlamydia/gonorrhoea/trichomonas and culture for gonorrhoea. Take blood for syphilis serology (consider HIV serology if high risk)
- **At birth** – full STI check if STI status unknown and check for Group B streptococcus (GBS) if status unknown. Take blood for syphilis serology
- **6 weeks after birth** - NAAT for chlamydia/gonorrhoea/trichomonas and culture for gonorrhoea. Take blood for syphilis serology

**Additional test:**

Always check there are no genital ulcers (sore, scab, lump) present at each visit as an ulcer could indicate the female has syphilis, donovanosis or herpes infection.

If an ulcer is present:

- NAAT dry swab of ulcer or fluid from blister
- Treat straight away – refer to genital ulcers and lumps or genital herpes in pregnancy

**NB:** testing for syphilis throughout pregnancy and post-delivery is essential due to the risk of congenital syphilis from mother to child transmission of undiagnosed, untreated or inadequately treated syphilis infection.

For more detail on STI checks in pregnant women, management of positive test and syndromic management, refer to WBM, Sexual Health, p250-270.

Ensure the requirement of neonatal assessment for syphilis is clearly documented in the antenatal care record.

5.6 **Brief interventions**

A consultation is an opportunity to provide the client with brief information and education regarding STI/BBV prevention. It is good practice to provide this every STI consultation but it is not always achievable due to time constraints and busy work load, therefore, the best times to provide extra information are when people ask for a test, present with symptoms or have been diagnosed with an STI and need treatment.

**Talk about:**

- What STIs are, how people get them and how to protect against them
- Common signs and symptoms and asymptomatic infection
- Need for test for reinfection at 3 months
- Importance of treating sexual partners
- Complications of untreated STIs e.g. infertility, risk of HIV, PID, pregnancy problems, mother to child transmission of infection
- Importance of having a routine yearly check-up for those aged less than 35 years

5.7 **Safer sex and condom use**

Clinicians should not make the assumption that clients are aware of what safer sex means, therefore, a STI consult is an opportunity to provide information on condom use. Advise the client of the importance of using lubricant (lube) to prevent condoms breaking.

Include information on the importance of using a condom ‘every time’, having only one partner and ensuring both have had a check-up. Show the client how to use a condom and ensure they know this is the only form of contraception that protects against STIs. Always offer condoms and lube to take away or let the client know where they can get them.
5.8 Contact tracing

Contact tracing (informing sexual partners) is an essential component of effective STI control to break the transmission cycle and prevent individuals diagnosed with an STI from being reinfected by their partner. However, contract tracing is one of the hardest aspects of STI control to complete for clinicians working remotely.

It is important to talk about the need for contact tracing with the client who presents with symptoms or has been diagnosed with an STI as a lot of people are reluctant to disclose partner/s information.

Talk about:

- Partner/s need for check and treatment as they may not aware of their risk of infection
- Information kept confidential
- Likelihood of reinfection if partner/s untreated
- Importance of avoiding sex for 7 days after client and partner/s have been treated
- STI complications e.g. PID, mother to child transmission

Ways to contact trace:

- Ask local Aboriginal Health Practitioners (AHPs) for the best ways to do contact tracing in the community
- Check back on sexual partners for last 3 months
- Ask the client to tell you name of partner/s and clinic will find them. Let the client know their name will never be mentioned

OR

- Ask them to write name/s down

OR

- Give the client a note to give to partner/s explaining need for them to come into clinic for treatment

OR

- Ask the client if they are comfortable to tell partner/s to come in for treatment

On electronic medical records:

- Add recall to any named partner/s file for testing and treatment as known contact for STI (do not add index client’s name to partner/s file)
- Inform other primary health clinics for need to contact trace an individual identified as living at that community
- Always offer treatment to a named sexual contact even if they refuse testing
- Add recall to the initial client’s file to test for reinfection at 3 months – this is another opportunity to talk about importance of contact tracing if the client again tests positive.
6  **Management of abnormal vaginal discharge**

Vaginal discharge usually comes from the vagina or cervix. All women have some vaginal discharge normally from cervical and vaginal secretions. This can vary throughout the menstrual cycle and at different times of a woman’s life.

It is abnormal when the discharge increases in amount, and/or is accompanied by a change in colour, or vaginal or labial soreness, itch and/or odour.

6.1  **History**

Ask the woman about:

- The amount, colour, duration and smell of the discharge
- Any itching, soreness or pain on passing urine or frequency. Urinary symptoms can be caused by STIs or UTIs
- Any lower abdominal pain or pain during sex - if yes to either, assess for pelvic inflammatory disease. (refer PID section)
- If pregnant/not pregnant
- Last menstrual period
- Other possible STI symptoms (e.g. genital lumps, ulcers, rash, sore throat)
- Sexual partners and if any of them are from an area with penicillin resistant gonorrhoea*

6.2  **Investigations**

Include:

- Pregnancy test (urine) if unsure about pregnancy/having lower abdominal pain
- pH of vaginal discharge if available (do not do if woman is post-menopausal, semen or blood (e.g. period) present – test unreliable

6.3  **Treatment**

If the woman is *not pregnant* and has a pH 4.5 or more or pH not done, treat for trichomonas and bacterial vaginosis straight away (do not wait for results).

Treat with:

- Metronidazole oral 2g dose
  OR  
- Tinidazole oral 2g dose (not if breastfeeding)
  OR  
- Metronidazole 400mg twice a day for 7 days (if breastfeeding)

If the woman is pregnant: wait for results and if positive treat for trichomonas in pregnancy (WBM p151).  

Start contact tracing partners and provide safer sex education.

Do not forget to consider thrush as a cause of vaginal discharge.

6.4  **Women at high risk of STIs**

Women with the following criteria are considered high risk of STI:

* Penicillin resistant zones: Darwin OR all people with partners outside penicillin sensitive zone OR anyone whose partners are unknown.
- Age less than 35 years and have abnormal vaginal discharge
- Visible discharge from the cervix or inflamed/friable cervix on examination (bleeds easily)

Refer to CARPA STM for speculum examination (p412).¹

If a woman has clinical signs on examination or is aged less than 35 years also treat for chlamydia and gonorrhoea (Table 3). Do not wait for test results as presentations of all 3 infections are very similar.

Treat with (if self and all partners in last 3 months are from a zone with penicillin sensitive gonorrhoea¹):
- Azithromycin oral 1g stat
- Amoxycillin oral 3g stat
- Probenicid oral 1g stat

OR

Treat with (if self and any partner in last 3 months are from a zone with penicillin resistant gonorrhoea†):
- Azithromycin oral 1g stat
- Ceftriaxone IMI 500mg (mix with 2mL lignocaine 1%) (if Ceftriaxone in 1g vials: mix 3.6mL lignocaine 1% and administer 2mLs)

Table 3. Gonorrhoea treatment (this treatment also covers chlamydia infection)

<table>
<thead>
<tr>
<th>Client or partner/s from</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penicillin sensitive zone</td>
<td>- Azithromycin oral 1g stat AND - Amoxycillin oral 3g stat AND - Probenicid oral 1g stat</td>
</tr>
<tr>
<td>NT outside Darwin Or Kimberley OR cross border areas of Central Australia</td>
<td></td>
</tr>
<tr>
<td>Penicillin resistant zone</td>
<td>- Azithromycin oral 1g stat AND - Ceftriaxone IM 500mg. (Mix with 2mL lignocaine 1%) (if Ceftriaxone in 1g vials: mix 3.6mL lignocaine 1% and administer 2mLs)</td>
</tr>
<tr>
<td>Darwin OR all people with partners outside penicillin sensitive zone OR anyone whose partners are unknown.</td>
<td></td>
</tr>
</tbody>
</table>

*If allergic to penicillin – talk with SHU.

