



Centers for Disease Control and Prevention National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention

This pamphlet is meant for u	use by Disease Interventio	n Specialists and others o	conducting partner servi	ces activities.

High Priority Index Patients for Partner Services

- Pregnant women
- Male index patients known to have pregnant female partners
- Index patients suspected of (or known to be) engaging in behaviors that significantly increase the risk for transmission to multiple other persons
- Persons co-infected with HIV and one or more other STDs
- Persons with recurrent STDs
- Persons who present with clinical signs or symptoms suggestive of infection
- Cases from core areas for gonorrhea, prioritizing cases from core areas may offer an opportunity to reduce transmission at the community level
- Persons with high HIV viral load (e.g., >50,000 copies RNA/mL) high serum viral load is associated with increased risk for HIV transmission
- Persons with evidence of acute infection or recent infection

Effective Case Management Tips

• Conduct pre/post interview analysis

• Take notes and review them with the VCA

• Write up case quickly while information is still fresh

• Review VCA regularly

• Respond to supervisor comments

• Review case daily

• Maintain good organization

• Debrief case (peers, supervisor, etc.)

• Re-interview patient as soon as possible



DISEASE INTERVIEW PERIODS*

Chlamydial infection

Symptomatic 60 days before onset of symptoms through date of treatment

Asymptomatic . . . 60 days before date of specimen collection (through date of treatment if patient was not treated

at time specimen was collected)

Gonorrhea

Symptomatic . . . 60 days before onset of symptoms through date of treatment

Asymptomatic . . . 60 days before date of specimen collection (through date of treatment if patient was not treated

at time specimen was collected)

Interview Periods* for Partner Services Programs for Chlamydial Infection, Gonorrhea, Human Immunodeficiency Virus (HIV) Infection or Acquired Immunodeficiency Syndrome (AIDS), and Syphilis

Interview Periods

^{*} The time interval for which an index patient is asked to recall sex or drug-injection partners.

Interview Periods

Interview Periods* for Partner Services Programs for Chlamydial Infection, Gonorrhea, Human Immunodeficiency Virus (HIV) Infection or Acquired Immunodeficiency Syndrome (AIDS), and Syphilis

HIV infection, AIDS

1 or 2 years before date of first positive HIV test through date of interview; might be mitigated by evidence of recent infection or availability of verified previous negative test results. All current or former spouses during 10 years before diagnosis.

Syphilis †

Primary Syphilis. 90 days prior to date of onset of primary lesion** through the date of treatment.

Secondary Syphilis 6.5 months prior to date of onset of secondary symptoms** through the date of treatment.

Early Latent Syphilis[†] 1 year prior to start of treatment.

^{*} The time interval for which an index patient is asked to recall sex or drug-injection partners. Interview periods may be modified if a history of symptoms, a negative test result, or incidental treatment are documented. If symptom history is questionable, a maximum interview period should be used. If the patient claims no partners during the interview period, then the most recent partner before the interview period should be elicited and notified.

[†] Many syphilis cases cannot be staged until after the case is closed. When the stage of syphilis is undetermined at the time of interview, a one-year interview period should be used.

^{**} If the onset of primary or secondary symptoms is unknown, or questionable, the maximum symptom duration (5 weeks for primary and 6 weeks for secondary) should be used to calculate.

Interview Format

I. Introduction

State purpose/role Assure confidentiality

II. Patient Assessment

Resolve patient concerns Obtain social history Obtain medical history Ensure disease comprehension

III. Disease Intervention

Elicit partner information (foundation, name, exposure, locating, clustering, description) Develop risk reduction interventions

IV. Conclusion

Re-state commitments Prepare for RI Wrap up and summarize



Effective Interviewing Techniques

- Be professional
- State purpose of interview
- Explain and emphasize confidentiality
- Establish rapport
- Address concerns
- Observe verbal and non-verbal body language
- Display STD/HIV pictures to educate and motivate
- Identify persons with symptoms
- Identify persons exposed to known cases
- Identify screening opportunities
- Identify pregnant females
- Utilize effective listening skills



Example Questions to Ask When Contacting Health Providers

- What is the patient's current locating information? Emergency locating information?
- What *prompted* the visit?
- What is the result of pregnancy testing?
- What other STD/HIV/HEP/TB tests were conducted? (previous/current)
- What symptoms or history of symptoms were observed/noted?
- What medication(s) was prescribed?
- How many sexual and/or needle sharing partners have been identified? Treated?
- Has the patient been treated according to the most recent treatment guidelines? Date of guidelines?
- Has the patient been referred for follow-up care and to what facility?
- Ask if health provider has most recent treatment guidelines?
- Is the patient married? If so, has the spouse been notified and tested?

