Chlamydia

FACT SHEET

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Summary

Chlamydia is a sexually transmitted infection caused by a bacterium. It can be transmitted through sexual contact. All people who are sexually active may be at risk for chlamydia.

Chlamydia can infect the urethra (the tube that allows urine and semen to pass out of the body), cervix, rectum, throat and eyes. Many people with a chlamydia infection have no symptoms. If symptoms do occur, they usually appear two to six weeks after infection. Symptoms can include vaginal pain and bleeding, painful urination, and an abnormal discharge from the vagina, urethra or rectum.

To test for chlamydia, samples are taken from the sites of suspected infection and tested for the presence of the bacteria. Chlamydia can be treated and cured using antibiotics.

Chlamydia can increase the risk of sexual transmission of HIV.

Correct and consistent condom use reduces the risk of chlamydia transmission.

Key messages on chlamydia for clients are available at the end of this fact sheet.

The words we use here – CATIE is committed to using language that is relevant to everyone. People use different terms to describe their genitals. This text uses medical terms, such as vagina and penis, to describe genitals. Cisgender[i] people can often identify with these terms. Some transgender[ii] people may use other terms, such as front hole and strapless. CATIE acknowledges and respects that people use words that they are most comfortable with.

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What is chlamydia?

Chlamydia is a sexually transmitted infection (STI) caused by the bacterium *Chlamydia trachomatis*. The bacterium infects the "wet" linings (mucous membranes) of the body. Chlamydia can infect the genital tracts, including the cervix, uterus, fallopian tubes, urethra (the tube that allows urine and semen to pass out of the body) and epididymis (a tube in the testicle that stores and carries sperm). It can also infect the throat (pharynx), anus and rectum. In addition, it can infect the eyes through contact with infected discharge.[1,2,3]

How is chlamydia transmitted?

Chlamydia can be transmitted through sexual contact and sharing of sex toys. Transmission occurs when secretions from infected mucous membranes or semen of a person with a urethral infection comes into contact with the mucous membranes of another person.

Condomless penetrative vaginal sex and anal sex are the highest-risk behaviours for the transmission of chlamydia.

Chlamydia can be transmitted when a person who has the infection in their mouth or throat performs oral sex on another person or when a person performs oral sex on a person who has a genital infection. Oral-anal contact (rimming) can transmit chlamydia as well.

Shared sex toys can also transmit chlamydia. It is theoretically possible to transmit chlamydia through a hand job or fingering if infected fluids are present.

Chlamydia can be passed during childbirth if the newborn has come into contact with infected vaginal discharge or fluid.[1,2,3,4]

Who is at risk?

Chlamydia is the most common notifiable STI in Canada. A notifiable disease must be reported to public health authorities when an infection is confirmed by a clinic, doctor or laboratory. All people who are sexually active, including people who experience sexual violence, may be at risk for chlamydia. The majority of reported cases of chlamydia occur in people under the age of 30. The highest reported rates have been among females aged 15 to 24. Gender differences in reported rates of chlamydia are likely due, in part, to higher testing rates among females.

Some individuals are at increased risk of chlamydia infection: people who have had condomless sex with a new sexual partner or more than two sexual partners in the past year and people who have had previous STIs.

There are higher rates of chlamydia among injection drug users, prisoners, sex trade workers and street youth. Reported rates of chlamydia among Aboriginal people are higher when compared to national rates, and rates are highest in the northern territories.[1,5,6,7,8]

Symptoms

Many people with chlamydia have no symptoms. If symptoms do occur, they usually appear two to three weeks after infection (the incubation period) but it can take as long as six weeks.

Infection of the cervix: Symptoms may include an unusual discharge (a fluid that flows out of the opening of the vagina), unusual vaginal odour, pain during vaginal intercourse, and bleeding between menstrual periods. If the infection spreads to the uterus and fallopian tubes, symptoms such as lower abdominal pain, fever and nausea may occur.

Infection of the urethra: Symptoms may include a yellow or white watery or milky discharge, a painful burning sensation during urination, urethral itching, and testicular pain and swelling.

Note that the symptoms of chlamydia may vary for trans persons if they have had bottom surgery and depending on the type of surgery.

Infection of the rectum: Symptoms may include rectal pain, discharge and bleeding.

Infection of the throat: Symptoms may include a sore throat.

