

## Contact Tracing Guidelines for the Sexually Transmissible Diseases and Blood Borne Viruses

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**Summary** Document provides a framework for the process of contact tracing people at risk of infection with sexually transmissible diseases (STD's) and blood borne viruses (BBV's).

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**Applies to** Area Health Services/Chief Executive Governed Statutory Health Corporation, Board Governed Statutory Health Corporations, Affiliated Health Organisations, Community Health Centres, Dental Schools and Clinics, Divisions of General Practice, Environmental Health Officers of Local Councils, Government Medical Officers, NSW Ambulance Service, Private Hospitals and Day Procedure Centres, Private Nursing Homes, Public Health Units, Public Hospitals

**Distributed to** Public Health System, Community Health Centres, Dental Schools and Clinics, Divisions of General Practice, Environmental Health Officers of Local Councils, Government Medical Officers, Health Associations Unions, Health Professional Associations and Related Organisations, NSW Ambulance Service, Public Health Units, Public Hospitals, Private Hospitals and Day Procedure Centres, Private Nursing Homes, Tertiary Education Institutes

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### CONTACT TRACING GUIDELINES FOR THE SEXUALLY TRANSMISSIBLE DISEASES AND BLOOD BORNE VIRUSES

This Circular supersedes Circular 93/96 *Contact Tracing Guidelines for the Sexually Transmissible Diseases*.

#### 1 INTRODUCTION

This document provides a framework for the process of contact tracing people at risk of infection with sexually transmissible diseases (STDs) and blood borne viruses (BBVs).

The principles upon which the framework is based are:

- health care providers must take reasonable steps to ensure the appropriate follow up of contacts of people with major STDs/BBVs;
- only health care providers who have had adequate training should perform contact tracing. If a health care provider feels inadequately trained they should either refer to or seek advice from a specialist centre such as a Sexual Health Service or Public Health Unit;
- contact tracing should ideally be performed on a voluntary basis free from coercion and at all times in a manner that ensures the respect and dignity of both the index case and the contacts. The process should remain confidential, which includes ensuring the anonymity of the index case unless otherwise requested by the index case;
- ideally, contact tracing should occur with the cooperation of the index case. The key process is index case referral and follow-up in conjunction with appropriate, quality and culturally sensitive support services; and
- a balance needs to be struck between respecting rights, preserving confidentiality, protecting public health, meeting legal obligations and providing quality care for the patient/client and their contacts.

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## **2 GLOSSARY OF TERMS**

Anti-HAV	hepatitis A virus antibody
Anti-HBc	hepatitis B core antibody
Anti-HCV	hepatitis C virus antibody
Anti-HDV	hepatitis D virus antibody
BBV	blood borne virus
contact	in the case of STDs is defined as a person who has had sexual contact with the index case. For BBVs the term contact is defined as a person who has shared injecting equipment, been the recipient of a blood transfusion or had any other relevant blood exposure.
contact tracing	the process of identifying contacts of a person with an infectious disease in order to inform them of their exposure, assess the risk of transmission and if appropriate, provide screening and treatment. The transmission potential for STD and BBV varies between conditions and is based on the infectious period of the organism.
DNA	deoxyribonucleic acid
EIA	enzyme immunoassay
HBsAg	hepatitis B surface antigen
HCV	hepatitis C virus
HIV	human immunodeficiency virus
HPV	human papilloma virus
IgM	immunoglobulin of the M class – the first isotype to appear in serum following an immune response to new antigen.
Index case	term used to describe the original person diagnosed with the infection.
LGV	lymphogranuloma venereum
NAA	nucleic acid amplification assay
NGU	non-gonococcal urethritis
STD	sexually transmissible disease

### **3 PURPOSE OF CONTACT TRACING**

One of the main aims of contact tracing is to decrease the incidence of STDs and BBVs in the community by interrupting the transmission cycle of the condition. Prevention of infections through contact tracing however, is no substitute for prevention through effective targeted education.