Sample Interview Questions

- What brought you into the clinic today?
- What did the doctor/nurse/clinician tell you?
- Where have you traveled in the last (interview period)?
- When was the last time you were treated for an STD?
- When was the last time you had a blood test?
- If female patient:
 - *Have you been pregnant in the last year?
 - *When was the last time you had a pelvic exam?
 - *When was the last time you had a pap test?
 - *What were the results?
- Some drugs like cocaine or heroin can affect test results. When was the last time you used drugs like these? What other drugs do you use? How often do you use?
- How many sex and/or needle-sharing partners have you had since (interview period)? How many were men... women...transgender?

- How many did you meet over the Internet?
- Who on your "buddy list" should be tested?
- Who do you know in the community...friends...at-risk populations...pregnant females that could benefit from a free test/exam?
- What have you heard you can do to lower your chances of contracting STD/HIV?
- What steps are you willing to try to further lower your chance of getting or transmitting HIV or STDs?
- What can interfere with you taking these steps?
- When are you to return for follow-up? Medication?
- I will be contacting you in a couple of days. When is the best time to reach you? Where is the best place to contact you?

Syphilis Ghosting Hierarchy

- An Existing Primary Lesion
- A *Historical* Primary Lesion
- A Ghosted Primary Lesion
- A Secondary Symptom

Ghosting a Source

Begin at the inoculation point of the patient suspected of being a spread. Make this point the center of the partner's ghosted lesion. The ghosted lesion should begin and end 1 ½ weeks on either side of the center point to give a total 3-week ghosted lesion.

Ghosting a Spread

Begin at the center of the lesion suspected to be the source of infection. Equate this to the inoculation point for the patient for whom the spread ghost is being developed. The onset of the ghosted lesion should be drawn 3-weeks after the ghosted inoculation point, and the ghosted lesion should have a 3-week duration.

Interview Periods: Syphilis

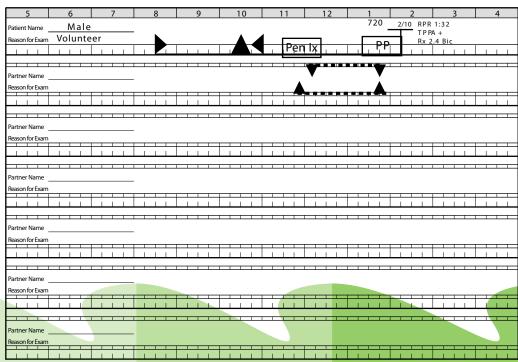
- Primary: 90 days before the onset of symptoms
- Secondary: 6 ½ months before onset of secondary symptoms
- Early Latent: 1 year prior to start of treatment

Visual Case Analysis Tips

Plot the Facts

- 1. Months of the year
- 2. Name of the patient
- 3. Reason for the exam
- 4. Medical history
- 5. Symptoms
- 6. Critical period
- 7. Exposure dates

VCA Chart



Hepatitis

Symptoms of Acute Infection: Symptoms of all types of viral hepatitis are similar, however not all newly infected persons show signs of illness. If symptoms do appear they can include one or more of the following: Fever; Fatigue; Loss of appetite; Nausea; Vomiting; Abdominal pain; Gray colored bowel movements; Joint pain; and Jaundice.

Hepatitis A Virus (HAV) Infection:

Routes of transmission: Ingestion of fecal matter, even in microscopic amounts, from: Close person-to-person contact with an infected person; Sexual contact with an infected person; and Ingestion of contaminated food or drinks.

Recommended treatment: No medication available. Best addressed through supportive treatment.

Persons at risk: Household members, sex contacts, or caregivers of infected persons; Men who have sex with men; Users of certain illegal drugs (injection and non-injection); Persons with clotting-factor disorders; and Travelers to regions where HAV is common.

Prevention: Vaccination for at-risk individuals including MSM and IDU.

Hepatitis

Hepatitis B Virus (HBV) Infection:

Routes of transmission: Contact with infectious blood, semen, and other body fluids, such as through: Birth from an infected mother; Sexual contact with an infected person; Sharing of contaminated needles, syringes or other injection drug equipment; and Needlesticks or other sharp instrument injuries.

Recommended treatment:

Acute: No medication available; best addressed through supportive treatment.

Chronic: Regular monitoring for signs of liver disease progression; some patients are treated with antiviral drugs.

Persons at risk: Sex partners of infected persons; Persons with multiple sex partners; Persons with a sexually transmitted disease; Men who have sex with men; Injection drug users; Household contacts of infected persons; Healthcare and public safety workers exposed to blood on the job; Hemodialysis patients; Residents and staff of facilities for developmentally disabled persons; and Travelers to regions with HBsAg prevalence of $\geq 2\%$; and Infants born to infected mothers.

