



**Module 6: Mastering the Art  
of STD Clustering**

## FORWARD

To meet the ever-increasing challenges facing sexually transmitted disease (STD) prevention programs, the Bureau of STD Prevention and Control set out in October 2004 to develop the first formalized STD Field Operations Certification Curriculum in the nation. This ground-breaking initiative has received considerable recognition from across the U.S. among leaders in STD prevention. To prevent STDs successfully, stakeholders must continue to assess their mission, refocus efforts as necessary, and be willing to accept new challenges. Because the Disease Intervention Specialist (DIS) workforce is the Bureau's most valuable STD prevention asset, we have worked hard to honor our commitment to enhance professional growth opportunities.

The Bureau has long-recognized the invaluable contribution of the state's DIS workforce, a pivotal cornerstone of any STD prevention program. Without their unwavering commitment, passion, and devotion to improving the quality of life for others, the burden of disease and related complications would be incalculable.

The Bureau is deeply committed to enhancing the knowledge, skills, and abilities of our STD Program Field Operations staff. We are confident this formalized certification will considerably expand the expertise of these professionals and their ability to respond to the enormous challenges facing STD prevention programs. The Bureau will continue to capitalize on every opportunity to promote professional credibility and well-deserved recognition for these highly specialized professionals and their invaluable contribution to public health.

## DEDICATION

The Florida Department of Health, Bureau of STD Prevention and Control dedicate the STD Field Operations Training Curriculum to Mr. Jayson Trussel. Without his tremendous insight and invaluable contribution during the planning and development stages, this ground-breaking training opportunity would not be possible.

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# Module 6: Mastering the Art of the STD Cluster Interview

## Overview

Veteran Disease Intervention Specialists (DIS) state that understanding the nuances of conducting the Cluster Interview as well as the subtleties of the clustering process are some of the more challenging skills that a new DIS must learn. Mastering these skills may take time. This module will present you with an overview of the rationale, strategies and techniques for conducting both Cluster Interviews and clustering. This module can help you prepare for the Cluster Interview and clustering questions portion of the **Florida STD Prevention Certification Exam**.

Efforts to update and improve the information are on going —your feedback is welcome and encouraged. Please send your comments and suggestions to [disfeedback@doh.state.fl.us](mailto:disfeedback@doh.state.fl.us).

## Introduction

Intervening in the spread of disease involves identifying the source of the disease and those touched by it. DIS need to use clustering to help identify all of the individuals involved. This module discusses the technique of ‘clustering’ and the tool of ‘the cluster interview’. It looks at the reasons why DIS perform clustering and the time commitment involved in pursuing clustered information properly; it addresses errors that new DIS commonly make when learning clustering and typical errors made during the cluster interview; and finally it presents the art of the cluster interview from a veteran’s point of view.

The Cluster Interview is an interview conducted with a person whose disease status is "not infected" or "unknown" at the time of the interview. This interview is used as a part of case management that takes information gathering about a given case beyond the parameters of partners and at-risk individuals named by the index (original) patient and assumes that the index patient did not give you all of the information you need, or that the interviewee may not know all of the players involved in a cases **Lot Folder** (see **Lot System**). It is a case management technique that combines science and human experience. For example, when performing a Cluster Interview and using clustering a DIS can take into consideration the fact that syphilis is typically

**Lot System** – A system of organizing cases so that related cases are filed in the same "lot" or folder. The goal is to assure that all obtainable information regarding the continuing management of related cases contained in a "lot" is readily available to all responsible workers. The process promotes case management and helps workers thoroughly analyze, make effective decisions, and take advantage of every opportunity to advance disease intervention. It is a case management tool used to increase efficiencies, and when used properly, speeds analysis of Lot System forms.

manifest in a group of friends and acquaintances and that roughly 70% of people who contract syphilis have multiple exposures to the disease.

"Clustering", conversely, is the process of gathering names of others who may benefit from exam and treatment, and is conducted with individuals **regardless of disease status**. These individuals may be able to provide information on the original patient, partners to known cases, people who have signs or symptoms suggestive of disease, or people who may benefit from an exam based on their social connections within the same social network.

This module will present the use of the clustering technique to help identify these close associations. It will also examine the effective use of the Cluster Interview.

- **The module proceeds on the assumption that you are already familiar with the Original, Cluster, and Re-interview techniques taught in the EDG and ISTD. If you need to review these interview techniques, please do so before beginning this module. You can find them in Module 10, "STD Interview Activities" of your EDG disk.**
- This module draws from EDG, CDC, and ISTD resources on the topic of clustering and the Cluster Interview. Studying the CDC web site<sup>i</sup> and both the EDG and ISTD materials on these topics will be helpful if you are preparing for the Florida STD Prevention Certification Exam, or as an adjunct to developing and maintaining your skills.
- The module makes use of Sidebars and Useful Links to present definitions, suggested reading and other important information that may not be part of the module examination. However these references provide context for the important core material. Please take time to read and explore these items.

