

GUIDELINES

2015 European guidelines for the management of partners of persons with sexually transmitted infections

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Abstract

Background Partner management is the process of identifying the contacts of a person infected by a sexually transmitted infection (STI) and referral to a health care provider for appropriate management. It represents a public health activity.

Methods This guideline is produced by the IUSTI European Guideline Editorial Board and EDF Guideline Committee.

Results It provides recommendations concerning the infections that require partner management, the lookback periods for this STI and the main steps to follow for partner management (offering support to patients, notifying partners, identification of contacts). Partner management is voluntary and needs to be performed with respect to human rights, social, cultural and religious behaviours.

Conclusions In European countries, there are different approaches to the partner management; some common type of actions can enhance the fight against STI.

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Conflict of Interest

None declared.

Funding sources

None declared.

Definitions

–*Index case/index person.* person identified with a sexually transmitted infection (STI), who represents the starting point of partner management.

–*Contact.* a person who has been exposed to a sexually transmitted infection by having sexual contact (vaginal, oral, anal) with an infected person (the index case) during their incubation period.

–*Partner management/partner notification/contact tracing/partner referral.* the process of identifying the contacts of a person infected by an STI and referral to a health care provider for

appropriate management. It represents a public health activity that also serves to the benefit of individuals who are notified and offered treatment for STI.

–*Epidemiological treatment.* treatment of sexual contacts of a person infected by an STI in advance of confirmation by laboratory testing.

Objectives and aims of partner management^{1,2}

- To interrupt the chain of transmission for an STI.
- To prevent re-infection of the index patient – for curable STIs (curable STIs refer mainly to bacterial and parasite

- infections; viral infections are mainly considered to be incurable) (grade B, level IIa).³
- To identify people that have already been infected and to offer them early treatment in order:
 - to prevent complications (grade B, level III)⁴
 - to obtain total cure – for curable STIs
 - to reduce viral load and future spread of disease – for incurable viral STIs (especially HIV)

- To promote safer sexual behaviour in persons at risk of infection.

Partner management should be performed as part of prevention programmes together with strategies that help control the spread of STIs^{2,5} (grade B, level IIb).²

There is a wide difference in European countries regarding partner management, in terms of strategies and techniques applied.⁶ There are several socio-economic issues that lead to the diversity of strategies, such as: privacy and human rights, legislation, cultural factors, religious beliefs, health care systems.⁴ All partner management should be voluntary and observe the international/EU laws and human rights.

Partner management can be performed in various settings that deal with sexual health (e.g.: hospitals, clinics, primary care, youth services, community pharmacies, community-based testing centers)⁷ and in various disciplines of medicine (e.g. dermato-venereology, sexual health, primary care, gynaecology, infectious diseases).

Benefits for index case:

- Prevention of re-infection.
- Decreasing rate of future STI infection by appropriate counseling, advice and information

Benefits for contacts:

- Providing (early) treatment for infected contacts, including asymptomatic contacts.
- Preventing complications by offering early treatment.
- Screening for concomitant STIs and offering treatment.
- Decreasing rate of future STI infection by appropriate counseling, advice and information

Benefits for public health:

- Control of STI outbreaks.
- Reduction in the period of infectiveness leading to reduced onward transmission.
- Reduction in unsafe sexual behaviour in communities and populations at risk.
- There is little evidence for cost-effectiveness of partner management due to small number of studies, but early identification, treatment and prevention of complications in infected persons results in cost savings.³ (grade B, level III)³

Effectiveness of partner management should be evaluated regularly by monitoring the number of contacts identified, number

of contacts traced, number of contacts who tested positive for the infection and number of contacts treated.

Very few studies have assessed partner management and its effects on individual and community health. Outcomes of partner management need to be thoroughly evaluated by randomized controlled trials. Papers modelling *Chlamydia trachomatis* infection have demonstrated that partner management is reliable for case finding but not for reducing prevalence.⁸

Partner management is recommended and should be offered in the case of STI that are curable and/or have serious short and long-term implications for a person's health.