Prevention: Vaccination for at-risk individuals including MSM, IDU, high-risk heterosexuals (HRHs), STD patients, incarcerated persons, and adults with diabetes aged 19 - 59; people aged > 60 years at the discretion of the treating clinician.

Hepatitis C Virus (HCV) Infection:

Routes of transmission: Contact with blood of an infected person, primarily through: Sharing of contaminated needles, syringes, or other injection drug equipment. Less commonly through: sexual contact; birth from an infected mother; and needlestick or other sharp instrument injuries.

Recommended treatment:

Acute: Antivirals and supportive treatment.

Chronic: Regular monitoring for signs of liver disease progression; some patients are treated with antiviral drugs. New treatments are now available.

Persons at risk: Current or former injection drug users; Recipients of clotting factor concentrates before 1987; Recipients of blood transfusions or donated organs before July 1992; Long-term hemodialysis patients; Persons with known exposures to HCV (e.g., healthcare workers after needlesticks, recipients of blood or organs from donor who later tested positive for HCV); HIV-infected persons; and children born to infected mothers (do not test before age 18 mos.); and adults born 1945-1965.

Prevention: Avoid risky behaviors. Screen IDU and others at risk for HCV infection.

Tuberculosis

Tuberculosis (TB) is a disease caused by germs that are spread from person to person through the air. It usually affects the lungs, but it can also affect other parts of the body, such as the brain, the kidneys, or the spine. Persons with TB can die if they do not get treatment. TB is spread when a person with TB disease of the lungs or throat coughs, sneezes, speaks, or sings. These germs can stay in the air for several hours, depending on the environment.

Persons with active TB disease are considered infectious and may spread TB bacteria to others.

Active TB Disease:

- A skin test or blood test result indicating TB infection
- May have an abnormal chest x-ray, or positive sputum smear or culture
- Has active TB bacteria in his/her body
- Usually feels sick and may have symptoms such as coughing, fever, and weight loss
- May spread TB bacteria to others
- Needs treatment to cure active TB disease

Recommended treatment: Must be treated with several drugs for 6 to 12 months.

Tuberculosis

Latent TB Infection:

- Usually has a skin test or blood test result indicating TB infection
- Usually has a normal chest x-ray and a negative sputum test
- Has TB bacteria in his/her body that are alive, but inactive
- Does not feel sick
- Cannot spread TB bacteria to others
- Needs treatment for latent TB infection to prevent TB disease; however, if exposed and infected by a person with multidrug-resistant TB (MDR TB) or extensively drug-resistant TB (XDR TB), preventive treatment may not be an option

Recommended treatment: Several treatment options are now available to treat latent TB infection and prevent development of TB disease.

Chlamydia

Signs and Symptoms

<u>Adolescent and Adult Women:</u> Most are asymptomatic, may have abnormal vaginal discharge, pain or bleeding during intercourse, bleeding between menstrual periods, pain or burning sensation when urinating, urinary frequency, rectal pain or discharge, lower abdominal pain, lower back pain, nausea, or fever.

<u>Adolescent and Adult Men:</u> Most are asymptomatic, may have urethritis, urethral discharge, pain or burning sensation when urinating, or rectal pain or discharge.

Recommended Treatment Regimens

Adolescents and Adults: Azithromycin 1g orally in a single dose OR doxycycline 100 mg orally twice daily for 7 days.

<u>Pregnancy:</u> Azithromycin 1 g orally in a single dose **OR** amoxicillin 500 mg orally 3 times a day for 7 days.

HIV Infection: Patients who have chlamydial infection and also are infected with HIV should receive the same treatment as those who are HIV negative.

See STD Treatment Guidelines for Chlamydial Infections Among Infants and Children.

Gonorrhea

Signs and Symptoms

<u>Adolescent and Adult Men:</u> A burning sensation when urinating, or a white, yellow, or green discharge from the penis, or painful or swollen testicles. Rectal discharge, anal itching, soreness, bleeding, or painful bowel soreness and bleeding; most pharyngeal infections are asymptomatic.

<u>Adolescent and Adult Women:</u> A painful or burning sensation when urinating, increased vaginal discharge, or vaginal bleeding between periods, rectal discharge, anal itching, soreness, bleeding, or painful bowel soreness and bleeding; most pharyngeal infections are asymptomatic.