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<sup>i</sup> [www.cdc.gov/std/program](http://www.cdc.gov/std/program)

## **Module Outline**

### **Section 1: Defining the At Risk Individual – Page 4**

Introduction to the Concept of “At Risk Individual”

### **Section 2: Identifying the At Risk Individual – Page 11**

The use of “AR” as a Tool for the Cluster Interview

### **Section 3: “Clustering” During the Interview – Page 16**

Identifying the Promising Individuals

Defining the Characteristics of “Promising and Appropriate” Individuals

### **Section 4: Prioritizing Candidates for a Cluster Interview – Page 21**

Prioritizing Candidates by

- Significance
- Frequency
- Time frame

### **Section 5: Planning for the Cluster Interview – Page 31**

Commonly Pursued Information

Generating an Interview Plan for a Cluster Interview

### **Section 6: Conducting the Cluster Interview – Page 37**

Purposes of the Cluster Interview

Key Elements

Common Mistakes Made by New DIS

Overcoming the Common Mistakes

The Art of Clustering and the Cluster Interview: Veteran Recommendations

### **Chapter Appendices**

Appendix S: RPR and Titer Information

Appendix T: Cluster Interview Record

Appendix U: The Cluster Interview Format

Appendix V: Glossary of Terms

### **End-of-Module Exam: Taken on-line**

## Section 1: Defining the At-Risk Individual

### Introduction

The interview skills required to effectively cluster around a known STD case begin with knowing who the players are and keeping the relationships clear. After completing this section you should be able to define the terms Original Patient, Partner, At Risk individual 1 (AR-1), At Risk individual 2 (AR-2), and At Risk individual 3 (AR-3) and their relationship to Suspects and Associates. Furthermore, you should also be able to identify these individuals when given a case. You will use these definitions to label and discuss the people in the cases throughout this module.

### Key Points

Your job as a DIS involves dissecting patient's stories and their related cases everyday and requires a specialized vocabulary with which to communicate to your colleagues. This enables fellow workers to know who you are talking about and what their relationships are. The usual catalyst for a new case is the original patient.

- Original Patient, abbreviated OP, is a patient newly diagnosed with an STD and who is a candidate for an interview by a trained DIS. (The OP may also be referred to as the Index Patient, or IP.)

During the course of the original interview, the original patient is offered assistance with the notification and timely referral of partners determined to be at risk for infection for counseling, testing and referral as necessary. The DIS must also try to identify others within the patient's "community" or "social network" of friends or acquaintances (who may or may not be sexual partners) who might benefit from an examination. This is called "clustering." So it is the OP who starts the chain of events that leads to clustering and the Cluster Interview. "Clustering" and the Cluster Interview are two separate entities and DIS should be careful to remember to perform "clustering" during every interview you perform.

During the original interview with the OP, the DIS will elicit names of the OP's partners.

- Partners (P) are people with whom the original patient has had sexual contact or has shared IV drug needles or both. Partners may or may not have signs or symptoms of an infection; they may or may not know the identity of the sex or needle sharing partner who named them; they may have no idea why they have been contacted and asked to come to a county health department or why they are being visited at their job, their home, or their hangout. Interviewing partners and other people in the OP's social circle are a challenge to the skills of the DIS. The DIS must respect the rules of confidentiality and protect the identity of the OP.
  - P-1—Sex Partners to the OP
  - P-2—Needle-sharing Partners to the OP
  - P-3—Both a sex and a needle-sharing partner to the OP

- At Risk Individuals are people who are named during an interview *but who are not partners of the interviewee*. At Risk individuals are divided into three (3) categories based on their likelihood of infection:
  - AR-1—People with signs or symptoms suggestive of disease
  - AR-2—Partners of other persons known to be infected
  - AR-3—Others who might benefit from an STD examination (e.g., pregnant females, roommates)

**Sidebar – “At Risk” vs. “Suspect” or “Associate”**

**In your ISTD training, At-Risk Individuals were referred to as Suspect 1,2,3 and Associate 1,2,3. The Bureau of STD Prevention and Control has long been interested in moving away from this terminology since it can imply that we are somehow associated with law enforcement. The desire is to not have new DIS inform a client that they are a “suspect” in a syphilis case. This type of language can and does inhibit client cooperation.**

The terms *Suspects* and *Associates* are still valid and useful. However, in this module we will use AR to represent the combined class of at risk individuals irrespective of who named them. Use the terms “At Risk individual” and “AR” when referring to individuals who are identified during an interview but who are not partners of that person and keep the 1, 2, 3 differentiation based on their likelihood of infection. You may find the use of Original Patient (OP), Partner (P), Suspect (S 1-3) and Associate (A 1-3) more convenient within the professional environment. The classifications correlate like this:

		NAMED BY AN INFECTED PERSON	NAMED BY A NON-INFECTED PERSON
	(At- Risk)	(Suspect)	(Associate)
People with signs or symptoms suggestive of disease	AR-1	S-1	A-1
Partners of other persons known to be infected	AR-2	S-2	A-2
Others who might benefit from an STD examination (e.g., pregnant females, roommates)	AR-3	S-3	A-3
	Language to use with the general public	Language to use in the professional office	

## Context

### Kyle's Story

- Kyle is a 41 year old MSM (Male having Sex with Males) previously diagnosed HIV+, Hep C+, and previously treated for syphilis. He was tested at his last visit to the CHD and he had a serofast RPR of 1:8. On today's visit Kyle is complaining of a generalized body rash and his RPR is 1:256. During his interview, Kyle is with his partner, Jason, but Jason refuses to be examined. Vincent, the DIS, continues his interview with Kyle. Kyle says he "has been monogamous with Jason" and that they "use condoms during anal sex, but not always for oral sex."

After the Original Interview is completed for Kyle, DIS Vincent speaks to Jason privately and is able to motivate him to be tested. His stat RPR is non-reactive and his HIV and Hepatitis labs are pending. DIS Vincent makes sure Jason is epi-treated, since he is a named partner of a known case, and conducts an interview alone with Jason. As part of the lead-in for the Cluster Interview that DIS Vincent is conducting, he explains to Jason that although he currently has no signs or symptoms and his test is non-reactive, that he may still be incubating syphilis and that the possibility of developing the disease if left untreated has necessitated Jason's need for medication today. Vincent gathers information on Jason and Jason's partners and quickly learns that Kyle may not have been forthcoming with all of his sex partners. Kyle may not be monogamous after all. Jason says he and Kyle do have sex, but whenever Jason is out of town on business, he believes Kyle is spending happy hour at Club Annex. They have friends there who know of Kyle's HIV and hepatitis C status and who still participate in sex anyway. Jason gives Vincent the names of Darund and Samuel. Darund and Samuel have always liked Kyle. Jason believes they are having sex with Kyle. DIS Vincent asks if there are any other people Kyle might be having sex with and Jason states that Kyle is friends with the bartender, Kip, and knows the guys in the band that plays there on weekends, but he doesn't think they are having sex. Jason claims he does not know who else Darund and Samuel are having sex with, but he gives Vincent the address of the club and the best times to find the gang there. He also gives full descriptions for Darund, Samuel, and Kip and gives Vincent the name of the band, The Green Clam Fanatics.

Jason admits to feeling neglected, and to having active and passive oral and anal sex with a masseuse by the name of Carlos at his and Kyle's gym, Male, Inc. This has been going on once a week for four weeks, not always protected, the last time was six days ago. While he states Carlos knows Kyle from the gym, he does not believe they are involved sexually. DIS Vincent showed pictures of the signs and symptoms of syphilis to Jason, and Jason was shocked to recognize a picture of a penile lesion as being similar to a healing scab on Carlos' penis.

**Serofast** is a term used to describe a patient who has had a serologic response to syphilis treatment. After treatment for syphilis, some patients maintain serum nontreponemal test titers that are reactive at low and unchanging titers, generally  $\leq 1:8$ , for extended periods of time, up to the lifetime of the patient. While the significance of "serofast-ness" in patients is not clear, it probably doesn't represent a failure of treatment. In order to detect a re-infection in a serofast patient, there needs to be at least a fourfold increase in titer above the established serofast baseline.

For more information on **RPR** and **titer**, see **Appendix S** of this chapter.

Let's take a look at Kyle's story to identify the individuals and use the definitions we just learned.

Original Patient (OP) – A patient newly diagnosed with an STD who is a candidate for an interview by a trained DIS

**Kyle** is the OP in this story. He may also be referred to as the "Index Patient (IP)," because everyone else in the story is figured relative to him. He is the reference point in this case. There will not be another OP in this case. If other people are diagnosed positive with STDs in this story they retain their classification relative to Kyle *in Kyle's case*. In *their own* case files they become the OP and they get their own original interviews. All subsequent related files become part of this case's "Lot Folder".

Partners (P) – People with whom the original patient has named as having sexual contact or has shared IV drug needles or both.

**Jason** is Kyle's only *known* partner in this case thus far. Perhaps during a reinterview, or during a cluster interview, other partners to Kyle will emerge. Jason has introduced some doubt as to whether Kyle is monogamous or not. He suggests Kyle is having sex with several people at Club Annex, but none of this can be confirmed until further interviewing and testing are done.

At Risk 1(AR-1) — People with signs or symptoms suggestive of disease

**Carlos** is showing signs and symptoms suggestive of disease. Jason has identified that Carlos has a healing scab on this penis suggestive of a syphilitic sore. Carlos should be contacted by a DIS to begin the intervention process. Jason is confirmed as negative for syphilis and has been epi-treated and therefore will not develop syphilis related to this case unless he is re-exposed after the next thirty days. He cannot be a source for Kyle.<sup>ii</sup>

At Risk 2(AR-2) — Partners of other persons known to be infected

In Kyle's case there are no AR-2's. Thus far, we have no other test results to work with to inform us of *others known to be infected*.