Infections that require partner management (alphabetical order)

Chancroid

Chlamydia trachomatis infection (including Lymphogranuloma venereum)

Donovanosis

Epididymo-orchitis

Gonorrhoea

Hepatitis A

Hepatitis B

Hepatitis C

HIV infection

Non-gonococcal urethritis

Pelvic inflammatory disease

Phthirus pubis infestation

Scabies

Syphilis

Trichomonas vaginalis infection

Formal partner management for genital warts is not required; however, appointment for sexual partners can be considered for the purposes of explanation and reassurance.

Genital infections with herpes simplex viruses types 1 and 2 usually do not require partner management as no significant benefits for contacts have been determined in terms of disease evolution and future infectiveness. Testing asymptomatic partners of index cases with genital herpes with type-specific serology, if available, can provide useful information about risks of transmission.¹

For information on diagnosis and treatment of specific diseases, please see IUSTI guidelines available at <http://www.iusti.org/regions/Europe/>.

Partner management

All contacts of an infected person, starting from the presumed time of infection for the index case, need to be informed about the possibility of infection.¹ However, partner management is voluntary and needs to be performed with respect to human rights, social, cultural and religious behaviours, therefore, in many cases, not all contacts can be identified, nor notified. Partner management requires dedicated and special trained staff (dermato-venereologists, nurses, health care professionals).

Table 1 Partner management lookback periods

Disease (alphabetical order)	Period to trace contacts (from onset of symptoms)	Epidemiological treatment
Chancroid	10 days	Yes
<i>Chlamydia trachomatis</i> infection (including Lymphgranuloma venereum)	6 months	Yes
Donovanosis (Granuloma inguinale)	Up to 1 year according to estimated time of infection	Yes
Epididymo-orchitis	6 months	Yes
Gonorrhoea	3 months	Yes
Hepatitis A	According to estimated time of infection or 2 weeks before the onset of jaundice	No. Consider testing and/or vaccination of sexual and household contacts.
Hepatitis B*	According to estimated time of infection or 2 weeks before the onset of jaundice	No. Consider testing and/or vaccination of sexual and household contacts.
Hepatitis C*	As far back as estimated time of infection if index case and/or contact is HIV positive (men who have sex with men only)	No
HIV†	3 months in recent infection or since last negative HIV test or guided by the sexual history if untested	Postexposure prophylaxis where indicated by national guidelines
Non-gonococcal urethritis	4 weeks	Yes
Pelvic inflammatory disease	6 months	Yes
<i>Phthirus pubis</i> infestation	3 months	Yes
Scabies	2 months	Yes
Syphilis	primary	3 months
	Secondary	6 months
	Early latent	2 years
	Late latent and tertiary	Up to 30 years
<i>Trichomonas vaginalis</i> infection	2 months	Yes

*Possible vertical transmission may require screening of children.

†Partner management should be offered at follow-up visits, if there are new sexual contacts who are either HIV negative or of unknown HIV status or if other STIs are detected.

Lookback periods

It is often difficult to determine the precise time of infection for the index case. Contacts have to be traced back in time according to type of infection, history and laboratory testing (Table 1).^{1,9,10}

In some situations, the index case history can reveal important clues for the lookback time frame: a previous negative test (e.g. in an STI clinic, by antenatal screening or on blood donation) or a likely exposure to STI given the sexual history and knowledge about local epidemiology (e.g. an MSM who only started having sex with other men at a defined moment in time or a heterosexual who gives a history of a single high-risk partner) or a good history of recent infection with HIV (as shown by a typical acute HIV (sero-conversion) illness or an HIV avidity test suggesting infection within the last 4–5 months).

Some STIs can also be vertically transmitted. It may be necessary to consider testing the mother if the person was born in a country, where antenatal testing for these infections was not reliable. Also, if the index patient is a woman with children, then it may be necessary to test the children for these infections unless

it can be shown that the woman was negative after the delivery of the child (or children).