Recommended Treatment Regimens:

<u>Uncomplicated Infections of the Cervix, Urethra & Rectum:</u> Ceftriaxone 250 mg IM in a single dose OR, IF NOT AN OPTION cefixime 400 mg orally in a single dose PLUS azithromycin 1 g orally in a single dose OR doxycycline 100 mg twice daily for 7 days.*

<u>Uncomplicated Infections of the Pharynx:</u> Ceftriaxone 250 mg IM in a single dose PLUS azithromycin 1 g orally in a single dose OR doxycycline 100 mg orally twice daily* for 7 days, PLUS Test-of-cure in 1 week.

<u>Pregnancy:</u> As with other patients, pregnant women who have gonococcal infection should be treated with a recommended or alternative cephalosporin. Because spectinomycin is not available in the US, azithromycin 2 g orally can be considered for women who cannot tolerate a cephalosporin. Either amoxicillin or azithromycin is recommended for treatment of presumptive or diagnosed chlamydia.

^{*} Because of the high prevalence of tetracycline resistance among Gonococcal Isolate Surveillance Project isolates, particularly those with elevated minimum inhibitory concentrations to cefixime, the use of azithromycin as the second antimicrobial is preferred.

Gonorrhea

Recommended Treatment Regimens (continued)

<u>HIV Infection:</u> Patients who have gonococcal infection and also are infected with HIV should receive the same treatment regimen as those who are HIV negative.

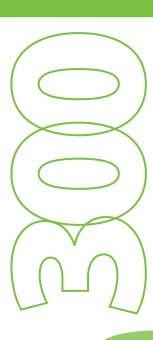
<u>Dual Therapy for Gonococcal and Chlamydial Infections:</u> Patients who have gonococcal infection frequently are coinfected with *C. trachomatis*; it is recommended that patients treated for gonococcal infection also be treated routinely with a regimen effective against uncomplicated genital chlamydial infection.

Disseminated Gonococcal Infection (DGI):

Signs and symptoms: Petechial or pustular acral skin lesions, asymmetrical arthralgia, tenosynovitis, or septic arthritis.

Recommended treatment: Ceftriaxone 1 g IM or IV every 24 hours.

See STD Treatment Guidelines for Gonococcal Infections Among Infants and Children.



Syphilis

Primary A single sore (called a chancre) or multiple sores can appear. The chancre is

usually a firm, round, small, and painless ulcer or chancre at the infection site.

Secondary Rash on one or more areas of the body can appear. The rash may appear as

rough, red, or reddish brown spots both on the palms of the hands and the bottoms of the feet. Fever, swollen lymph glands, sore throat, patchy hair loss,

headaches, weight loss, muscle aches, and fatigue are other symptoms.

Latent None. A positive serologic test for syphilis is the only evidence of infection

during latent syphilis. Early latent is syphilis infection of less than one year.

Late latent is syphilis infection of one year or longer.

Tertiary Asymptomatic, cardiovascular manifestations, or gummatous lesions.

Neurosyphilis Cognitive dysfunction, motor or sensory deficits, ophthalmic or auditory

symptoms, cranial nerve palsies, and symptoms or signs of meningitis.



Syphilis (continued)

Recommended Treatment Regimens

Primary, Secondary, and Early Latent: Benzathine penicillin G 2.4 million units IM in a single dose.

<u>Late Latent or Unknown Duration:</u> Benzathine penicillin G 7.2 million units total, administered as 3 doses of 2.4 million units IM each at 1-week intervals.

Tertiary: Benzathine penicillin G 7.2 million units total, administered as 3 doses of 2.4 million units IM each at 1-week intervals.

Neurosyphilis: Aqueous crystalline penicillin G 18-24 million units per day, administered as 3-4 million units IV every 4 hours or continuous infusion, for 10-14 days.

<u>Pregnancy:</u> Pregnant women should be treated with the penicillin regimen appropriate for their stage of infection.

HIV Infection: HIV infected persons with syphilis should be treated according to the stage-specific recommendations for HIV-negative persons.

See STD Treatment Guidelines for Recommended Syphilis Regimens for Infants and Children.



Human Immunodeficiency Virus (HIV)

HIV is the human immunodeficiency virus. It is the virus that can lead to acquired immune deficiency syndrome, or AIDS.

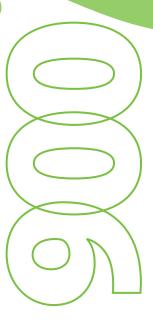
HIV is transmitted from an infected person via unprotected sexual contact, the sharing of needles, syringes, or works; from mother to child during the birth process, or through breast feeding; transfusion of blood or blood products; and the transplantation of tissues and organs. Blood (or secretions and tissues contaminated by blood) is the major means of transmission.