Contact tracing should always be initiated at first consult when an individual presents with symptoms as prompt treatment of partners will minimise risk of reinfection. Talk about STI prevention and give safer sex education (e.g. no sex until 1 week after both client and partner/s treated, no sex while having symptoms/partner not treated).

If pregnant or allergic to penicillin – contact the local Sexual Health Unit (SHU) or Rural Medical Practitioner (RMP) for advice.

6.5 Follow up

Ask the woman to come back for review in 1 week as it is important to follow up and check results and assess whether symptoms have gone or are resolving.

If positive STI:

*Penicillin sensitive zones: NT outside Darwin Or Kimberley OR cross border areas of Central Australia.
†Penicillin resistant zones: Darwin OR all people with partners outside penicillin sensitive zone OR anyone whose partners are unknown.
Check if partners have been followed up
Provide further safer sex education if needed
Test for HIV and syphilis if not done at initial consult
Place the client on a recall in 3 months to test for reinfection

If no improvement, discuss with the local SHU, RMP or regional sexual health coordinator.

3 month testing for reinfection is recommended as it is common for people diagnosed with an initial STI to become reinfected.\textsuperscript{10,12}

For information on management of thrush (candidiasis) and more detailed information of abnormal vaginal discharge, refer to WBM (p261-263).\textsuperscript{2}
Female presents with vaginal discharge, itch and odour

Take history and do a full STI check

Lower abdominal pain OR Deep pain during sex

Yes

Assess for pelvic inflammatory disease (PID)

No

15-35 years

No

Yes

Treat for chlamydia and gonorrhoea

pH >4.5 or not done

Treat for bacterial vaginosis and Trichomonas vaginalis

pH <4.5

No treatment

If vulval itch, soreness or swelling, yeast cells on microscopy, or discharge is curd like also treat for candidiasis
Female presents with vaginal discharge, itch and odour

Take history; perform physical examination and do a full STI check

Lower abdominal pain  
OR  
Deep pain during sex  
OR  
Tender uterus or adnexa  
OR  
When moving the cervix

Assess for pelvic inflammatory disease

Cervical inflammation or discharge  
AND / OR  
Less than 35 years

Treat for chlamydia and gonorrhoea

pH >4.5 or not done

Treat for bacterial vaginosis and trichomonas

pH <4.5

If vulval itch, soreness or swelling, yeast cells on microscopy, or discharge is curd like also treat for candidiasis
7  **Pelvic inflammatory disease**

Pelvic inflammatory disease (PID) is inflammation of the upper genital tract – uterus, fallopian tubes, ovaries or pelvic cavity. It is often caused by gonorrhoea or chlamydia. Many other organisms, which usually live in the vagina without causing harm, can cause PID.

PID is a common and often under recognised cause of lower abdominal pain in women in the NT, particularly in remote communities where there are high rates of gonorrhoea and chlamydia infection and should always be suspected if new onset of pain in young women. PID is unlikely after first trimester of pregnancy, but can cause miscarriage if not treated.

**Always consider PID in a woman with lower abdominal pain.**

7.1 **History**

Check woman’s age (higher risk of PID in women aged 15-35 years) and clinical record for the following:

- History of STIs, PID, ectopic pregnancy
- Recent operations on genital tract
- Recent childbirth
- Date and results of last STI check, pap smear and speculum examination

Ask the woman about:

- Abdominal pain – where, when, how long, what makes it worse or better
- Menstrual history:
  - Last normal period
  - Any changes – bleeding in between periods, painful period
- Pain deep inside with sex, bleeding with sex
- Vaginal discharge – amount, colour, smell, how long
- Fever, nausea, vomiting, generally unwell
- Urinary problems- pain, frequency, blood in urine

Check for the following:

- Temperature, pulse, BP
- Full STI check (p12)
- Urine pregnancy test
- Bimanual examination if skilled (refer to Clinical Procedures Manual (CPM) p420)\(^{13}\)
- If the woman is pregnant consult with RMP first
  - If pregnant, check abdomen to feel for uterus above pubic bone- if cannot be felt and woman is less than 12 weeks – **think ectopic pregnancy**

If the client is pregnant consult with RMP for provisional diagnosis, treatment and whether to transfer to hospital.

Follow the PID pathway flowchart p26 if PID is suspected to assess for severe, mild to moderate cases of PID or uncertain diagnosis.

7.2 **Management of severe PID or diagnosis uncertain**

If the woman’s condition is classified as severe or uncertain diagnosis it is important to have a medical consult and transfer them to hospital. Initial treatment can be commenced in the clinic.
Give the following treatment before transferring to the hospital:

- Ceftriaxone IM/IV 1g single dose (mix with 3.6mLs lignocaine 1% if given IM) AND
- Azithromycin oral 1g AND
- Metronidazole IV 500 mg single dose

7.3 Management of mild/moderate PID

Treatment and management for mild/moderate PID is divided up into Day 1 (initial consult), Day 3 (check treatment response), Day 8 (check results) and day 14 (for general review).

7.3.1 Day 1 treatment and management

Give:

- Ceftriaxone IM 500mg single dose. Mix with 2mL lignocaine 1%
  AND
- Doxycycline oral 100mg twice a day (bd) for 14 days (not in pregnancy)
  OR
- Azithromycin 1g (will need a 2nd dose on Day 8)
  AND
- Metronidazole oral 400mg twice a day for 14 days
  • Start contact tracing and advise client on safer sex and STI prevention
  • Ask the woman to come back in 3 days for a review

7.3.2 Day 3 management

Assessment on Day 3 is important to assess if symptoms resolved or improving.

- If improving, PID was the likely diagnosis
- If not improving, seek medical advice
- Check if contact tracing completed
- Ask the woman to return on Day 8

7.3.3 Day 8 treatment and management

- Check test results – a positive STI test confirms PID but a negative test does not rule it out as women can still have PID caused by other microorganisms
- Enter a recall for 3 month re-test if STI positive
- Advice to continue all medications provided on Day 1
- 2nd dose of azithromycin oral 1g stat – if this treatment was decided on Day 1
- Refer to medical practitioner if symptoms not improving as PID unlikely diagnosis

Treatment choice of doxycycline or azithromycin is dependent on how compliant the client will be in taking treatment for 14 days or whether the clinician would be able to locate the woman to administer a 2nd dose of azithromycin 1 week after initial treatment.