At Risk 3(AR-3) — Other people who might benefit from an STD examination

**Darund, Samuel**, and maybe even **Kip, the bartender**, and the **band members** might benefit from an exam. Kyle denies having sex with them and Jason only has suspicions. For these reasons we look at these individuals as AR-3s.

DIS Vincent should also talk to Carlos to learn about other clients, sex partners, etc. Veteran DIS say to look for common partners of Carlos in order to close the circle to Kyle. It has become clear Kyle is probably not monogamous.

Cluster Interview -- An interview with a person whose disease status is "not infected" or "unknown" at the time of the interview.

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<sup>ii</sup> In this scenario, Jason could only have been a spread from Kyle or Carlos but proved to be not- infected and was subsequently epi-treated. He cannot be the source to Kyle or Carlos nor could he have spread it to anyone else since he is technically negative based upon his negative blood test for syphilis. Jason will not develop symptoms secondary to his epi-treatment unless there is a reexposure after the next thirty days (the protective property of Bicillin remains in the system approximately thirty days.)

Since Jason's stat RPR returned as non-reactive, the interview performed by DIS Vincent is a Cluster Interview. He utilized this opportunity to explain to Jason the possible complications he could have experienced had he not received treatment today to prevent the development of the disease, the HIV connection, the possible asymptomatic nature of the disease, the possibility of re-exposure, and the sexually transmitted nature of the disease. He also discusses ways that Jason can reduce his risks to prevent future exposure. With each piece of information, DIS Vincent increases his credibility and subsequently his rapport with Jason. Vincent also explains that because syphilis usually travels in a group of friends that it is imperative to talk about others who may have been exposed or who may have exposed him to this disease. With this, Vincent was able to elicit potential partners to the OP (Kyle), or any other at-risk individuals with signs or symptoms suggestive of disease or who could simply benefit from a screening test. This is the "clustering" that took place during this Cluster Interview. Had Jason's RPR and confirmatory test been positive for syphilis, this interview would count as his Original Interview.

### Additional Information

Assigning a classification to an individual named in a case is not an attempt to marginalize them or to assign preferential treatment. It is simply a way to help DIS organize the people involved and to classify them relative to their "closeness" to a given disease. The CDC advises that:

At a minimum, all (at risk individuals)... who are referred for examination as the result of an interview should:

- be informed as to the reason for the referral;
- be provided information about the disease;
- be informed of the reasons why they should have a sense of urgency in seeking a timely and appropriate medical evaluation;
- be given the opportunity to be examined;
- be given the opportunity to ask questions;
- be able to receive client-centered counseling to develop a personalized risk reduction plan.

Anyone reasonably believed to have been exposed to an STD should be treated prophylactically at the time of exam based on CDC treatment guidelines<sup>iii</sup>.

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<sup>iii</sup> –From <http://www.cdc.gov/std/program/partner/3-PGpartner.htm#volunteers>

## Practice

Choose the best answer from the following options.

1. Tiffany shared a heroin needle with her best friend, Kristine. Tiffany thought she was safe because Kristine was in a monogamous relationship with a steady boyfriend. When her doctor told her she tested positive for HIV, Tiffany was stunned. She hadn't had sex with anyone in over 12 months. Tiffany volunteered to the CHD and had a second test done. It, too, was positive for HIV. DIS Larry opens the case file and enters Tiffany as:
  - a. AR-1 Person with symptoms suggestive of disease
  - b. AR-2 Partner of other persons known to be infected
  - c. OP A patient newly diagnosed with an STD who is a candidate for an interview by a trained DIS
  - d. P-1 Person with whom an original patient has had sexual contact
  
2. Jenna enjoyed her freedoms now that she was away at college and often enjoyed the company of several different men within her circle of friends. It wasn't unusual for her to sleep with 3 or 4 of these guys in a weekend, including Philip. Jenna felt safe since she insisted her partners always wear a condom. One day DIS Larry visited Jenna and told her she was named as a sex partner by someone who had recently tested positive for syphilis. (Philip had included Jenna on his list of sex partners during his original interview with Larry.) Jenna said 6 weeks ago she participated in a blood and urine screening on campus and her results came back negative for STDs. She agreed to be retested and her test was non-reactive. When Based on DIS Larry's OI with Philip, what is Jenna's classification on this case?
  - a. AR-1 Person with symptoms suggestive of disease
  - b. AR-2 Partner of other persons known to be infected
  - c. AR-3 Another person who might benefit from an STD examination
  - d. P-1 Person with whom an original patient has had sexual contact
  
3. Andrea is 25 year-old female who saw a private provider on 11/17/CY complaining of a sore in her mouth since the first day of November. No treatment was provided, but the physician performed an RPR, which returned a 1:8 titer and a positive FTA. She was referred into the STD Clinic on 11/22/CY where, surprisingly, her stat RPR was non-reactive. However, she was treated with 2.4 mu Bicillin on that date and diagnosed as having primary syphilis. That treatment was repeated the following 2 weeks for good measure. In her interview Andrea said she only had sex with Christen, but had shared needles with both Christen and Tamara in the last six months. Both individuals are being pursued. What will Tamara's designation be on Andrea's case?
  - a. AR-1 Person with symptoms suggestive of disease
  - b. AR-2 Partner of other persons known to be infected
  - c. OP A patient newly diagnosed with an STD who is a candidate for an interview by a trained DIS
  - d. P-2 Person with whom an original patient has shared IV drug needles with.