Steps for partner management

Offering support and gaining trust

Besides offering appropriate treatment, the health professional (physician or nurse) must explain to the index patient the importance of identifying his/her contacts, who may be asymptomatic at the time of his/her diagnosis and the need of treatment to stop the onward transmission of the STI.⁵ The health professional must ensure the individual understands the risks of getting re-infected without proper treatment of his/her contacts.¹¹ To obtain relevant data, the index case must be willing to co-operate. The index case will be informed to abstain from sexual activities until he/she and all sexual partners have received treatment and are no longer infectious. The health professional must offer to the patient and to all sexual partners information on how to reduce future risk of acquiring and transmitting a STI (e.g. use of condoms) and also on the importance of follow-up and possible complications of the STI.⁹

Identification of contacts

The health professional (physician, nurse, epidemiologist) should obtain from the index patient the contact data of the individuals he/she has had sex with during the incubation period of the disease.² As many infections are asymptomatic then the precise time of infection can often not be established; a previous negative test for the infection may define the time period during which contact tracing needs to be carried out, so such information should be specifically sought. This includes prior antenatal testing or blood donation (e.g. testing for HIV and syphilis). Sometimes, it is impossible to find out data about all the contacts, but an effort needs to be made to obtain as much information as possible.

Data to be obtained:^{1,2,12}

- number of contacts
- names of contacts
- addresses, phone numbers and email addresses of contacts
- insights into sexual networks
- explicit details about relationship with contacts, sexual practices, use of condoms.

Principles^{1,2}

The health professional:

- must assure the index case of confidentiality (but also explain that there may be certain limitations of confidentiality, depending on national law and policy, e.g. if evidence emerges of child sexual abuse)
- must show empathy
- must be a good listener and encourage dialogue
- must be flexible in approach
- must ask open questions
- must not imply judgment.

The index case:

- will identify his/her contacts voluntarily and without coercion
- can decline to co-operate.

In cases where an index case is initially uncooperative, further efforts by the same, or a different health care worker, are sometimes productive. The most frequent reasons why an index case refuses to identify his/her contacts are: timidity, fear of loss of confidentiality, patient not accepting or not being reconciled with the diagnosis, patient unaware of consequences for contacts. Index patients will usually agree to identify contacts if they are correctly counselled and informed by the practitioner or health care worker about the consequences of STIs (including the risk of re-infection), if they are allowed enough time to reconcile with the diagnosis (more than one interview with the practitioner or health care worker could be needed), if they are offered assurance that notification of contacts will not break confidentiality.

The health professional will have to break the confidentiality in the case of illegal findings (e.g. abuse of children) or if a partner is judged as being at risk of serious disease as a result of non-disclosure. Identification of contacts should not be a

prerequisite for providing appropriate medical care for the index case.

Notifying partners

When choosing the strategy of delivering information to the partners the index case should be offered the possibility to choose between the following options:²

- information delivered by the index case
- information delivered by a health professional

Information delivered by the index case The index case takes responsibility of informing his/her contacts (*patient referral*).

The health professional (physician, nurse, epidemiologist, health care worker trained to conduct partner management) must provide the individual with the information that will be transmitted to the contact:

- name of the infection
- possible infection of the contact
- need of immediate treatment and referral to a health care provider
- risk of complications
- need for follow-up
- future sexual practices
- future risk of re-infection or transmission

The index patient should be offered a letter (or card) containing information his/her contacts need.¹

Simple patient referral represents the spoken advice from the health care personnel about the need to treat the contacts of the index case.

Enhanced patient referral defines a group of strategies that can be used by health care personnel to increase rates of contacts being informed by the index.¹³ Among these strategies, the following can be cited: written information (leaflets, booklets), videos with disease specific educational material, Internet links to websites dealing support for STI patients, reminders by telephone, Internet or other means. In some cases, a trained professional can rehearse the notification with the index patient. Counselling offered to the index patient, appropriate education and information has been proven to increase the number of contacts presenting for screening and treatment.¹³ There is no consistent evidence of superiority in treatment of contacts for any of the various strategies of enhanced patient referral.⁸

For curable STIs, re-infection can be reduced with faster times for contact treatment.⁸ This is the rationale why, according to national policies, in some countries, the index person may also be provided with appropriate treatment or prescriptions to be given to the contact,⁵ without the need of the contact to present for a medical examination. This is called expedited partner therapy.¹³ However, it does not exclude referral to a specialist for appropriate testing. Expedited partner therapy proved to be more successful in decreasing re-infection of index patients with curable STIs such as chlamydia, gonorrhoea and non-gonococcal

urethritis, when compared with simple patient referral.¹³ However, re-infection rates for chlamydia are higher than for other STIs. Expedited partner therapy can lead to more contacts being treated than with simple patient referral.¹³

Enhanced patient referral and expedited partner therapy are reported to be similar in terms of re-infection of the index patient.¹³ Some other countries do not provide treatment for contacts through the index person, as this might contribute to increasing resistance to therapy or because it is not approved by professional regulatory bodies.