Refer to WBM for Day 14 management, Intrauterine Contraceptive Device (IUCD) management and more detailed information for PID (p, 267-270).
Do also – if IUCD

- **Medical consult.** Doctor should talk with gynaecologist
  - Women with mild PID can be managed in community without removing IUCD
  - Very careful follow up, **must** be seen daily for 3 days
  - If not improving – **medical consult**
- **If IUCD removed**
  - Take 2 swabs of IUCD for MC&S, NAAT for gonorrhoea, chlamydia, trichomonas
  - Put IUCD in yellow-top jar and send for MCS

7.4 **Follow up**

- Check that partner/s have been treated
- If woman treated in hospital – check if follow up needed, e.g. pelvic ultrasound
- If positive STI results – repeat STI check (p12) at 3 months to test for reinfection.
Flowchart 3. Suspected pelvic inflammatory disease in non-pregnant woman (PID)

Suspect PID

Any of the following:
- Lower abdominal pain (guarding, rebound, tenderness on examination)
- Temp more than 38°C
- Pulse more than 100 beats/min
- Systolic BP less than 100 mmHg
- Pelvic mass or swelling (may be abscess)

Yes

No

Severe PID or diagnosis uncertain – seek medical consult

Bimanual examination done and if skilled and ectopic pregnancy excluded (negative urine HCG)

Yes

No

- Tenderness when cervix moved
- OR adnexal tenderness
- OR tender uterus

Yes

No

See Lower abdominal pain (CARPA STM, p25)
Think about other causes

Mild to moderate PID – refer to PID treatment and management or WBM, p269
Management of discharge from the penis or pain on passing urine

8.1 Causes

Urethritis in males is most commonly caused by gonorrhoea or chlamydia; however, these signs and symptoms can sometimes be caused by trichomonas or other organisms. It is not possible to tell by clinical examination the causative organism, therefore, syndromic management of the presenting issue is recommended (treat immediately).

8.2 History

Ask the man about:

- How long the symptoms have been present and has he had them before (pain on passing urine and discharge from the penis)
- Any other signs or symptoms, (e.g. sores, blisters, lumps, rashes) and check for any swollen lymph nodes, skin rash or hair loss
- Any scrotal pain, swelling or discomfort
- Sexual partners in the past 3 months and whether any of them are from outside the Top End or Central Australia (areas with penicillin resistant gonorrhoea) as this influences treatment (CARPA STM, p312).

Check:

- If the man has genital sores, blisters, lumps, painful or swollen scrotum – check genitals and around anus
- Skin and mouth for lesions and lymph nodes (armpits, neck and groin)

Do a full STI check (CARPA STM, p309) – if discharge is present take penile swabs x 2 and test for chlamydia, gonorrhoea/trichomonas NAAT and gonorrhoea culture (refer to CPM, p383).

8.3 Treatment

Treat immediately for gonorrhoea and chlamydia even if only dysuria with no urethral discharge.

Treat with (if the client and all sexual partners in last 3 months are from a zone with penicillin sensitive gonorrhoea):

- Azithromycin oral 1g stat
- Amoxycillin oral 3g stat
- Probenicid oral 1g stat

Treat with (if the man and any partner in last 3 months are from a zone with penicillin resistant gonorrhoea or partners unknown):

- Ceftriaxone IMI 500mg mix with 2mL lignocaine 1% (if ceftriaxone 1g vial – mix with 3.6mL lignocaine 1% and administer 2 mL)

---

* Penicillin sensitive zones: NT outside Darwin Or Kimberley OR cross border areas of Central Australia
† Penicillin resistant zones: Darwin OR all people with partners outside penicillin sensitive zone OR anyone whose partners are unknown.
AND

- Azithromycin oral 1g stat

**If allergic to penicillin**: contact the Sexual Health Unit (SHU) or RMP.

### Table 4. Gonorrhoea treatment (this treatment also covers chlamydia infection)

<table>
<thead>
<tr>
<th>Client or partner/s from</th>
<th>Treatment</th>
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<tbody>
<tr>
<td>Penicillin sensitive zone</td>
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</table>
| NT outside Darwin  
Or Kimberley  
OR cross border areas of Central Australia  |  
| Azithromycin oral 1g stat  
AND  
Amoxycillin oral 3g stat  
AND  
Probenicid oral 1g stat  |
| Penicillin resistant zone  |  
| Darwin  
OR all people with partners outside penicillin sensitive zone  
OR anyone whose partners are unknown  |  
| Azithromycin oral 1g stat  
AND  
Ceftriaxone IM 500mg. Mix with 2mL lignocaine 1% (if ceftriaxone 1g vial mix 3.6mL lignocaine 1% and administer 2mLs) |

*If allergic to penicillin – talk with SHU.

Contact tracing should always be initiated at first consult when an individual presents with symptoms as prompt treatment of partners will minimise risk of reinfection. Talk about STI prevention and give safer sex education (e.g. no sex until 1 week after both client and partner/s treated, no sex while has symptoms/partner not treated, use condoms).

#### 8.4 Follow up

Ask the man to come back for review in 1 week as it is important to follow up and check results and assess whether symptoms have gone or are resolving.

If positive STI:

- Check if partners have been followed up
- If trichomonas not tested for – treat presumptively as this can be a cause of urethritis
- Provide further safer sex education if needed
- Test for HIV and syphilis if not done at initial consult
- Place the client on a recall in 3 months to test for reinfection
- Confirm hepatitis B serostatus

If no improvement, discuss with the local SHU, RMP or regional sexual health coordinator.

Testing for reinfection at 3 months is recommended as it is common for people diagnosed with an initial STI to have repeat infection.8

#### 8.4.1 If symptoms still present

If there is no STI – do a urinalysis (U/A) and send for urine MCS – seek medical advice.

If positive for chlamydia and/or gonorrhoea:

- Check if correct treatment taken – if not, repeat treatment

It is important to check if symptoms have resolved and then returned, as reinfection is common, or if symptoms never improved despite correct treatment as this may be an indicator of resistance.

If reinfection likely:

- Repeat STI check and re-treat man and sexual partners
Please note: it can sometimes take over a month for NAAT tests to become negative after correct treatment given.

If resistance likely:

- Check culture results for antibiotic sensitivity
- Repeat STI check and make sure gonorrhoea culture taken
- Give ceftriaxone 500mg IM (mixed with 2mL lignocaine 1%) as single dose if not given at initial treatment (if ceftriaxone 1g vial – mix with 3.6mL lignocaine 1% and administer 2 mL)

Advise the man to return for review if symptoms persist and ask them to come back for 3 month STI check to test for reinfection.

If symptoms continue, discuss what further tests or treatment are needed with the local SHU/RMP.
Flowchart 4. Discharge from the penis or pain on passing urine

Discharge from the penis or pain on passing urine

Ask the following:
- Duration of pain on passing urine or urethral discharge
- Any scrotal pain or swelling
- Presence of genital sores (ulcers, lumps)
- Sexual partners (any from Darwin region, interstate, overseas or unknown)

Urethral discharge or pain on passing urine

- **Urethral discharge**
  - Examine if client consents
  - Full STI check – including penile swabs x2 (chlamydia, gonorrhoea, trichomonas NAAT plus gonorrhoea culture)

- **Pain on passing urine**
  - Full STI check – including penile swabs x2 (chlamydia, gonorrhoea, trichomonas NAAT plus gonorrhoea culture)

Treat for chlamydia and gonorrhoea (do not wait for results)
Contact trace partners
Ask client to return in 1 week for results and review

If trichomonas not tested for, treat presumptively at return visit for results
9 Management of painful scrotum – infected testes (epididymo-orchitis) and twisted testicle (torsion)

9.1 Causes

The 2 main causes of painful scrotum are testicular infection (epididymo-orchitis) or twisted testis/testicle (testicular torsion). As these are serious health problems and difficult to diagnose, any man who presents with a painful scrotum, must have a medical consult.