CY = CURRENT YEAR
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4. Gustav is a 21 year-old MSM who is unemployed and lives at home with his sister, Dagmar, 24. He volunteered into the ER of a local hospital on 11/20/CY after he experienced a generalized body rash. The stat RPR that was performed at the time of the visit returned at 1:256. With those findings, the ER clinician diagnosed him as having secondary syphilis and treated him with 2.4 mu Bicillin. Gustav was contacted and referred into the STD Clinic for an interview on 11/22/CY. The original interview produced two critical period partners, but the descriptions were shaky, the stories of meeting them were inconsistent, and Gustav denies knowing exact locating information for either of them. There is still someone else in the picture; Dagmar. When DIS Larry studies this case, how should he classify her?

- a. AR-1 Person with symptoms suggestive of disease
- b. AR-2 Partner of other persons known to be infected
- c. AR-3 Another person who might benefit from an STD examination
- d. P-3 Person with whom an original patient has had sexual contact and has shared IV drug needles.

### Useful Links & Reference Information

There is more information on original patients, partners, suspects, and associates and the CDC website. <http://www.cdc.gov/std/program/partner/3-PGpartner.htm#partners>

Answers to Practice items:  
1. c., 2. d., 3. d., 4. c.

## Section 2: Identifying the At-Risk Individual

### Introduction

This section will help you recognize the different categories of risk within a case. By the time you complete this section, when you are given a description of an individual involved in an STD case, you should be able to classify them as an original patient, a partner, or an at risk individual 1-3. It is important to remember that not everyone is “at risk.”

### Context

It is also important to understand the relationship of a "cluster" (at-risk individual) versus actual contacts (partner) to a disease. Contact tracing is linear, linking persons directly to each other, from one to the next, through the infection itself. Whereas, "clusters", brought about through the "clustering" process, are the socio-sexual network that an OP interacts with and encounters through their daily life and routines.

"One's habitat is where one has habits at."

Patrick Harris, CDC

These socio-sexual networks are the groupings of people who surround the OP in their everyday life. This includes not only partners, but also persons at varying levels of risk, as well as persons not at risk but who are associated with the client. The nature of these interactions is complex, overlapping, non-linear, and tangential as people tend to travel in multiple spheres of social activity; persons "at risk" may be found in more than one of these spheres.

### **Joe's Story**

- DIS Larry Jordan did an original interview this morning with Joe. Joe has a lesion on his penis and is diagnosed with primary syphilis. Joe is considered the OP of the case. During the initial interview, DIS Larry does a good job describing the disease and how it is spread. Joe names 3 people who clearly fit the definition of sex partner (P-1), but he then names Jane, a co-worker and lunch mate. Larry asks about his relationship with Jane and in Joe's description he insists that he does not have sex with Jane, but he is concerned because they often share a meal and she eats off his plate. She even sips beverages through a shared straw periodically. Joe also mentions that he received a haircut recently that included a vigorous shampoo by the stylist, Becky.

Based on the definition of a partner (P) as stated in Section 1 of this module, and Joe's descriptions of Jane and of Becky, neither one will be classified as a sex or needle sharing partner (P) in this case. According to Joe, he didn't have sex or share IV drug needles with these women. And as you recall a partner is someone with whom the original patient has had sexual contact or has shared IV drug needles.

So, is every individual an infected person comes into contact with throughout the day considered “at risk?” How about the teller at the bank who deposited his check? No. What about the woman who rode 40 minutes shoulder to shoulder next to him on the crowded train? No. What about the new friend who traded him oral sex for a joint? Yes. In each case there is a level of intimacy that must be decoded in the dialogue with the patient. In Joe’s case, he was too eager to name everyone he touched or who had touched him during his infectious period. Since DIS Larry understood Joe’s disease in more detail and depth, he explained why Jane and Becky were not at risk.<sup>iv</sup>