In European countries, where partner management is required by law, the index case should sign a declaration in front of the health professional that he/she will notify the contact/contacts (see Appendix 1 for example document).

In some countries, the index patient is allowed a certain amount of time to inform his partners (according to either legislation or agreement between the health care worker and the index case). Afterwards, the health care professional can enquire whether the contacts have been informed. If not, he can proceed to notification.² This is called *contract referral*.

Information delivered by a health professional When the index case does not want to take responsibility to inform his/her contacts or does not want his identity to be revealed to his/her contacts, a health care professional could inform the identified partner(s) directly; this could be done by telephone, SMS, email or letter (see Appendix 2, for example communication). This is called *provider referral*. Its implementation is more expensive for the health care system than is patient referral.

The health professional who informs the contact can be a physician, a nurse, an epidemiologist or a health care worker trained to conduct partner management.^{1,2}

Provider referral compared with patient referral results in more partners presenting to the health professional to be diagnosed and, if necessary, treated¹³

There are various means of informing the contacts:

- by telephone
- by letter, email or text
- by visit to the partner's home
- by notification sent to the partner's general practitioner (see Appendix 3, for example document).

The following information needs to be conveyed:

- sexual contact with an infected person
- name of the infection
- possible infection of the contact
- need of immediate treatment and referral to a health care provider
- risk of complications
- need for follow-up.

The importance of appropriate testing and treatment should be emphasised.

There is no good evidence for the superiority of any of these strategies to enhance partner management.¹³ Provider referral and contract referral are more expensive, but have proved to identify more contacts than patient referral in the case of HIV patients.¹³

Management of contacts

A contact/partner should be appropriately tested for the infection he/she has been exposed to. If infection is identified, the treatment should be started immediately. In some cases of STI, when a person is a known contact of infection, practitioners decide to give epidemiological treatment which is therapy administered in advance of laboratory confirmation of the infection (grade C, level IV). (see Table 1 and European guidelines for Anogenital warts, Chancroid, *Chlamydia trachomatis* infection, Lymphogranuloma venereum, Donovanosis, Epididymo-orchitis, Gonorrhoea, HIV, Non-specific urethritis (non-chlamydial, non-gonococcal), Pelvic inflammatory disease, Syphilis, *Trichomonas vaginalis* infection – available at: <http://www.iusti.org/regions/Europe/euroguidelines.htm>).

According to history and risk behaviours, the contact should be tested for other types of sexually transmitted infections^{4,9,11}(grade A, level 1).⁴ A further partner management process should be started for the secondary contacts (i.e. additional partners of the contacts other than the original index case) if infection is confirmed in them. Immediate treatment should be considered if a contact cannot attend regular visits for clinical examination and serological testing.⁹

Notification of contacts to authorities

In some European countries, some STI (e.g. syphilis, gonorrhoea, HIV infection) have to be notified to the health authorities, therefore, a report of the index case and, if required by the national law, report of contacts should be filled in.

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Composition of European STI Guidelines Editorial Board

Refer to document at: <http://www.iusti.org/regions/Europe/euroguidelines.htm>

List of contributing organizations

Refer to document at: <http://www.iusti.org/regions/Europe/euroguidelines.htm>

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Appendix

Levels of evidence

Ia Evidence obtained from meta-analysis of randomized controlled trials.

Ib Evidence obtained from at least one randomized controlled trial.

IIa Evidence obtained from at least one well-designed study without randomization.

IIb Evidence obtained from at least one other type of well-designed quasi-experimental study.