Contact tracing also aims to:

- decrease disease sequelae through the early detection and treatment of STDs and BBVs; and
- provide information and education to effect behaviour change amongst people infected with or at risk of a STD or BBV.

### **4 DIAGNOSIS OF STD/BBV**

Contact tracing should not be undertaken unless an STD or BBV is clearly demonstrated on reasonable clinical and laboratory grounds (see Appendix 1). Expert advice should be sought when there is doubt as to the interpretation of test results or when those results are inconsistent with clinical findings. Contact tracing is particularly desirable for sexually transmissible and blood borne infections where there is a reasonable chance of serious consequences, and where contacts will benefit from prophylaxis, treatment and counselling on preventive measures. These include:

- chancroid;
- donovanosis;
- genital chlamydial infection and associated conditions such as cervicitis, acute epididymitis and non gonococcal urethritis;
- gonorrhoea;
- hepatitis A;
- hepatitis B;
- hepatitis C;
- HIV;
- lymphogranuloma venereum;
- pelvic inflammatory disease; and
- syphilis.

Only those contacts during the period of infectivity of each disease would be considered relevant (see Appendix 2). Definitions of case contacts for each STD and BBV are available from Public Health Units. Contact tracing in relation to acute hepatitis, hepatitis A, B and C must be done in collaboration with Public Health Units.

### **5 NOTIFICATION**

The Public Health Act 1991 requires doctors, hospital chief executive officers and laboratories to notify certain STDs and BBVs to Public Health Units as follows:

Disease	Medical Officers	Hospital CEO (or General Managers)	Laboratories
AIDS	X	X	
Acute viral hepatitis	X	X	
Chancroid			X
Chlamydia			X
Donovanosis			X
Gonorrhoea			X
Hepatitis A			X
Hepatitis B			X
Hepatitis C			X
Hepatitis D			X
HIV			X
LGV			X
Syphilis	X	X	X

See also Circular 97/92, *Notification of Infectious Diseases under the Public Health Act 1991*.

## 6 CONFIDENTIALITY

Balancing duty to warn, duty of care and duty of confidentiality is the key to effective contact tracing. In New South Wales, the framework for contact tracing is set out in section 17 of the Public Health Act 1991 and section 22 of the Health Administration Act 1982. These Acts include provisions for protection of confidentiality and for the management of situations where the index case either refuses to consent to contact tracing or is behaving in a manner which places the health of the public at risk. The circumstances where confidential information may be disclosed are:

- with the specific consent of the patient/client;
- in connection with the administration of the Public Health Act 1991 or another Act;
- when ordered by a court of law;
- where that person is believed to be behaving in a way that places the health of another person at risk (see Circular 97/93 *Management of people with HIV infection who risk infecting others*); and
- during the normal course of providing a health care service.

For more information on confidentiality refer to NSW Health Circulars:

- 98/100 *HIV and Confidentiality: A Guide to Legal Requirements*; and
- 90/126 *Confidentiality of Health Records*.

## 7 CONTACT TRACING PROCESS

### 7.1 Methods <sup>3</sup>

The contact tracing method is determined by considering the risk exposure, disease, societal views of the disease and the motivation level of the index case. Co-operation of the index case can be enhanced by providing assurance of confidentiality and an explanation of the reasons for contact tracing.

### **7.1.1 Index case referral**

This is the method whereby index cases personally notify contacts. The health care worker should advise the index case of which contacts need notifying and supply the index case with the relevant information to relay to contacts. Some institutions supply the index case with a written letter for contacts which includes details of the infection and appropriate treatment as well as a list of services that will provide management. If index case referral is used, then health care workers should follow up index cases to confirm that contacts have been notified. In cases where the index case has not notified contacts, the health care worker should provide further information and assistance with the process.