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<sup>iv</sup> DIS Larry’s understanding of Joe’s disease enabled him to explain why Jane and Becky were not at risk the way a sex partner is at risk. However, a veteran DIS like Larry would still initiate Jane based on her closeness to the OP, and would probably explain why Jane may need a test just to be safe. The dialogue could go something like this: “Remember when I told you that syphilis generally travels in a group of friends? Well, that is why it is so important to get even Jane tested, because the only way we can be sure that she is okay is with a blood test... And of course confidentiality would be stressed to the OP, etc...” This is primarily because even if Jane is negative she may still be a very good cluster interview candidate. (*Note: patients often give us clues to people they are not comfortable naming as a sex partner and include them in the context of someone else who could benefit from an exam. In this example, Joe may be hesitant to name Jane as a sex partner.*)

## Key Points

DIS must consider the people in an OP's life, relate them to the OP's interview story, apply their understanding of infectious periods, and hypothesize who is at risk and who is not. Granted, the only way to *determine* for sure who is infected is with a blood test. But during the interview you can be most effective when you:

- Understand, generally, who is at risk and who is not.
- Have solid knowledge of the diseases you investigate including infectious periods and the disease processes.
- Establish a common understanding with the patient of what “sex” is.

For example,

- **Aida** is an 18 year old female, who volunteered to the STD Clinic with a generalized body rash that she noticed about a week and a half earlier. Her stat RPR returned at 1:64. The original interview that was performed by DIS Larry produced two locatable partners. Both partners were prophylactically treated that same day. Larry's interview uncovered an AR-1 who was also identified, but who had a negative RPR. During the interview Aida limited her description of sexual partners to males with whom she had engaged in unprotected vaginal intercourse. It became obvious to Larry that there may be other partners, but that she needed help recalling them or help understanding her disease and how her sexual behavior can spread it. Once Larry explained that sex included all types of sex, including sex with a condom, anal sex, oral sex, sex among friends and even one time sex acts, it put anyone she has had these types of encounters with at risk. With this new understanding, Aida provided several more names.

Cracking Aida's case depended on Larry's ability to recognize the problem, explain the disease process to Aida, make sense of her definition of sex, and communicate effectively all while allowing for return dialogue from Aida. This kind of interaction comes with practice.

## Practice

Choose the best answer from the following options.

1. Bradley is a 40 year-old white male with a penile lesion. He came to the CHD on 9/3/CY. Bradley stated during an interview that his *only* critical period sexual encounter occurred on 8/5/CY in New York City. Allegedly, the partner is a woman, for whom he knew only a first name, Raisa. He states he had unprotected vaginal sex with her and denies knowing how to locate her. Bradley has volunteered to the CHD. His stat RPR is 1:8 and an FTA is positive. DIS Vincent is working with Bradley to help him locate Raisa. In the case file, Bradley is
  - a. Raisa's source
  - b. The OP
  - c. An AR-1, since his symptoms clearly suggest disease
  - d. Not yet classifiable. More information must be gathered.

2. Apparently, Raisa took better notes during the encounter than Bradley because she made a phone call to him September 9 CY, to inform him that he needed to be examined for syphilis. She explained that she had been tested and treated after she developed dark spots on her hands and feet. Shortly after the phone call, Bradley called DIS Vincent and updates him on Raisa's information. In light of this new information, Vincent updates the file:

- a. Bradley becomes a P and Raisa is the new OP
- b. Bradley remains the OP and Raisa is classified as a P1
- c. Bradley remains the OP and Raisa is classified as AR-1
- d. Raisa remains the OP and Bradley remains the partner

3. DIS Trevor elicits the following information from Jack, an 18 year old male. Jack was named in an HIV case, but has tested negative. During the interview, Jack names Marge and Bryan as people he is very close to. He says he shoots heroin with Marge since "she gets the good stuff," and "lets Bryan do whatever he wants" to him sexually, because "Bryan lets me stay in his house for free, lets me use the phone, the computer, the pool, and sometimes the car. Plus, Bryan doesn't care if I'm high, or when I sleep late. Bryan's cool." Trevor finds out that Jack is having receptive oral and anal sex with Bryan 4X a week, sometimes with a condom, sometimes without. Trevor knows that Bryan and Marge are married, but he learns that she doesn't care what Bryan does since "Bryan gives her money and the freedom to do what she wants."

Jack has tested negative but is providing a lot of good information. Jack was named in Marge's original interview when she described her drug-using lifestyle and the people involved.

If Marge is the OP, what is Jack?

- a. AR-1 Person with symptoms suggestive of disease
- b. AR-2 Partner of other persons known to be infected
- c. AR-3 Another person who might benefit from an STD examination
- d. P-2 Person with whom an original patient has shared IV drug needles with.

4. Marge insists that she hasn't had sex with her husband, Bryan, in over five years and that he shares her interest in young men. Marge also states that Bryan does not do drugs with her anymore but has in the past. She states Bryan has been "clean" for over three years. But since they are a married couple DIS Trevor will go back 10 years and will classify Bryan as a:

- a. AR-1 Person with symptoms suggestive of disease
- b. AR-2 Partner of other persons known to be infected
- c. AR-3 Another person who might benefit from an STD examination
- d. P-3 Person with whom an original patient has had sexual contact has shared IV drug needles with.