9.2 History

Check

- Temp, pulse, BP
- Abdominal examination (pain could be due to hernia)
- Check scrotum and testes
- Full STI check (refer to p9 in this guideline)
- Urine MCS

In addition ask about:

- How long the pain and swelling have been present, whether it started slowly or suddenly
- Any trauma preceding the pain
- Nausea or vomiting
- Discharge from penis, painful urination
- Other STI symptoms (e.g. genital ulcers and lumps)
- Take sexual history (refer to sexual history section in this guideline)

9.3 Twisted testicle

This is a medical emergency because the testicle can die (necrosis). If a twisted testicle cannot be excluded – send the man to hospital urgently.

Do – if twisted testicle

- Give pain relief – client most likely experiencing moderate pain
- Send to hospital urgently
- Keep nil by mouth – may need operation
- If there is a delay in sending the client to hospital – seek medical consult urgently

9.4 Infected testes

In younger men, infection is usually due to an STI, whereas older men or men who have recently had a urinary tract procedure and catheterisation, the infection may be due to urinary pathogens (UTI). It is important to rule out mumps virus as a cause for pain/swelling.

Do – if infected testes

- Give pain relief
- Advise client to wear firm/supportive underpants as this can help support the scrotum and relieve pain
- Medical consult is a priority

9.4.1 For all men with discharge from the penis and any man less than 45 years with no discharge

Treat as STI related presentation

Give
- Ceftriaxone IM 500mg IM stat. Mix with 2mL lignocaine 1% (if ceftriaxone 1g vial – mix with 3.6mL lignocaine 1% and administer 2 mL)

AND
- Azithromycin oral 1g orally stat

THEN
- Doxycycline 100mg twice daily (bd) for 14 days

OR
- Azithromycin oral 1g – second dose, one week later (after first dose)

Treatment choice of doxycycline or azithromycin is dependent on how compliant the client will be in taking treatment for 14 days or whether the clinician would be able to locate the client to administer a 2nd dose of azithromycin 1 week after initial treatment.

9.4.2 For all men over 45 years with no discharge from the penis

Treat as UTI related presentation

Give
- Trimethoprim oral 300mg daily for 14 days (CARPA STM, p407)¹

OR
- Cephalexin oral twice daily (bd) for 14 days (doses, CARPA STM, p456)¹

OR
- Amoxicillin-clavulanic acid oral 22.5mg/kg/dose twice a day (bd) for 14 days (doses, CARPA STM, p454)¹

9.4.3 Follow up – all presentations

Advise the client to immediately return if starts to feel worse.

If STI likely cause – discuss the importance of contacting sexual partner/s to offer them STI check and treatment.

Ask the client to return for review 3 days after treatment.

Day 3

- Check results for STI and MCS, if available
- If results indicate a different infection, seek medical advice for treatment change
- If STI positive - start contact tracing process (if not already done at initial consult) and talk about STI prevention and safer sex (using condoms)
- Advise the client no sex until 7 days after both they and their regular partner has been treated
- If getting better – advise the client to complete antibiotic course and ask to return for further review at 1 week and to check results (if not back)

If UTI – refer to UTI follow up (CARPA STM, p444)¹
- If the client is no better – send to hospital
At 1 week (Day 8)

- Check results – follow up as above depending on result
- Check the client has taken their antibiotics as advised
- If using azithromycin treatment – give azithromycin oral 1g (2nd dose)

Table 5 provides an outline to assist in making a diagnosis.

Table 5. Differentiation between torsion and infection of the testes

<table>
<thead>
<tr>
<th></th>
<th>Twisted testicle (torsion)</th>
<th>Infected testes (epididymo-orchitis)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>All ages but most common between 12-18 years</td>
<td>Any age</td>
</tr>
<tr>
<td></td>
<td>Usually young sexually active men or older men</td>
<td>Usually more than 37.5°C</td>
</tr>
<tr>
<td></td>
<td>Rare under 14 years (unless mumps infection)</td>
<td></td>
</tr>
<tr>
<td><strong>Onset</strong></td>
<td>Usually sudden (seconds to minutes) but can be gradual</td>
<td>Usually starts gradually over several hours</td>
</tr>
<tr>
<td></td>
<td>Sometimes related to recent trauma</td>
<td></td>
</tr>
<tr>
<td><strong>Pain</strong></td>
<td>Always painful – can be severe</td>
<td>Usually mild to moderate pain</td>
</tr>
<tr>
<td></td>
<td>If pain stops 4 to 6 hours later – the testicle may be dying</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(not getting better)</td>
<td></td>
</tr>
<tr>
<td><strong>Other symptoms</strong></td>
<td>Usually nausea and vomiting</td>
<td>Discharge from the penis, pain on</td>
</tr>
<tr>
<td></td>
<td>May experience lower abdominal pain (refer to CARPA STM, p27)</td>
<td>passing urine</td>
</tr>
<tr>
<td></td>
<td>¹</td>
<td>May have lower abdominal pain, flank or loin pain</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(refer to CARPA STM, p27-32)</td>
</tr>
<tr>
<td><strong>Fever</strong></td>
<td>Either no fever or less than 37.5°C</td>
<td>Usually more than 37.5°C</td>
</tr>
<tr>
<td><strong>Scrotum examination</strong></td>
<td>Hot, swollen, very tender</td>
<td>One or both testicles involved</td>
</tr>
<tr>
<td></td>
<td>Only 1 testicle involved</td>
<td>Tender, hot, swollen</td>
</tr>
<tr>
<td></td>
<td>Affected testicle may be sitting higher than the other</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and/or lying sideways</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Examine male standing up</td>
<td></td>
</tr>
<tr>
<td><strong>When testicle lifted</strong></td>
<td>Pain gets worse</td>
<td>Pain may get better</td>
</tr>
<tr>
<td><strong>Urinalysis</strong></td>
<td>Usually normal</td>
<td>Usually leukocytes present and/or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>blood and/or protein</td>
</tr>
</tbody>
</table>
10 **Management of genital ulcers and lumps**

10.1 **Causes**

There are number of causes for genital ulcers and lumps (sores), such as:

- Herpes (most common)
- Syphilis
- Donovanosis (very rare)
- Genital warts
- Scabies/pubic lice/thrush
- Molluscum contagiosum

Cancer can also be a cause, therefore, any genital sore that does not resolve following standard treatment should be reviewed by a medical officer.

**Ask**

It is important to get a history, particularly to determine if the sore is painful or painless as this will impact on treatment and management.

Ask the following:

- How long sores have been present and are they getting worse
- Has the client had similar sores before
- Are the sores are painful/painless
- If sexual partner/s have similar sores

Refer to sexual history section in this guideline or use you the STI templates on electronic patient record system to prompt you regarding what sexual history questions to ask.

