Sexually Transmitted Infections:
Guidance for Primary Care

- Sexual history
- What tests should you do?
- STI symptoms summary
- When to refer to a Sexual Health Service

www.lothiansexualhealth.scot.nhs.uk
# Sexually Transmitted Infections: Guidance for Primary Care

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**Introduction**

This guidance is intended for use by those undertaking testing for sexually transmitted infection (STI) in primary care. It highlights those infections that cause harm and summarises the key points to consider when offering tests, or dealing with symptoms. It also contains information on referral and where to find more detailed clinical information.

It provides some basic guidance on management of common presentations, warts, herpes and vaginal discharge.

STIs can be divided into two groups: those that are likely to cause significant disease and those that are not.

*The extent to which GPs choose to manage STI will depend on individual expertise. This guidance is designed to act as a ready reckoner when deciding what tests to do, when to refer and how to manage those STIs which cause least serious harm.*

Chalmers Sexual Health Centre focuses on complex STI testing and management amongst high risk and vulnerable groups, and offers support with partner notification as required.

GPs and practice nurses can obtain support and advice at anytime via:

**Phone:** 0131 536 1070 (press option 9)

**Email:** Chalmers.ClinicalAdv@nhslothian.scot.nhs.uk

**Refhelp:** Find us under 'Sexual Health Services'.
Sexual history

Ask the following questions to help with risk assessment and timing of tests:

» When did you last have sex?

» Was this with a regular partner or more of a one-off? If regular, how long have you been together? Are you using/did you use a condom?

» When did you last have sex with anyone else?

» In your lifetime have your partners been male, female or both?

» Any sex with partners from Africa, Asia, the former Soviet Union or Eastern Europe?

» Any previous STIs including hepatitis B, C and HIV?

» Any history of intravenous drug use (patient or their sexual partners)?

Timing of tests

• Incubation periods for STIs vary
• Ensure that sufficient time has elapsed post-exposure to ensure the validity of results
• If ongoing risk, e.g. multiple partners, do not postpone tests: carry out a full screen immediately, then arrange for repeat tests as necessary.

Definitive results timing chart

» Chlamydia/gonorrhoea 2 weeks after any risk (10 days is acceptable)

» HIV 4 weeks post-exposure - negative result extremely reassuring

3 months post exposure - negative result is definitive

» Syphilis 4 weeks - usually sufficient to become positive

3 months - negative tests are definitive

» Hepatitis B/C 6 months - negative results definitive
What tests should you do?

**High risk patients:**

Men who have sex with men (MSM), sex workers, black Africans, sex with partners in or from Africa, Asia, the former Soviet Union or Eastern Europe, drug users, prisoners or contacts of cases.

- Offer HIV, Hep B and syphilis testing
- Offer Hep C in line with SIGN Guidelines: main indication being drug use
- Offer Chlamydia and Gonorrhoea NAAT.

GPs may opt to test high risk individuals. However, all of the above justify referral to Specialist Services.

*NB these indications only apply in the context of sexual health – syphilis and HIV testing is also indicated in other situations, e.g. certain neurological presentations and indicator illnesses.*

**All other patients:**

**HIV**
- Many will be low risk but you are more likely to do harm by not offering an HIV test than by testing someone with their consent.

**Syphilis**
- General population is never risk-free, and anyone may opt for testing if concerned
- Likelihood of a positive test is extremely low
- Opportunistic testing in these prevalences is not currently justified
- GPs may be made aware if there are concerns re local clusters

**Chlamydia and Gonorrhoea**
- Do not offer opportunistic test to anyone over 20 years
- Offer routinely to those under 20 years
- Offer to those over 20 years who have symptoms
- Offer to those with multiple partners, i.e. two or more in twelve months or new partner in last three months
- Do on request if patient still concerned after exclusion of above.
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Sexual Health swabs and urine

**Chlamydia/Gonorrhoea NAAT urine**

Test of choice for men
- 1st 20mls of the urine stream, and not necessarily an early morning sample
- Orange Abbott test kit (see image 1, page 13) (pipette urine from a white-topped universal bottle into the orange sample bottle)
- URINE samples should not be used for women, because of reduced sensitivity for gonorrhoea, compared with swabs.