### **7.1.2 Provider referral**

This is the method where a health care provider notifies the contact on behalf of the index case. Provider referral may be performed by the primary carer or a secondary referral agency. This type of contact tracing can be instigated at the request of the index case or by suggestion of the health care provider. Ideally the index case should consent to the process. Contact can be made via telephone, written letter or personal visit. There are several advantages and disadvantages to each of these methods and they must be carefully reflected on prior to proceeding.

## **7.2 Special Cases**

### **7.2.1 Contact Tracing without Index Consent**

While all reasonable efforts should be made to obtain the consent of the index case for contact tracing, there may be exceptional cases where consent is consistently refused. While health care workers owe a statutory duty of confidentiality to patients/clients, this must be balanced against the duty to protect the health of the public and in that context, to notify others of their possible infection or risk of infection.

The decision on whether to conduct contact tracing without the consent of the index case needs to be made on a case by case basis. Relevant factors may be:

- Are the contacts traceable?
- Does the patient history reveal the likelihood of a *high* risk of transmitting infection?
- For what reason is the index case refusing to consent?
- What factors may lead to the index case agreeing to assist with contact tracing?

If a health care worker has reasonable grounds to believe that a person is behaving in such a way that the health of the public is at risk, then under clause 7(2) of the Public Health Regulation, the Director-General of NSW Health must be informed.

Contact tracing without the consent of the index case cannot occur without the prior authorisation of the Director General of NSW Health. The parameters for non-consensual contact tracing are set out in clause 10 of the Public Health Regulation. Under this clause, the Director General, NSW Department of Health or a delegate may notify a person who is believed to have been in contact with a person suffering from a specified medical

condition of measures to be taken (eg. diagnosis, treatment and prevention) to prevent further transmission of infection.

Clause 10 does not permit the disclosure of the name of the index case so health care workers must be careful not to reveal the identity of the index case. If the identity of the index case is obvious to the person being notified, then this is regarded as an unavoidable consequence of the contact tracing and the health care worker involved would not be in breach of the statutory patient confidentiality provisions.

In situations where authorisation has been given for contact tracing without the consent of the index case, it is appropriate for the index case to be informed of this and given a final opportunity to provide consent.

For further information on managing reluctant patients/clients see NSW Health Circular 97/93 *Management of people with HIV infection who risk infecting others* or the Commonwealth Department of Health and Family Services *National Contact Tracing Manual*.

### **7.2.2 Unknown or untraceable contacts**

Some index cases may have had numerous and/or anonymous contacts. It may not always be possible to contact all individuals at risk from exposure to the index case, particularly if the infection has a long latency period such as with HIV, but every reasonable effort should be made to advise contacts.

## **8 COUNSELLING**

Contact tracing should always include provision for adequate and supportive follow up of index cases and contacts. This should be planned in advance.

In general the attending medical officer is responsible for counselling and contact tracing. However, the medical officer may also request assistance from either the local Area specialist sexual health service or Public Health Unit.

The Public Health Act 1991 requires medical practitioners to provide the following information to persons with STD, including HIV:

- means of minimising the risk of infecting other people;
- public health implications of the condition;
- the need to inform sexual partners prior to penetrative sex acts and obtain their voluntary consent to the risk;
- diagnosis and prognosis; and
- treatment options.

For further information on counselling in regard to HIV see NSW Health Circular 92/20, *Guidelines Associated with HIV Antibody Testing*.

## 9 CHILD PROTECTION ISSUES

Obligations with regard to child protection are set out in NSW Health Circular 97/135 *Notification of suspected child abuse or neglect*.

**Further information on all aspects of contact tracing is also available from the specialist Sexual Health Service or Public Health Unit in your Area (see Appendix 3 for contact details).**

## **References**

1. Commonwealth Department of Health and Family Services. *Contact Tracing Manual*. 1998.
2. Chin J, Ed. *Control of Communicable Diseases Manual, 17<sup>th</sup> edition*. Washington; American Public Health Association. 2000.
3. Adapted from Commonwealth Department of Health and Family Services. *Contact Tracing Manual*. 1998.