10.2 **Investigations**

Full STI check (refer to STI check male or female in this guideline or CARPA STM, p308-312; WBM, p250-254).

PLUS

- Dry swab base of sore – NAAT herpes, syphilis, donovanosis

Use Flowchart 5 as decision tool for treatment.
**10.3 Genital herpes (painful sore/s or ulcer)**

Treat – refer to disease specific treatment in this guideline.

Ask the client to return in 1 week for review and to check results.

Results:
- Positive NAAT confirms herpes
- Negative NAAT – ask client to return for swab if sores return

**10.4 Syphilis and donovanosis (painless sore or ulcer)**

If the sore is painless, treat the client for syphilis and donovanosis. It is very important to take syphilis serology before giving treatment to gain an accurate baseline RPR level. The RPR level is used as an indicator of treatment response as it will show a decrease if the client has responded to treatment when they are re-tested in 3 to 6 months and at 12 months.14

Treat for:
- Syphilis: benzathine penicillin IM 1.8g single dose
- Donovanosis: azithromycin oral 1g stat

**Jarisch Herxheimer Reaction**

If recent syphilis: clients may experience febrile reaction 3 to 4 hours after treatment. Advise the client this may occur and subside within 24 hours. Treat with paracetamol.
Do

- Contact tracing of sexual partners – this is very important if you suspect a new syphilis infection
- Get advice from SHU if new infection is suspected (syphilis register):
  - Top End: 89227818
  - Central Australia: 89517552
- Inform the client to avoid sex until results are reviewed
- Provide STI and safer sex education

10.5 Follow up

Review in 1 week to check results and review if sore is resolving, this is also a further opportunity to discuss contact tracing (if result positive) and STI prevention.

- If positive result/s – see STI management (CARPA STM, p312; WBM, p254)\(^1,2\) or refer to disease specific management in this guideline. If pregnant consult with SHU and congenital syphilis guidelines\(^3\)
- If negative result and donovanosis suspected – talk with SHU

10.6 Genital warts

(CARPA STM, p323-324; WBM, p265-266)\(^1,2\)

Genital warts (HPV) present as painless, solid lumps with hard/smooth surfaces or cauliflower like appearance.

May look like secondary syphilis (condylomata lata).

Do not

- Treat as genital warts until secondary syphilis excluded
- Treat pregnant or breast feeding women with podophyllotoxin

Do

- Give podophyllotoxin 0.5% solution or cream 0.15%
- Advise client to use twice a day for 3 days and no treatment for 4 days
- Repeat cycle up to 4 times
- Advise client regarding side effects of treatment and skin care (refer to CARPA STM, WBM)\(^1,2\) for detail
- Advise men not to have sex with pregnant or breastfeeding women whilst on treatment)

OR

- Give Imiquimod 5% cream (Category B1 in pregnancy)
- Refer to WBM, p266\(^2\) for detail

If genital warts are not improving - client should have medical consult or talk with SHU.
11 Management of gonorrhoea

Causative agent: *Neisseria gonorrhoea* (bacterial infection).

11.1 Symptoms

May be asymptomatic

11.1.1 *Females may present with the following symptoms:*

- Abnormal vaginal discharge
- Dysuria
- Lower abdominal pain – check for other signs and symptoms of PID

Note that 10-15% of acute gonococcal cervicitis in women is complicated by pelvic infection. Tubal damage can result in increased risk of ectopic pregnancy and infertility.

11.1.2 *Males may present with the following symptoms:*

- Dysuria (pain on passing urine)
- Discharge from the penis
- Painful scrotum
- Pharyngeal and anal infections can occur

11.2 Investigations

Refer to full STI check in this guideline (men p9, women p12).

11.3 Positive test for gonorrhoea

If a female has a positive test result – always ask about symptoms of PID (WBM p267).²

11.4 Antibiotic resistance of *Neisseria gonorrhoeae*

In most places globally, *Neisseria gonorrhoeae* is resistant to penicillin. Darwin is now considered penicillin-resistant; however the rest of the NT is currently classified as penicillin-sensitive.

The following box shows which (treatment) areas are currently sensitive and resistant to penicillin:

<table>
<thead>
<tr>
<th>Treatment areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areas with <strong>penicillin-sensitive gonorrhoea</strong>:</td>
</tr>
<tr>
<td>● All of the NT outside of Darwin</td>
</tr>
<tr>
<td>● The Kimberley</td>
</tr>
<tr>
<td>● Immediate cross-border areas of Central Australia</td>
</tr>
<tr>
<td>Areas with <strong>penicillin-resistant gonorrhoea</strong></td>
</tr>
<tr>
<td>● Darwin</td>
</tr>
<tr>
<td>● All areas outside of the NT, the Kimberley, and immediate cross-border areas of Central Australia</td>
</tr>
</tbody>
</table>

This means always ask where the person’s sexual partner/s are from (not where the sex took place) to assess which treatment should be given. If in any doubt, give ceftriaxone plus azithromycin.
### Table 6. Gonorrhoea treatment

<table>
<thead>
<tr>
<th>Client or partner/s from</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Penicillin sensitive zone</strong></td>
<td>Azithromycin oral 1g stat AND Amoxycillin oral 3g stat* AND Probenicid oral 1g stat</td>
</tr>
</tbody>
</table>
| *NT outside Darwin*  
Or Kimberley  
OR cross border areas of Central Australia | Azithromycin oral 1g stat AND Amoxycillin oral 3g stat* AND Probenicid oral 1g stat |
| **Penicillin resistant zone** | Azithromycin oral 1g stat AND Ceftriaxone IM 500mg. Mix with 2mL lignocaine 1% (if ceftriaxone 1g vial mix 3.6mL lignocaine 1% and administer 2mLs) |

*If allergic to penicillin – talk with SHU.

If oral or anal gonorrhoea

Treat with, regardless of treatment area (above)
- Azithromycin 1g single dose
  - AND
- Ceftriaxone IM 500mg single dose (mix with 2 mL lignocaine 1% – if ceftriaxone 1g vial – mix with 3.6 mL lignocaine 1% and administer 2 mL)

**Do**
- Contact trace partner/s from last 3 months. Focus on regular partner (CARPA STM p317)¹
- Complete a full STI check if not done (including syphilis and HIV tests)
- Advise the client no sex until partner is treated and to wait 7 days post treatment
- Provide STI and safe sex education

**11.5 Follow up**
- Do STI check in 3 months – test for reinfection (CARPA STM males p308, females WBM p250)¹,²
- Check syphilis and HIV tests done
12 **Management of chlamydia**

**Causative agent:** *Chlamydia trachomatis* (bacterial infection).

12.1 **Symptoms**

May be asymptomatic.

12.1.1 *Females may present with the following symptoms:*

- Abnormal vaginal discharge
- Lower abdominal pain – check for other signs and symptoms of PID
- Cervicitis (if client is examined)

Note, approximately 10-15% of cases are complicated in women by pelvic infection. Tubal damage can result in increased risk of ectopic pregnancy and infertility.

12.1.2 *Males may present with the following symptoms*

- Pain on passing urine
- Discharge from the penis
- Painful scrotum (epididymo-orchitis)

12.2 **Investigations**

Refer to full STI check in this guideline (men p9, women p12).