**Chlamydia/Gonorrhoea NAAT swabs**

Test of choice for women
- Self-taken by women
- Put swab in vagina (3cm), wipe firmly round vaginal wall five times
- Put straight into the Abbott orange-topped bottle
- If examination is indicated the same Abbot kit is used to take an **endocervical swab**

**Ulcer swabs in either sex**

For painful, multiple vesicles or ulcerated lesions
- **RED topped UTM virology bottle** with swab included (see image 2, page 13)
- For more information on genital herpes see page 9
- NB Single, painless or atypical ulcers should always be referred (Syphilis - see page 5)
- History of high risk travel – think Syphilis

**High vaginal swabs (see page 7 for more information)**
- Very few indications for these: Testing is criterion based
- Trichomonas Vaginalis (TV) is rare. In female high risk groups refer to Chalmers Centre
- If referral is not possible take an HVS from the posterior fornix
- Sensitivity may be low because motility reduces with transit time. Labs may not routinely perform wet microscopy or TV culture so mention TV on the laboratory request form.
Bacterial endocervical swabs
No longer available in Primary Care

- Gonorrhoea not suitable for culture in primary care
- Very high false negative rate
- If positive gonorrhoea NAAT refer to Chalmers Sexual Health Centre or Howden Sexual Health Clinic for culture and sensitivity, treatment, and contact tracing.

Sexual Health serology:

HIV and Hepatitis B

- Serious and under-diagnosed
- We should have a low threshold for testing for them
- Prevalence commoner in certain population groups, e.g. MSM, black Africans, Asians and immigrants from Eastern Europe
- Infections often diagnosed late in people who do not fall into traditional risk groups.

Syphilis

- Serious and rare, largely urban
- Can occur in clusters
- 188 cases in Scotland in 2011. Most (92%) are in men, and 84% of the total in MSM
- 29% have co-infection with HIV
- 63% of infections are presumed to have been acquired through contacts in Scotland
- Routine screening programmes of low risk populations (antenatal, blood transfusion) detect very small numbers (5/227,000 cases in Scotland in 2011), indicating a very low prevalence (0.002%)
- Risk of false positive tests in low prevalence populations
- Opportunistic and population screening is therefore not appropriate in General Practice.

Specific practices may receive alerts when geographical clusters are identified via specialist services.
Hepatitis C
- Rarely transmitted sexually
- Primarily associated with a history of intravenous drug use or iatrogenic risk (blood transfusions, etc)
- Geographical risk factors
- For full indications to test, please see the SIGN Guideline 92: Management of Hepatitis C [http://www.sign.ac.uk/pdf/sign92.pdf]

STI Symptoms Summary
- **Vaginal discharge**: exemplifies syndromic approach: clinical assessment more important than tests. See page 8
- **Break through or post coital bleeding**: consider chlamydia, gonorrhoea
- **Dyspareunia**: consider chlamydia, gonorrhoea
- **PID**: consider whether admission is indicated. Chlamydia/ gonorrhoea is identified in <50% of cases. Take a [vaginal/cervical NAAT](#) for these plus HVS, but make sure treatment given is broad spectrum (see LJF)
- **Ulcers**: consider herpetic (test and treat) or syphilitic (refer)
- **Lumps**: consider warts. See page 11
- **Urinary symptoms**: dysuria in a sexually active man is due to an STI until proven otherwise. Obtain urine NAAT
- **Epididymo-orchitis**: in a sexually active man is due to an STI until proven otherwise. Obtain urine NAAT
- **Remember** - seroconversion illnesses, (HIV, syphilis) and systemic manifestations (HIV, syphilis, chlamydia & gonorrhoea)
- Maintain awareness of illnesses that can be associated with HIV-related immunosuppression, e.g. recurrent chest infections, diarrhoea and weight loss, oral candidia, lymphopaenia.
Vaginal discharge

The commonest causes of vaginal discharge are not sexually transmitted

- **Physiological:** white/clear, non itchy, non offensive, changes with menstrual cycle. Sometimes associated with cervical ectopy.
- **Candida:** white, curdy, itchy, erythema, fissuring
- **Bacterial Vaginosis (BV):** milky, coats vaginal walls, odour, PH>4*
- **Trichomonas Vaginalis:** Green, frothy discharge - if TV suspected, refer.

*High Vaginal Swabs (HVS) are of limited value. Reporting of commensal bacteria can cause anxiety and lead to over treatment.*

HVS may be used to aid the diagnosis of BV, TV or other genital tract infections but their use should generally be reserved for the following situations:

- Symptoms, signs and/or pH are inconsistent with a specific diagnosis
- Related to problems in pregnancy, postpartum or gynaecological surgery/instrumentation
- Recurrent / persistent discharge after empiric treatment
- PID.

* Narrow range Ph Paper – if you have problems obtaining this, see [Refhelp](#) for most up-to-date ordering information.
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Uncomplicated Vaginal Discharge Algorithm
(not pregnant, unrelated to gynae procedure/IUD, no abdominal pain, systemically well.)