III Evidence obtained from well-designed non-experimental descriptive studies such as comparative studies, correlation studies, and case-control studies.

IV Evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities.

Grading of recommendations

A (Evidence levels Ia, Ib): Requires at least one randomized control trial as part of the body of literature of overall good quality and consistency addressing the specific recommendation.

B (Evidence levels IIa, IIb, III): Requires availability of well-conducted clinical studies but no randomized clinical trials on the topic of recommendation.

C (Evidence IV): Requires evidence from expert committee reports or opinions and/or clinical experience of respected authorities. Indicates absence of directly applicable studies of good quality.

Search strategy

Resources

PubMed (<http://www.ncbi.nlm.nih.gov/pubmed>)

Biomedical Reference Collection (via EBSCO Host - <http://web.ebscohost.com/ehost/>)

Medline (via EBSCO Host - <http://web.ebscohost.com/ehost/>)

Keywords

partner management	Combined with	Anogenital warts
partner notification	AND search	Chancroid
contact tracing		Chlamydia trachomatis
index case		Lymphgranuloma
index person		venereum
notifying partners		Donovanosis
epidemiological		Granuloma Inguinale
treatment		Epididymo-orchitis
counselling		Gonorrhoea
STI contacts tracing		Hepatitis A
STI control		Hepatitis B
lookback periods		Hepatitis C
provider referral		HIV
prevention		Non-specific urethritis
effectiveness		Pelvic inflammatory disease
		Phthirius pubis infestation
		Scabies
		Syphilis
		Trichomonas vaginalis

NOTES

Searches were performed in December 2013.

Appendix 1

Example of patient consent regarding partner notification for European Countries where partner notification is required by law.

For documents required by law in your country (that could stand up in court) see National Guidelines for Management of STIs.

Patient consent and declaration regarding partner notification for sexually transmitted infections

Date.....

I [name of patient] have been informed by [name of health care professional] that I have been diagnosed with a sexually transmitted infection I understand that I have to undergo appropriate treatment in order to treat the infection and avoid future complications.

I understand the importance of notifying all my sexual partners from the past. ... months [appropriate time depending on type of disease and presumed time of infection see Table 1] that they have potentially been exposed to the above named infection. I declare that I will proceed to inform them in the shortest time possible, refer them to an appropriate health care professional in order to be tested and receive treatment.

I have been warned about future risk of reinfection or infection transmission if I or my partners do not complete the appropriate treatment.

[Patient]
[Signature]

Appendix 2

Sample letter to be sent to contacts. For documents required by law in your country see national guidelines for management of STIs.

Date.....

Dear [name of contact],

One of your sexual partners has been diagnosed with [name of sexually transmitted infection], which is a sexually transmitted infection. There is a high chance that you may have been infected, even if you do not have any symptoms at present.

You need to attend your health care provider, in order to be tested and receive appropriate treatment.

Left untreated, the disease can lead to severe complications.

If you are at risk, you may be tested for other sexual transmitted infections

If you are infected, you can transmit this to your sexual partners. Please remember not to have sexual intercourse until you have completed treatment. Please bear in mind that, if you are tested positive, all your sexual partners of the previous 6 months have to be informed, tested and treated, otherwise, you can pass the infection from one to another.

After completing the treatment, you are not protected against being re-infected. Please remember to always use a condom when having sexual intercourse, to prevent reinfection of acquisition of other sexually transmitted infections.

Sincerely,
[Health care professional]
[Signature]

Appendix 3

Sample letter to be sent to general practitioners. For documents required by law in your country see national guidelines for management of STIs.

Date.....

Dear Colleague,

One of your patients, [patient name], has been identified as sexual contact of a person that tested positive for [name of infection], which is a sexually transmitted infection. As a sexual contact, there is a high chance that he/she also got infected, even if he/she is asymptomatic at present.

Please notify your patient in the shortest time possible and refer him/her for appropriate testing and treatment. Left untreated, the disease can lead to severe complications.

If he/she is infected, he/she can transmit the disease to his/her sexual partners. Please advise your patient not to have sexual intercourse until completion of treatment.

Sincerely,
[Health care professional]
[Signature]