12.3 **Positive test**

If a female has positive test result – always ask about symptoms of PID (WBM p267). Lower abdominal pain is not a normal symptom of uncomplicated chlamydia.

**Treat with:**

- Azithromycin oral 1g single dose

**Do**

- Contact trace partner/s from last 3-6 months. Focus on regular partner (CARPA STM p317, WBM p259)\(^1,2\)
- Complete a full STI check if not done (including syphilis and HIV tests)
- Advise the client no sex until partner is treated and to wait 7 days post treatment
- Provide STI and safe sex education (CARPA STM p318, WBM p260)\(^1,2\)

12.4 **Follow up**

- Do STI check in 3 months – test for reinfection (CARPA STM males p308, females WBM p250)\(^1,2\)
- Check syphilis and HIV tests done
13 Management of trichomoniasis

Causative agent: *Trichomonas vaginalis* (protozoan infection).

13.1 Symptoms

May be asymptomatic.

13.1.1 *Females may present with the following symptoms:*

- Abnormal vaginal discharge (thin, frothy, yellow/green)
- Fishy odour
- Vulval itch and irritation

Infection can persist for months or longer.

13.1.2 *Males may present with the following symptoms:*

- Discharge from the penis
- Pain on passing urine

Symptoms are usually short-lived in men and the majority are asymptomatic.

13.2 Investigations

Refer to full STI check in this guideline, men p9, women p12.

13.3 Positive test

(WBM, p258; CARPA STM, p316)\(^1,2\)

Treat with:

- Metronidazole 2g orally stat
  OR
- Metronidazole 400mg twice a day (bd) for 7 days (best for breastfeeding, take after baby is fed).
  OR
- Tinidazole 2g (not if pregnant or breast feeding)

Do

- Contact trace – focus on regular partner
- Complete full STI check if not done (e.g. syphilis and HIV test)

13.4 Follow up

- Do STI check at 3 months – test for reinfection
- Check syphilis and HIV tests done
13.5 **Trichomonas in pregnancy**

Trichomonas is routinely screened for during pregnancy as having this infection, may lead to adverse pregnancy outcomes (e.g. premature labour). However, there is no strong evidence to support treating pregnant women with trichomonas before 36 weeks, if they have no symptoms; therefore the following treatment pathway is recommended.

**Trichomonas infection confirmed by test:**

If the woman has symptoms (e.g. abnormal vaginal discharge):

- Treat immediately

If the woman is asymptomatic:

- Treat at 36 weeks gestation to reduce risk of mother to child transmission
14 Management of donovanosis

Causative agent: *Klebsiella granulomatis*.

14.1 Symptoms
- Usually red, beefy, raised, raw, painless ulcer
- In early stages, small sore may look like primary syphilis
- Sores will not go away without treatment, will slowly get larger

14.2 Investigations

Refer to full STI check in this guideline, men p9, women p12.
- Dry swab base of sore – NAAT herpes, syphilis, donovanosis

14.3 Treatment
- Azithromycin orally 1gm weekly for 4 weeks or until sore/s healed, whichever is longer

Do
- Check sore/s each week when giving medicine
- If not healed after 4 weeks – medical consult
- If not improving, may need biopsy for cancer
- Contact tracing
- Provide STI and safer sex education

14.4 Follow up
- Check 3 months after sore/s completely healed – to make sure sore/s have not come back
- Do STI check at 3 months – test for reinfection
- Check syphilis and HIV tests done
15 **Management of Syphilis**

**Causative agent:** *Treponema pallidum* (bacterial infection).

Syphilis infection can be divided into sexually acquired and congenital infection.

15.1 **Stages of infection**

15.1.1 **Primary syphilis**
- Ulcer/s called chancres – usually painless
- Ulcers usually red with firm base (indurated) and rolled edge
- Client may have associated lymphadenopathy
- Ulcer will resolve without treatment but the infection is still present

15.1.2 **Secondary syphilis**
- Fleshy moist wart like lesions in genital or peri-anal area called condylomata lata
- Rash – typically involving palms/soles
- Generalised lymphadenopathy
- Fever
- Patchy hair loss

15.1.3 **Primary or secondary syphilis**
- Stages can overlap
- Represents the dissemination of the organisms throughout the body
- Systemic symptoms such as, fever, rashes (often involving palms and soles), patchy hair loss and generalised lymphadenopathy can occur

15.1.4 **Asymptomatic stage (latent)**
- Early latent: syphilis for less than or equal to 2 years duration (still infectious)
- Late latent: syphilis of greater than 2 years duration (non-infectious)

15.1.5 **Tertiary syphilis**
- Tertiary syphilis occurs in 10-30% of people who are untreated and involves lesions of skin, bone and complications of the neurological and cardiovascular systems

15.2 **Investigations**

Refer to full STI check in this guideline, men p9, women p12.

- Syphilis serology (treponemal test) is the specific test for syphilis (e.g. TPPA, TPHA)
- Once positive, treponemal tests remain positive for life regardless of treatment
- Non-treponemal tests such as RPR measure disease activity and response to treatment
- Pathology services will automatically perform additional treponemal and a non-treponemal test if the initial syphilis serology is positive (e.g. EIA positive)
- Dry swab NAAT for syphilis, herpes and donovanosis from any genital ulcer and lump

**Syphilis is diagnosed by**

- Positive test with no history of previous treatment
- Signs and symptoms of primary or secondary syphilis
- 4 fold (2 titre) increase in RPR level, e.g.1:4 to 1:16 in a previously treated patient with syphilis

Syphilis serology can be hard to understand. If you need help – talk with Syphilis Register or SHU.
15.3 Treatment

Syphilis treatment depends on how long a person has been infected. The Syphilis Register can give history and advice on management.

**Blood should be taken for RPR just before starting treatment. This result is used as the baseline result to determine treatment response.**

**Syphilis <2year duration**
- Benzathine penicillin 1.8g or 2.4 million units IM stat (pre-filled syringes x2)

**Syphilis >2 years duration or unknown duration**
- Benzathine penicillin 1.8g or 2.4 million units IM X 3 at intervals of 7 days for 3 weeks

If greater than 7 days between injections – talk with Syphilis Register or SHU.

**Neurosyphilis or cardiovascular syphilis**
Seek advice from your Syphilis Register, or SHU.

Usually need to go to hospital for more tests.
If recent syphilis they can get a febrile reaction 3-4 hrs after treatment that gets better within 24hrs (Jarisch-Herxheimer). Give paracetamol for treatment.

15.4 Syphilis in pregnancy

Seek advice from your Syphilis Register or SHU; Alice Springs 08 8951 7552 or Darwin 08 8922 7818

Refer to the Guidelines for the investigation and treatment of infants at risk of congenital syphilis in the Northern Territory, and Syphilis CDNA National Guidelines for Public Health Units.

15.5 Contact tracing

Contact tracing for primary, secondary and early latent syphilis (infectious stages), is a high priority and a matter of urgency if the person diagnosed with the infection or named contact, is pregnant.