Appendix 1: Definitive Disease Diagnosis Criteria for Contact Tracing Purposes

Individual condition	Suspected or Presumptive Diagnosis	Confirmed Diagnosis
Chancroid	NA	Isolation of Haemophilus ducreyi on specialised media
Chlamydia	NA	Demonstration of Chlamydia trachomatis from a clinical specimen by direct immunofluorescence with monoclonal antibody, EIA with blocking antibody, DNA probe, NAA or cell culture
Donovanosis	NA	Demonstration (in Wright or Giemsa stain) of Donovan bodies in tissue samples
Genital Herpes	Clinical diagnosis of herpes lesions	Demonstration of herpes simplex virus on culture, EIA or immunofluorescence Serology is of little assistance in diagnosis of herpes and contact tracing should not be instigated on serology results
Genital warts	Clinical diagnosis of genital lesions	NA Contact tracing should not be instigated on demonstration of HPV on cervical cytology
Gonorrhoea	Detection of intracellular gram negative intracellular diplococci in a urethral, endocervical or neonatal conjunctival smear. Caution should be exercised in interpreting microscopy as other Neisseria species appear identical. This method of detection is not reliable for pharyngeal specimens.	Isolation of Neisseria gonorrhoeae from a clinical specimen Positive NAA for N.gonorrhoeae
Hepatitis A	A clinical illness consistent with acute/chronic hepatitis	IgM anti-HAV positive
Hepatitis B	A clinical illness consistent with acute/chronic hepatitis	HBsAg positive
Hepatitis C	A clinical illness consistent with acute/chronic hepatitis	Anti-HCV positive
Hepatitis D	NA	HBsAg and/or anti-HBc positive and anti-HDV positive
HIV Infection	NA	HIV antibody positive confirmed by a NSW HIV Reference Laboratory
Lymphogranuloma Venereum	NA	Demonstration of Chlamydia trachomatis in fluid aspirated from a fluctuant bubo (by culture, immunofluorescence or NAA) and specific serology (LGV compliment fixation test)
Pelvic Inflammatory Disease	Clinical evidence of cervical motion tenderness and/or adnexal tenderness on bimanual examination	Laparoscopic demonstration of disease process
Syphilis	NA	Demonstration of Treponema pallidum in clinical specimens by darkfield fluorescent antibody, or equivalent microscopic methods from lesions, placenta, umbilical cord or autopsy material, or A clinically compatible case that has reactive serology And no past diagnosis or treatment of syphilis
Trichomoniasis	NA	Demonstration of trichomonads on wet film
Other Chlamydia associated conditions (eg. Cervicitis, NGU, acute epididymitis)	Clinical evidence of cervicitis, acute epididymitis, or urethritis.	For urethritis demonstration of greater than 10 polymorphs per field (minimum 5 fields) on gram stain of a urethral specimen.