## Practice Feedback

1. Correct answer is b. The OP.

DIS Vincent opens the case with Bradley as the OP. This case is about Bradley and Bradley's syphilis disease. Even though Bradley is sure he could only have contracted the disease from one person, Raisa, it does not make her his source or this case about her. Bradley does have signs and symptoms of a disease, but that doesn't make him an AR-1. As you recall, AR-1s have signs and symptoms, *but are not sex or needle sharing partners to the OP*. Bradley has volunteered to the clinic and based on his exam and test results been diagnosed with a new syphilis infection. That leaves only one category: OP.

2. Correct answer is b. Bradley remains the OP and Raisa is classified as a P1.

The only thing that changes here is DIS Vincent is able to add contact information on Raisa in New York for confirmation that she has been tested and treated for her disease. This is done by submitting Raisa's information on an OOJ (out of jurisdiction) field record to surveillance in New York who in turn has a DIS verify it and send back a disposition on the PRISM or STD-MIS field record. Locating the person who gave Bradley syphilis does not shift the classification: Raisa does not become the OP and Bradley does not become a P-1 in Bradley's own file. Raisa could only be an OP in Raisa's file, and Bradley would only be a P-1 in her file.

If you answered a in question 1, you may have been tempted to answer d in question 2. But remember that Bradley will never be a partner in his own file.

3. Correct answer is d. Jack is a P-2.

Even though Jack does not have sex with Marge, doing heroin with her is just as dangerous. It may be just a matter of time before Jack tests positive for HIV, or it may be that they have been extremely careful in cleaning their "works" and have avoided sharing contaminated needles. DIS Trevor must counsel Jack on recommended lifestyle changes that could save his life, including never sharing drug needles.

4. Correct answer is d. P-3.

Since the disease being investigated is HIV and not syphilis or gonorrhea, and there is no history of a previous blood test, Trevor needs to go back 10 years for married couples, therefore Bryan is a P -3, a sex and needle-sharing partner. Bryan would benefit from a test and from counseling to help him understand his exposure risks. If he is HIV-, he needs to know how to remain that way. Bryan could be a good source of information for DIS Trevor. Bryan has monetary control over Marge and Jack. Much of the household lifestyle depends on his funding. He may know a lot about Marge's partners, and where she spends her money. If Trevor can win Bryan's trust, Bryan could help a lot.

(Interestingly, if Marge and Bryan were unmarried, then Bryan would be an AR-3 since they haven't had sex in 5 years. However, the CDC guidelines specifying 10 year interview history for married and previously married individuals make Bryan a partner and in this case a P-3.)

## Section 3: "Clustering" During the Interview

### Introduction

Getting interviewees to talk about their partners can be difficult. To build credibility and establish the trust required to get clients to open up about the partners of their partners is an even bigger challenge. It is only natural that once a client gives you the names of partners, he or she will want to stop there, believing the interview is over. But to effectively intervene in the spread of a disease a DIS must know more about all of the people involved in the infection. Taking the time to identify people who are in the "community and social network" of partners, friends and/or acquaintances who might benefit from an examination will help the disease intervention. This type of persistent probing during an interview is called "**clustering.**"

### Key Points

Clustering involves:

- Interviewing original patients to obtain information on those who are not partners, but are at risk of infection.
- Interviewing uninfected partners or persons to obtain information on others at risk.
- Identifying individuals who may be unnamed partners of the OP or who have similar risky behaviors and offering blood tests to detect infection.
- Collecting information about environments where at-risk individuals gather or places where risky behaviors take place.
- Determining where targeted field screenings should be undertaken in direct response to known cases.

### Context

**The activity of "clustering" is distinct from the tool known as the "Cluster Interview."**

The cluster interview is a specific type of STD interview conducted with an individual whose disease status is believed to be "not infected" at the time of the interview. It is designed to elicit more information on the case regarding case management and on individuals at risk for infection.

Clustering occurs in every interaction with the OP including the Original Interview as well as any subsequent interviews. It also occurs in the DIS' interaction with interviewees during Cluster Interviews. Clustering helps identify other persons who may potentially be closely related to a case as well as the standard inquiries such as pregnant females, IVDU, roommates, and so on. It also extends to intelligence gathering

Clustering during an interview does not make the interview a "cluster interview."

for information on partner selection sites and social venue sites where targeted outreach screenings may be of considerable benefit.

The rationale is that other people within the client's social network may benefit from an examination. The DIS must use all of the information at his or her disposal. The DIS may know of test results of which the client is unaware. In fact, this will be true in many cases. So as the client suggests other people who may benefit from an examination, (usually classified as an AR-3), that AR-3 may actually be listed already as an AR-2 in the DIS' case lot, or listed as an OP in the case lot. This is part of assembling the jigsaw puzzle.

For Example: If Barb is our OP and she names Bobby and Brandon as sex partners, we would initiate them as P-1's on OP Barb's case.