Communicable Disease Network Australia (CDNA) syphilis guidelines for Public Health units recommend the following for how far back to trace:

**Primary syphilis**
- Duration of symptoms plus 3 months
- If uncertain, trace back 6 months prior to presentation

**Secondary syphilis**
- Duration of symptoms plus 6 months
- If uncertain, trace back 12 months prior to presentation

**Early latent or probable infectious syphilis**
- Trace back 12 months prior to presentation

All named contacts should be treated presumptively, therefore, give benzathine penicillin 1.8g or 2.4 million units and do full STI screen. Do not wait for results before treating.

Contact your Syphilis Register or SHU for advice on all new infections.

Refer to Syphilis CDNA National Guidelines for Public Health Units.
15.6 Follow up

Adequate treatment of early syphilis is a four-fold (2 titre) drop in RPR titre, 3-12 months after treatment. It is recommended, clients diagnosed with syphilis should be retested 3-6 and 12 months, after treatment.

If a woman is pregnant at the time of diagnosis and treatment, discuss frequency of retesting with SHU Sexual Health Physician. Due to the high risk of mother to child transmission of this infection, the Sexual Health Physician may recommend monthly retesting to ensure adequate treatment response prior to delivery. Further follow up serology may be needed depending on the response to treatment. Discuss with Syphilis Register if unsure and notify of any treatments given.
16 **Management of genital herpes**

**Causative agent:** Herpes simplex 1 and 2 virus (HSV).

16.1 **Symptoms**

Herpes simplex viruses type 1 & 2 (HSV) cause genital and oral herpes (cold sores). Antiviral treatment reduces risk of spreading infection, duration and severity of symptoms, but does not cure herpes. There is a lifelong risk of recurrent episodes and shedding of herpes virus.

16.1.1 Client may present with:

- Painful or itchy blister/ulcers
- Tender inguinal lymphadenopathy
- First episode
  - Usually most severe
  - Can last 2-3 weeks
  - Usually associated with flu-like symptoms

16.2 **Investigations**

- Dry swab sores – NAAT for herpes, syphilis, donovanosis
- If blisters present burst with a sterile needle and swab the fluid

Do

- If pregnant – see *Genital herpes in pregnancy* (WBM p150)\(^\text{2}\)
- Keep sore clean with **normal saline** washes
- Give pain relief (CARPA STM p399),\(^1\) can put lignocaine gel on sores
- If kidney disease – medical consult. May need lower dose of antivirals.

**First episode**

Can be severe and lasts for 2-3 weeks.

- Give valaciclovir oral 500mg twice a day (bd) for 5-10 days.
- Paracetamol for pain relief if needed

**Recurrent episodes**

Usually less severe, heal within a week. Medicines most helpful if given before or on first day blisters appear.

- Give valaciclovir oral 500mg bd for 3 days
  OR
- Famciclovir oral 500mg single dose stat
  THEN
- Famciclovir oral 250mg bd for 3 doses

16.3 **Follow up**

- Review at 1 week
- Positive NAAT confirms genital herpes
- Negative NAAT does not exclude genital herpes – ask to return for another swab if sores come back
- Counselling for current partners – offer screening for other STIs
17  **Hepatitis B**

17.1 **Cause**

Hepatitis is inflammation of the liver caused by a viral infection, alcohol, kava and some medicines. There are three main types of hepatitis caused by a viral infection – these are hepatitis A, hepatitis B and hepatitis C. Hepatitis B is caused by the hepatitis B virus (HBV).\(^{16}\)

17.2 **Transmission**

Hepatitis B is spread by contact with blood or other body fluids, from an infected mother to her baby (known as vertical transmission), via unprotected sex with an infected person and between young children. The majority of people who acquire hepatitis B as infants will continue to chronic infection. Acute hepatitis B infections in adults will usually resolve in 95% of cases. It can take from 4 weeks to 6 months to be diagnosed with a chronic (uncleared) infection.

The NT is a high prevalence jurisdiction with Indigenous people and migrants from high-prevalence countries accounting for the majority of cases. In the NT most cases are acquired through mother-to-child transmission rather than sexually.\(^ {17}\)

17.3 **Hepatitis B in adults**

17.3.1 **Acute infection**

Most hepatitis B infections are asymptomatic, however some may experience one or more of the following in the acute stage:

- Feel unwell, decreased appetite
- Dark urine
- Pale faeces
- Nausea and/or vomiting
- Yellow skin or eyes (jaundice)
- Upper abdominal pain/tender liver
- Smokers may go off their cigarettes

17.3.1.1 **Diagnosis and management of acute hepatitis B**

- The client’s clinical presentation
- HBsAg and anti-HBc IgM are positive
- Highly elevated ALT/AST

Acute hepatitis B can resolve over 6 months with HBsAg clearing in 90-95% of cases and hepatitis B serology changing to positive anti-HBs and anti-HBc (markers of past infection, now immune).

Acute hepatitis is highly infectious; therefore actively trace all sexual and household contacts for 2 weeks prior to onset of symptoms and, depending on the contact’s history and hepatitis B serostatus, over testing and vaccination, if applicable.

Refer to *NT hepatitis B vaccination and public health guidelines* for greater detail.

**Chronic infection**

Chronic hepatitis B (CHB) is predominately asymptomatic; however, in 20-30% of people, persisting inflammation will lead to progressive liver fibrosis, cirrhosis and increased risk of hepatocellular carcinoma.

CHB is defined as an inflammation of the liver caused by the hepatitis B virus which has persisted for longer than 6 months, confirmed by 2 positive HBsAg results at least 6 months apart. All people diagnosed with hepatitis B, will need long term regular monitoring and consideration for treatment.
and specialist referral, depending on clinical presentation and serology markers of disease progression.

The following information is taken from *Northern Territory hepatitis B vaccination and public health guidelines.*

### 17.3.2 Initial assessment

- Medical consultation for all new cases – physical examination for signs of chronic liver disease

**Initial tests:**

- HBeAg, anti-HBe, HBV viral load (viral load)
- Liver function test – repeat 3 times over 6 months
- FBC, electrolytes, coagulation and iron studies, fasting glucose and lipids
- Hepatitis C
- Liver ultrasound if over 40 years of age or if co-infection with HCV or HIV or if needs liver cancer screening

**Initial management:**

- Immunise for hepatitis A if no record or no immunity on testing
- Immunise contacts
- Education with person
  - Prevent transmission
  - Prevent further liver damage (e.g. scarred liver – fibrosis, cirrhosis), liver cancer
  - Liver cancer screening if proven or suspected cirrhosis
  - Minimise alcohol consumption

**Ongoing monitoring:**

- Care plans for all clients diagnosed with CHB
- Clinical examination
- LFTs, HBV viral load
- HBeAg (if positive at baseline)*
  - 12 monthly is ALT normal and at 1st visit during pregnancy
  - 6 monthly if ALT fluctuating
- HCC screen with 6 monthly alpha fetoprotein and liver ultrasound for
  - All Indigenous people > 50 years
  - People with suspected/proven cirrhosis
  - People with family history of HCC

*HBeAg testing not needed after it becomes negative

### 17.3.3 Referral

CHB clients with any of the following should be referred to a specialist

- Consistently elevated ALT
- HBV viral load > 2,000 IU/mL
- Known/suspected cirrhosis
- Immunocompromised
- Pregnant and very high viral load (>10^7 IU/mL)
- Children <16 years diagnosed with CHB
- Hepatitis C and/or HIV co-infection
- Family history of HCC
- RMP considers further advice is required
17.3.4 Understanding serology

Ensure understanding of serology (blood tests). Contact CDC/PHU for help.