Risk of STI
(Age <20, relevant history or concern)

No

Physiological
white, non–offensive, no itch

Reassure

Pathological

Itch++ white/curdy
discharge+, vulvitis, vaginitis,
erythema, fissuring, non
offensive
PH<4

Candida

Bacterial Vaginosis

Test for chlamydia/
gonorrhoea (NAAT)

Yes

POSITIVE
Treat (see LJF)
and advise
notify partner
Patient leaflet

NEGATIVE
Reassure and
reinforce safer
sex message
Patient leaflet

No itch, ‘fishy’ smell, thin
white/grey vaginal
discharge
PH>4

Treat – see LJF (d) genital system

Discharge persists/ recurs-reassess,
examine, consider referral to Chalmers or
Howden Sexual and Reproductive Health
Herpes Simplex Genital Infection (HSV)

Primary infection

Diagnosis:
Clinical features suggestive of primary genital HSV infection include:

- Symptoms that develop within nine (usually three) days of sexual contact. (Delayed presentation beyond four weeks is rare, but does occur)
- Multiple painful vesicles or ulcerated lesions
- Systemic flu-like symptoms: fever, myalgia (only in primary infection)
- Inguinal or femoral tender lymph node enlargement
- Severe dysuria, particularly in women
- Retention of urine or constipation due to autonomic neuropathy
- Uncommonly, aseptic meningitis.

Think herpes, think swab, think treat

Diagnosis often clinical, but virological confirmation (HSV PCR) should always be attempted.

Will be HSV in >90% of cases (diagnosis can never be excluded by a negative result).

Treat before you have results back when the clinical picture is suggestive of early primary HSV. BUT always refer single, painless or atypical ulcers to rule out syphilis.

Management:

- Prescribe specific antiviral therapy (Aciclovir, 200mg given by mouth five times per day for five days)
- Saline bathing to discourage the formation of labial adhesions
- Prescribe oral analgesia.

In very severe cases start treatment and refer to Chalmers Sexual Health Centre or Howden Sexual Health Clinic. Patients will be seen the same day.

Admit to hospital if there is urinary retention, intractable pain, meningitis or if the woman is in the second or third trimester of pregnancy, especially if she is systemically unwell.
Patient information:
- The first episode is the most severe
- Infection is life-long. Recurrences need only be treated if frequent or severe
- Common: 50% of people have HSV-1 and 25% have HSV-2 by the age of 30 years
- Risk of recurrence in first year with HSV-1 significantly less than with HSV-2 (50% compared with 89%)
- Most people get one or two recurrences in the first year, then less often
- Asymptomatic carriage of the virus is common. No indication of infidelity with long term partner.

Follow up:
Review at two weeks with virological results. Offer a full STI screen if deferred at first visit. In the case of a severe primary episode, review at five days to confirm that no new lesions appearing. If new lesions are appearing give a further five days course of aciclovir.

Recurrent Genital Herpes
Diagnosis:
History suggestive of previous attacks and virological confirmation from previous episode. If no virological confirmation available, it is worth testing if vesicles or ulcers are present.

Treatment:
Strategies include:
- Supportive therapy
- Episodic antiviral therapy
- Suppressive antiviral therapy.

The majority of patients will require only supportive measures as for primary herpes. Treatment with aciclovir, if initiated within 24 hours of symptoms starting, will only shorten the duration of an episode by about one day on average. Management, however, will depend on the severity of symptoms, frequency of recurrences and the relationship status of the individual.

Consider referral to Chalmers Sexual Health Centre or Howden Sexual Health Clinic if episodic or suppressive therapy being considered.
Genital warts (HPV): when to refer

Patients with small, discreet warts: DO NOT REFER

Patient information

- Small warts do not require treatment
- Like all viruses our bodies control this infection by producing specific antibodies
- Once there is enough antibody present the warts will disappear without any treatment, (normally within 12 weeks)
- Treating with creams or liquid nitrogen does not make small warts go away any faster. Smoking may mean the warts take longer to clear and are more likely to recur
- Even when you cannot see warts the HPV can still be passed on but the majority of sexual partners will NOT develop warts and the infection will resolve spontaneously.

Treatment

Not treating small warts is often the BEST management together with an explanation of the natural history of HPV infection

- Men (if very anxious) can be offered Podophyllotoxin Solution*
- Women (if very anxious) can be offered Podophyllotoxin Cream*
  *Avoid contact with healthy skin.

Cryotherapy is not indicated for small, non keratinised warts.