Infection of the eye: A chlamydia infection of the eye results in a condition called conjunctivitis (also known as pink eye). The symptoms include itchy red

eyes and a green, white or yellow discharge that crusts over the eye.[1,2,3]

Complications

Untreated chlamydia infection of the cervix can spread to the uterus and fallopian tubes and cause pelvic inflammatory disease (PID). This can result in chronic abdominal pain, infertility and an increased risk of ectopic pregnancy (a potentially serious complication of pregnancy where the embryo implants outside the uterus).

Untreated chlamydia in the urethra can result in inflammation of the epididymis (called epididymitis). The epididymis is a tube in the testicle that stores and carries sperm. Epididymitis can result in infertility; however, this is a relatively rare occurrence.

Untreated chlamydia infection of the rectum can lead to proctitis, an inflammation of the lining of the rectum, which can become chronic.

An untreated eye infection (conjunctivitis) caused by chlamydia can cause scarring of the cornea.

Untreated chlamydia can also lead to the development of a form of reactive arthritis that causes joint pain and swelling of the fingers and toes. Most cases resolve spontaneously within six months of onset, but 30% to 50% of individuals with reactive arthritis will develop chronic symptoms.[1,2,3,9,10]

Testing and diagnosis (screening)

To screen for chlamydia, samples are taken from the sites of suspected infection and tested for the presence of bacteria. Suspected infection in the urinary and genital tracts may involve providing a urine sample or having a swab of the vagina, cervix or urethra taken. If there is a discharge from the urethra or vagina, a swab may be taken of the discharge. If someone has had oral or anal sex, a swab of the throat or rectum may be taken.

There are two primary methods of testing collected samples for chlamydia: NAATS (nucleic acid amplification tests) and cell cultures. NAATS are more sensitive than cultures and result in more diagnoses.

The Public Health Agency of Canada (PHAC) recommends that NAATs be used whenever possible to test urine, urethral or cervical samples. However, if blood or mucous is present in the sample, which can interfere with the accuracy of a NAAT, it is recommended that a cell culture be used. Cell culture tests require the use of endocervical or urethral swabs by a health practitioner. Some research suggests that NAATs are more effective than cell culture in detecting rectal chlamydia. PHAC recommends that only cell culture be used to test throat samples.

People diagnosed with chlamydia should also be tested for gonorrhea because there are high rates of this infection in people who have chlamydia. PHAC also recommends HIV counselling and testing, serological testing for syphilis, and immunization for hepatitis B (if not already immune).[1,2,11]

Notification of partners

Chlamydia is a reportable infection in Canada. This means that when an infection is confirmed by a clinic, doctor or laboratory it must be reported to public health authorities. When someone has a confirmed chlamydia diagnosis, they will be asked by the healthcare provider or public health nurse to contact or provide contact information for all their sexual partners in the 60 days before they were tested or noticed symptoms. If the client chooses not to contact their sexual partners, the healthcare provider or public health nurse will attempt to contact the partners and encourage them to test for chlamydia and get treated. PHAC recommends that all notified partners be treated without waiting for test results. In an attempt to retain their anonymity, the name of the original client is not given to sexual partners when they are contacted.[1]

Treatment

Chlamydia can be cured with treatment using antibiotics.

Recommended treatment is either a single dose of azithromycin or a seven-day treatment regimen of doxycycline. Both drugs have similarly high rates of effectiveness. If a person has completed treatment and the symptoms (if any) have disappeared and

there is no re-exposure to an infected partner, an additional test (called test of cure) is generally not given. However, because reinfection with chlamydia is common, PHAC recommends that all people with chlamydia be retested six months after treatment has been completed.[1]

What about HIV?

Having chlamydia can cause the amount of HIV in the genital and rectal fluids of a person with HIV to increase. This can increase the risk of sexual transmission of HIV.

The impact of effective HIV treatment on the transmission of chlamydia is unclear.

People with untreated chlamydia are also at increased risk for HIV infection.[12]

Prevention

Correct and consistent use of condoms reduces the risk of transmitting chlamydia. There are two types of condoms available. The external condom (sometimes called the "male" condom) is a sheath made from polyurethane, latex or polyisoprene that covers the penis during sex. The internal condom (also known as the insertive or "female" condom) is a pouch made of polyurethane or a synthetic latex material called nitrile that can be inserted into the vagina or rectum.

Some transgender men may cut a condom or oral dam to fit their genitals.

The use of oral dams or other barriers can reduce the risk of chlamydia during oral sex or rimming.

Using a new condom for sex toys with each partner can reduce the risk of chlamydia transmission by preventing the exchange of bodily fluids.