<table>
<thead>
<tr>
<th>Check for</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute infection</td>
<td>Hepatitis B surface antigen</td>
</tr>
<tr>
<td>Chronic infection</td>
<td>Hepatitis B surface antigen</td>
</tr>
<tr>
<td>Immunity due to past exposure</td>
<td>Antibodies to hepatitis B core antigens</td>
</tr>
<tr>
<td>Immunity due to vaccination</td>
<td>Antibodies to hepatitis B surface antigens</td>
</tr>
<tr>
<td>Viral load</td>
<td>Hepatitis B viral DNA</td>
</tr>
<tr>
<td>Liver damage</td>
<td>Liver function tests</td>
</tr>
<tr>
<td>Cancer screening</td>
<td>Alpha-fetoprotein</td>
</tr>
</tbody>
</table>

17.3.5 Classification of hepatitis B status

Ensure understanding of classification and result. Contact CDC/PHU for help.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis B – not immune and not infected</td>
<td>HBsAg negative, Anti-HBs negative, Anti-HBc negative</td>
</tr>
<tr>
<td>Hepatitis B – immune by exposure</td>
<td>HBsAg negative, Anti-HBs positive or negative*, Anti-HBc positive</td>
</tr>
<tr>
<td>Hepatitis B – immune by immunisation</td>
<td>HBsAg negative, Anti-HBs positive, or negative*, Anti-HBc negative</td>
</tr>
<tr>
<td>Hepatitis B – infection needing surveillance</td>
<td>HBsAg positive AND no criteria for specialist management (below)</td>
</tr>
</tbody>
</table>
| Hepatitis B – infection needing specialist management | HBsAg positive:  
  - AND proven or suspected cirrhosis  
  - OR on medicines that weaken the immune system  
  - OR ongoing raised ALT  
  - OR HB viral load more than 2000IU/mL  
  - OR currently pregnant |

*If infection/immunisation a long time ago – very low levels of Anti-HBs may not be detected

Refer to NT hepatitis B vaccination and public health guidelines\textsuperscript{17} and ASHM hepatitis B resources\textsuperscript{18} for further information and advice.
18 References

# Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFP</td>
<td>alpha-fetoprotein</td>
</tr>
<tr>
<td>AHP</td>
<td>Aboriginal Health Practitioner</td>
</tr>
<tr>
<td>ALT</td>
<td>alanine aminotransferase</td>
</tr>
<tr>
<td>Anti-HBc</td>
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<tr>
<td>Anti HBs</td>
<td>antibodies to surface antigen</td>
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<td>blood-borne virus</td>
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<td>CARPA</td>
<td>Central Australian Rural Practitioners Association</td>
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<td>CDC</td>
<td>Centre for Disease Control</td>
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<tr>
<td>CPM</td>
<td>Clinical procedures manual</td>
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<td>CT</td>
<td>computed tomography</td>
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<td>DNA</td>
<td>deoxyribonucleic acid</td>
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<tr>
<td>FBE</td>
<td>full blood examination</td>
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<td>FVU</td>
<td>first void urine</td>
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<td>GBS</td>
<td>Group B streptococcus</td>
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<td>HAV</td>
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<td>HAIGG</td>
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<td>hepatitis B virus</td>
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<tr>
<td>HCV</td>
<td>hepatitis C virus</td>
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<tr>
<td>HIV</td>
<td>human immunodeficiency virus</td>
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<tr>
<td>IMI</td>
<td>intramuscular injection</td>
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<td>INR</td>
<td>international normalised ratio</td>
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<td>IUCD</td>
<td>Intrauterine Contraceptive Device</td>
</tr>
<tr>
<td>IU/mL</td>
<td>International units per millimetre</td>
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<tr>
<td>IV</td>
<td>intravenous</td>
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<td>LFT</td>
<td>liver function test</td>
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<tr>
<td>MCS</td>
<td>microscopy, culture and sensitivities</td>
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<tr>
<td>MSM</td>
<td>man who has sex with men</td>
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<tr>
<td>NAAT</td>
<td>nucleic acid amplification test</td>
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<td>NT</td>
<td>Northern Territory</td>
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<tr>
<td>PHU</td>
<td>Public Health Unit</td>
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<tr>
<td>PID</td>
<td>pelvic inflammatory disease</td>
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<td>SHBBVU</td>
<td>Sexual Health Blood Borne Virus Unit</td>
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<tr>
<td>SHU</td>
<td>Sexual Health Unit</td>
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<td>STI</td>
<td>sexually transmitted infection</td>
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<tr>
<td>STM</td>
<td>standard treatment manual</td>
</tr>
<tr>
<td>RMP</td>
<td>Remote Medical Practitioner</td>
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<td>RPR</td>
<td>rapid plasma reagin</td>
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<td>U/A</td>
<td>urinalysis</td>
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<td>UEC</td>
<td>urea creatinine electrolytes</td>
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<td>UTI</td>
<td>urinary tract infection</td>
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<tr>
<td>WBM</td>
<td>Women’s Business Manual</td>
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Appendix 1 Flowchart for reporting child sexual harm

Reporting Child Sexual Harm

1. Confidentiality and privacy explained
2. Child under 18 years is sexually active
   - Aged 16 or 17 years
   - Aged 14 or 15 years
   - Aged under 14 years
     - YES
     - NO
3. Is there a relationship of special care between parties?
   - YES
   - NO
4. Determine the partner’s exact age
   - YES
   - NO
5. Is there more than 2 years age difference between the parties?
   - YES
   - NO
6. After thorough assessment that sexual activity is: 1) consensual, 2) between equals and 3) without coercion, do you believe harm or exploitation have occurred?
   - YES
   - NO
   - NOT SURE
7. Talk with Central Intake Team or Sexual Assault Referral Centre
8. Health Education:
   - Relationship Safety
   - STI/BBV prevention
   - Contraception advice
   - NO
9. REPORT REQUIRED
   - Telephone the Central Intake Team on 1800 700 250
10. Document: Assessment, clinical opinion, actions taken and any follow up required in patient’s medical record
For any enquiries regarding management of patients, please contact the staff at your nearest Centre for Disease Control or Sexual Health Unit

**Centre for Disease Control**
- Darwin: 08 8922 8044
- Alice Springs: 08 8951 7540
- Katherine: 08 8973 9049
- Nhulunbuy: 08 8987 0282
- Tennant Creek: 08 8962 4259

**Clinic 34**
- Darwin: 08 8999 2678
- Alice Springs: 08 8951 7549
- Katherine: 08 8973 9049
- Nhulunbuy: 08 8987 0356
- Tennant Creek: 08 8962 4250

**Syphilis Data Base**
- Darwin: 08 8922 7818
- Alice Springs: 08 8951 7552
- Katherine: 08 8973 9046
- Nhulunbuy: 08 8987 0356
- Tennant Creek: 08 8962 4250