Larger or more extensive warts: CONSIDER REFERRAL

- Large warts will take longer to clear spontaneously
- Reducing the size of the lesions makes it easier for the body to control the virus. Large or extensive, non keratinised warts can be treated with Imiquimod cream
- Keratinised warts will require cryotherapy. It is reasonable to send these patients to Chalmers Sexual Health Centre or Howden Sexual Health Clinic
- Perianal warts in MSM are an indication for full STI screening.

STI testing in patients with genital warts

Genital wart infection is not a sole indication for STI testing. A sexual history should be taken to identify any risk factors.
When to refer to a Sexual Health Service

**DEFINITE REFERRAL**
- Syphilis – ulcer
- Syphilis positive serology
- Gonorrhoea treatment and partner notification/follow up
- Recurrent herpes considering suppression therapy
- HIV positive serology.

**CONSIDER REFERRAL**
- High risk sexual history
- Rule out trichomonas vaginalis
- Large, coalesced or keratinised genital warts
- Persistent vaginal discharge following usual, initial investigation and management
- Severe herpes infection
- Men and women with symptoms of STI.

**NO INDICATION FOR REFERRAL**
- Low risk, asymptomatic individuals
- Small, non keratinised warts
- Management of partner notification for chlamydia.

**URGENT REFERRAL**
For urgent referral contact doctor on call during office hours
**0131 536 1000** or phone triage nurse **0131 563 1070 (Option 9)**
To arrange a quick access appointment at one of our clinics phone **0131 536 1070 (Option 9)**

**ROUTINE REFERRAL**
For routine referral – walk in available every morning at Chalmers Sexual Health Centre from 8.30 till 10am – patient will be triaged and seen same or next day.

Walk-in at Howden Sexual Health Clinic available Tuesday (registration at 4.30pm) and Friday (registration at 9am).

**SCI Gateway**
Please use SCI Gateway (Under Chalmers Sexual Health Centre) in the Gateway tree, whenever appropriate.
### Worldwide HIV Prevalence Estimates - >0.5% (UNAIDS data 2009)

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<thead>
<tr>
<th>Sub Saharan Africa 10-26 %</th>
<th>Sub Saharan Africa 5-10%</th>
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<tbody>
<tr>
<td>Botswana</td>
<td>Cameroon</td>
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<tr>
<td>Lesotho 23.6</td>
<td>Central African Republic</td>
</tr>
<tr>
<td>Malawi 11</td>
<td>Equatorial Guinea</td>
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<tr>
<td>Namibia 13.1</td>
<td>Gabon 5.2</td>
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<tr>
<td>South Africa 17.8</td>
<td>Kenya 6.3</td>
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<tr>
<td>Swaziland 26</td>
<td>Tanzania 5.6</td>
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<tr>
<td>Zambia 13.5</td>
<td>Uganda 6.5</td>
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<tr>
<td>Zimbabwe 14.3</td>
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The following countries have prevalence between 0.5 and 3%

- Caribbean: 1 - 3
- Central and South America: 0.5 - 2
- Djibuti: 2.5
- Estonia: 1.2
- Thailand: 1.3
- Russian Federation: 1
- Ukraine: 1.1
- Sudan: 1.1

The rest of Sub Saharan Africa ranges between 1 and 4%
Except for Comoros 0.1 Madagascar 0.2

### Swab Test Kits

- Chlamydia testing kit *(image 1)*
- Herpes testing kit *(image 2)*

Lothian SRH Services contact and further information

Phone - 0131 536 1070
For immediate patient management and referral queries please phone us and choose the ‘hidden’ option 9. This is for professional use only and will push your call up to first in the queue. You may have to wait until the previous call has been dealt with and we apologise if this means waiting. This line is open from Monday-Friday 8.30am-12pm and 1pm-4pm.

Day Time On-Call Duty Doctor (via RIE switchboard) - 0131 536 1000
Monday - Friday 9am to 5pm

Email - Chalmers.ClinicalAdv@nhslothian.scot.nhs.uk
For any non urgent clinical queries you can email us. Emails are checked by Senior Doctors daily and queries responded to within 48 hours.

Fax - 0131 536 1609
It is sometimes helpful for you to fax information to us if you have sent a patient to us for urgent specialist management. Please identify which member of the team the fax is intended for.

SCI Gateway
Please use SCI Gateway (Under Chalmers Sexual Health Centre) in the Gateway tree, whenever appropriate.

Lothian refhelp - NHS Lothian intranet
Find us under ‘Sexual Health Services’ for detailed referral information.

Or for more detailed clinical advice for both professionals and patients go to our website:
www.lothiansexualhealth.scot.nhs.uk