Someone who is diagnosed with chlamydia should avoid having sex until they have been treated and all symptoms have gone. The notification, testing and treatment of all sexual partners of an individual with chlamydia all help to prevent the spread of further infections.[1,2,3,4]

Footnotes

i Cisgender – someone whose gender identity aligns with the sex they were assigned at birth

ii Transgender – an umbrella term that describes people with diverse gender identities and gender expressions that do not conform to stereotypical ideas about what it means to be a girl/woman or boy/man in society

(Definitions taken from *Creating Authentic Spaces: A gender identity and gender expression toolkit to support the implementation of institutional and social change*, published by The 519, Toronto, Ontario.)

Resources

Condoms for the prevention of HIV and STI transmission – CATIE fact sheet

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This fact sheet was developed in partnership with the Sex Information and Education Council of Canada (SIECCAN).

Disclaimer

Decisions about particular medical treatments should always be made in consultation with a qualified medical practitioner knowledgeable about HIV- and hepatitis C-related illness and the treatments in question.

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What you need to know about chlamydia

FACT SHEET

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Chlamydia is a sexually transmitted infection (STI) that is most easily passed on during sex without a condom. It can infect the genitals, rectum and throat. The infection can be cured with antibiotics, and there are ways to lower the chance of getting or passing on chlamydia, such as using a condom each time you have sex.

The words we use here – CATIE is committed to using language that is relevant to everyone. People use different terms to describe their bodies. This text uses medical terms, such as vagina and penis, to describe genitals. Other people may use other terms, such as private parts or dick or front hole. CATIE acknowledges and respects that people use words that they are most comfortable with.

What is chlamydia?

Chlamydia is a sexually transmitted infection (STI). It can infect the genitals, rectum and throat. A person with chlamydia can pass it on to another person during sex.

Many people with chlamydia have no symptoms, so they don't know they have an infection. When symptoms do occur, they usually take 2 to 3 weeks to appear but it can take as long as six weeks. Common symptoms vary depending on where the infection is:

- Infections of the genitals can cause an unusual fluid (or discharge) to come out of the vagina or the penis, and pain when urinating (peeing).
- Rectal infections can cause discharge or bleeding from the anus and pain in the anus.
- Throat or mouth infections can cause a sore throat.

If it is not treated, chlamydia may lead to infertility, abdominal pain or pregnancy complications.

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Could I get chlamydia?

Anyone who is sexually active, including people who experience sexual violence, can get chlamydia.

Chlamydia is most easily passed on during sex without a condom; this includes vaginal intercourse and anal intercourse.

Although less common, chlamydia can also be passed on:

- when a person with the infection in their mouth or throat gives oral sex to another person
- when a person gives oral sex to a person with an infection of the genitals
- through oral-anal contact (rimming)
- through sharing sex toys or during a hand job or fingering if infected fluids get onto the toy or hand

Chlamydia and HIV

For people with HIV, a chlamydia infection may increase the amount of HIV in bodily fluids and increase the chance of passing on HIV to sex partners.

Someone who has chlamydia may be more likely to get HIV if they are exposed to HIV during sex.

What can I do?

Prevent infection

Use a condom during vaginal intercourse and anal intercourse.

Use a condom or oral dam during oral sex.

There is no vaccine to protect against chlamydia.

Get tested

The only way to know for sure whether or not you have chlamydia is to get tested. A doctor or nurse can do the test. The test involves a swab of the genitals, rectum or throat or a urine (pee) sample. Tell the doctor or nurse about all the different kinds of sex you are having so they can test all the right parts of your body.

It is a good idea to get tested for other sexually transmitted infections (STIs), including HIV, when you get tested for chlamydia. Other STIs can be passed on in the same way as chlamydia. Talk to your healthcare provider about how often you should test for chlamydia and other STIs.

If you are diagnosed with chlamydia, a public health staff person will talk to you about informing your sex partners that they might have been exposed to chlamydia and encouraging them to get tested. Your identity will not be revealed.

Get treated

Chlamydia can be cured with a single dose or a short course of antibiotics. If you are given a single dose to treat the infection, you should wait for seven days after taking it before having sex again. If you are given pills to take for seven days, you should wait until you have taken all the pills before having sex again. If you have a regular partner or partners, they should also be treated before you have sex with them.

Once you are cured, you cannot pass on chlamydia to your sex partners. But you can be infected again. Being treated for chlamydia does not protect you from getting chlamydia in the future.

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