Signs and Symptoms

Within a few weeks of being infected with HIV, some people develop fever, fatigue, and generalized body rash. Other signs and symptoms include headache, swollen lymph glands, sore throat, feeling achy, nausea, vomiting, diarrhea and night sweats.

Treatment

A variety of drug combinations may be used and will vary by medical care center.



Recommended Screening for HIV + Patients

Recommended screenings for HIV + Patients*

Screen for:

- 1. Hepatitis B, C
- 2. Tuberculosis
- 3. Chlamydia[†], gonorrhea[†], and syphilis
- 4. Screen for pregnancy, cervical cancer screening (Pap test) and trichomoniasis in females

Vaccinate against:

1. HBV and HAV

*Please review IDSA HIV Primary Care Guidelines for additional information.
† Including rectal and/or pharyngeal screening when appropriate



Conducting STD/HIV Partner Notification

- 1. Verify you have the right person and identify yourself
- 2. Ensure privacy
- 3. Provide notification
 - Ensure the patient knows the basics of the disease
 - Provide the patient with private/public options for receiving exam/treatment
 - Motivate him or her to act immediately
- 4. Draw blood to test for STDs and HIV. Depending on local protocols, a rapid antibody test might be used to test for HIV. Finger-stick whole blood specimens are preferred unless it is not feasible to obtain blood specimens.
- 5. Make/verify referrals

Ways to Confirm Locating Information

- Examine names on mailbox
- Speak with other people encountered at the address
- Inquire at local post office
- Inquire at local fire department



Safety Tips for the Field

- Plan stops before you go.
- Let supervisors and co-workers know your planned route.
- Know the neighborhood. Know drug and gang hangouts.
- Park your car so that you can leave quickly.
- Never leave keys in your car.
- When in your car and asking questions of strangers, roll your window down only a few inches.
- Don't wear expensive jewelry or carry expensive items.
- Don't try to blend in to a neighborhood. Promote the feeling that you are there to help someone.
- Be aware of large numbers of people congregating in an area.

- Avoid arguments.
- Report any incidents to your supervisor.
- Check for signs of animals nearby (food bowl, toys, chain, path, etc.).
- Whistle or rattle fence to check for animals.
- Always check out the house or building before you enter. Plan an escape route.
- Go to high risk areas in pairs and during the time of day there is less activity.

Investigative Resources to Check Before Closing "H" Dispos

- Public information sources
- National Electronic Disease Surveillance System (NEDSS) records
- Patient Tracking and Billing Management Information System (PTBMIS) records
- Department of Motor Vehicle (DMV) records
- White pages, Yellow pages
- Social networking websites (MySpace, Facebook, etc.)
- Sexually Transmitted Disease Management Information System (STDMIS) records

- State Immunization Registry
- Third Parties (housing authority, apartment manager, friends, etc.)
- High schools (if age appropriate)
- U.S. Postal Service
- Local police
- Old health department records
- College alumni directories
- "Usual hang out spots"
- Woman, Infants and Children (WIC)/other agencies
- Google maps
- GPS

Investigative Internet Sources

Below are some examples of currently used social networking sites, shopping sites, professional networking sites, microblogs, to use as a resource when conducting internet investigations. Social networking sites and names may change over time. Please note more than one site may be used to collect important information.

- · www.anywho.com
- www.zabasearch.com
- www.theultimates.com
- www.google.com
- www.whitepages.com
- www.lexisnexis.com
- www.spokeo.com
- www.pipl.com
- www.people.Yahoo.com
- www.Snitch.name
- www.peekyou.com

- www.123People.com
- www.peopleSmart.com
- www.tnid.us (phone only)
- www.Linkedin.com
- · www.twitter.com
- www.google.com/profiles
- www.Bing.com
- www.Yahoo.com
- www.Dogpile.com
- www.Ask.com
- www.Metacrawler.com



Referrals

	Name of Facility	Phone Number
Hepatitis		
Child Protective Services		
Domestic Violence		
Drug/Alcohol Treatment		
Family Counseling		
Family Planning Clinics		
HIV Testing Sites		
Immunization		
Language Assistance		
Maternal and Child Health		
Mental Health		
Prenatal Clinics		
Rape Crisis Center		
STD Clinics		
Temporary Housing		
Tuberculosis Clinics		
Community- Based Organizations		



For additional information: www.cdc.gov/nchhstp

www.stdhivpreventiontraining.org

www.cdc.gov/std/training

www.cdc.gov/std/treatment/2010/default.htm

www.cdc.gov/hepatitis

www.knowhepatitis.org

www.cid.oxfordjournals.org/content/49/5/651.full.pdf+html

For more information on the PSP Quick Guide:

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