## Appendix 2: Contact Tracing for Individual Conditions

Individual condition	Causative Organism	Incubation period	Mode of Transmission	Duration to Trace**	*Contact Tracing Priority ****
Chancroid	Haemophilus ducreyi	6 days to 2 weeks	By direct sexual contact with open lesions and pus from buboes. Non-sexual transmission is rare	2 weeks before ulcer appeared or since arrival from endemic area	High
Chlamydia	Chlamydia trachomatis	Poorly defined, 2 - 60 days in men although people can remain asymptomatic for years	Unprotected vaginal or anal intercourse Transmission via oral sex rare	According to symptoms or sexual history: usually up to 6 months prior to diagnosis.	High
Donovanosis	Calymmatobacterium granulomatis	Exact unknown - presumably weeks to months	Presumably by direct contact with lesions	Weeks to months according to sexual history	Medium
Genital herpes	Herpes simplex viruses types 1 and 2	2 - 14 days for primary infection however symptoms may not present for years	Direct sexual contact genital-genital, genital-anal and genital-oral	Depending on symptoms and history usually only current or most recent partners	Low
Genital warts	Human papillomaviruses	3 weeks to >12 months however many infections are asymptomatic	Usually by direct genital contact during sex Rarely transmitted via oral sex	Current partners only	Low
Gonorrhoea	Neisseria gonorrhoeae	2 - 14 days although people can remain asymptomatic for years	Contact with exudates from mucous membranes of infected persons, most commonly as a result of sexual activity, transmission via oral sex significant	According to sexual history, up to 6 months prior to diagnosis.	High
Hepatitis A	Hepatitis A virus	15 - 50 days	Person to person by the faecal oral route	Up to 4 weeks prior to the onset of symptoms.	High
Hepatitis B	Hepatitis B virus	30 - 180 days	Percutaneous and permucosal exposure to infective body fluids which include blood, saliva, semen and vaginal fluid	Up to 180 days prior to index developing symptoms and by sexual history or drug use if asymptomatic	High
Hepatitis C	Hepatitis C virus	Up to 9 months	Percutaneous exposure to blood Rarely sexually transmitted	Up to 180 days prior to index developing symptoms and by risk history if asymptomatic	Medium***
HIV Infection	Human Immunodeficiency viruses type 1 and type 2	1-12 weeks for primary infection	Percutaneous and permucosal exposure to infective body fluids which include blood, semen and vaginal fluid Oral sex transmission rare	1 - 12 weeks if primary illness As early as 1980 for infections of unknown duration or late stage disease	High
Lymphogranuloma venereum	Chlamydia trachomatis serovars L1-L3	3-30 days from primary lesion, if bubo is first manifestation 10-30 days	Direct contact with open lesions of infected person often during sexual contact	All sexual contacts since arrival from LGV endemic area (usually 30 days)	High
Pelvic inflammatory disease	Chlamydia trachomatis, Neisseria gonorrhoeae, Mycoplasma hominis & anaerobic & aerobic bacteria	Unknown, often several months	Sexually transmitted (gonorrhoea & chlamydia) by unprotected vaginal intercourse Less likely to be sexually transmitted in older women (>35 years)	For sexually transmissible infections according to sexual history: up to 6 months prior to diagnosis.	High in women <35 years
Syphilis	Treponema pallidum	Primary syphilis 9-90 days Secondary 30 - 150 days Tertiary 5 - 35 years	Direct contact with infectious exudates from lesions of skin and mucous membranes, body fluids and secretions (saliva, semen, blood, vaginal discharges) of infected persons during sexual contact	According to sexual history and clinical stage of infection	High
Trichomoniasis	Trichomonas vaginalis	4 - 20 days	By contact with vaginal and urethral discharges of infected people during sexual contact, contact with contaminated articles. Not transmitted by oral sex	Recent weeks prior to diagnosis.	Low
Other Chlamydia-associated conditions (eg. Cervicitis, NGU, acute epididymitis)	Most likely Chlamydia trachomatis	Unknown - people can remain asymptomatic for long periods of time	Unprotected vaginal or anal intercourse Transmission via oral sex rare Less likely to be sexually transmitted in older men (<35 years)	According to symptoms or sexual history: usually up to 6 months prior to diagnosis.	High in people aged <35 years

**Note:** The incubation periods are only of assistance to determine the infectious period of acutely symptomatic index cases. The duration of infectivity for cases detected when the index is asymptomatic will need to be assessed on an individual basis. For information on management of specific conditions see *National Management Guidelines for Sexually Transmissible Diseases and Genital Infections*, Venereology Society of Victoria, 1997.

\* The priority rating is generated by evaluating the potential benefit to the contact as well as the potential benefit for the public health of the community.

\*\*Some conditions may be infectious prior to the onset of signs /symptoms.

\*\*\* May vary depending on risk practices of index.

\*\*\*\* Contact tracing must occur with all STDs/BBVs where the contact tracing priority is medium or high. Where an STD/BBV has a low contact tracing priority, the tracing of contacts must be discussed with the index case.

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