Once tested, Brandon returns a negative RPR and is prophylactically treated. It is determined that he will be a good candidate to Cluster Interview regarding his close proximity to OP Barb. During his Cluster Interview, he names back Barb as well as several others who could benefit from an exam: Bryce Ella, Brenda, and Bradford in that order.

As the DIS you already know that Barb has tested positive for the disease at hand; however, you may not share this information with Brandon. Bryce Ella, Brenda, and Bradford would be classified as AR-3's and be initiated as A-3's or Associates who can benefit from an exam. Barb, however, will retain her status as OP on this case. The DIS will continue with the full partner elicitation process on all of the interview period partners and at-risk individuals elicited equally. This is to alleviate suspicion about any one person and assure confidentiality for the OP, in this case Barb.

Remember the purpose of the Cluster Interview is to obtain additional information, confirm known information, or clarify conflicting information of the OP (Barb here). "Clustering" around each named person would then take place.

### **Good questions to ask during clustering**

In the purest sense of the "clustering" technique, the DIS is interested in:

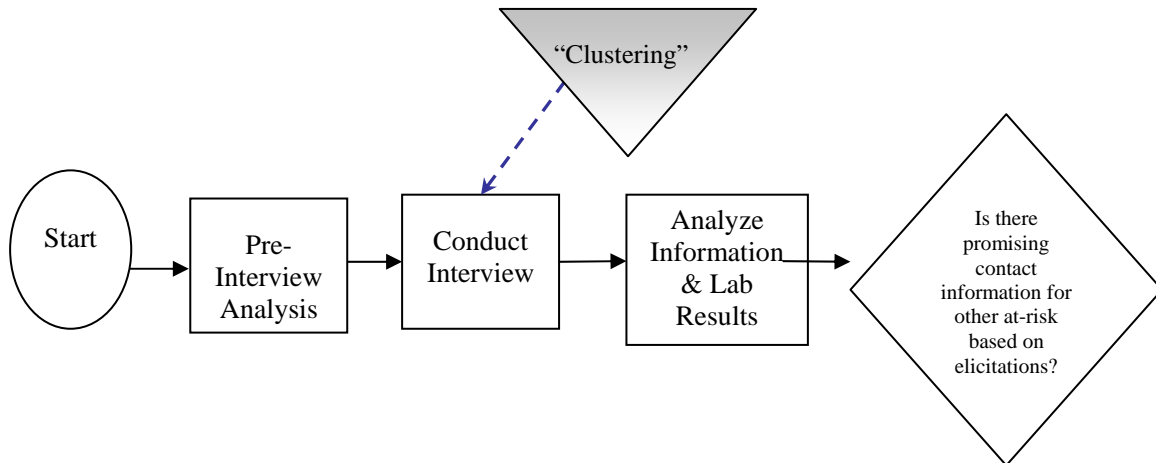
- Who else is the original patient having sex with and/or sharing needles with?
- Who do the original patient's *partners* have sex with?
- Who do *they* live with or hang out with?
- Who do they do drugs with?

These questions will lead the DIS to identify people who are in the "socio-sexual network" of partners, friends and/or acquaintances and that might benefit from an examination.

The first few steps in the clustering algorithm are

- Conduct the Pre-Interview analysis,
- Conduct the Interview

- Analyze any information and lab results during the Post-Interview Analysis, and then
- Determine if there is enough good information to identify other individuals in need.



When you get to the decision diamond and you ask “Did the "clustering" process elicit promising contact information for others at risk,” in almost all of the cases the answer is “Yes.” Disease transmission doesn’t happen in a vacuum. Let’s look at John’s story....

### John’s Story – Part I

- DIS William elicits the following information from John, a 20 year old male. John has tested HIV+ and Hep C+. In response to DIS William’s questioning, John names Mary and Billy as partners. He describes Mary as a needle-sharing partner, who also supplies him with his drugs, and Billy as a sex partner. John shot up with Mary 2 days ago and has shot up with her 2X a week for 3 months. Billy is a new boyfriend who started spending his layovers with John after they met at a club. John saw Billy 4 days ago, then 6 days before that, then 6 days before that, then 6 days before that, etc. Billy is due back in town in 2 days.
- When asked who else Mary shares needles with, John reports that Mary gets her drugs from her sister, Betty, in Orlando. John feels pretty sure that Mary shoots up with Betty (AR-3) when she is in town. He reports that he doesn't know any of Mary's sex partners but suspects she is trading sex downtown to get money for her habit. As for Billy, John reports that Billy is a flight attendant who has frequent weekend layovers in town; John says he is unaware of Billy’s other partners.
- When John was shown photographs of STD signs and symptoms and asked “when was the last time he saw these symptoms on anyone else?” John says he remembers seeing the Palmer/Planter

**Look at the information highlighted in gray.** It comes from William's use of clustering during the original interview with John and from subsequent interviews with Mary and June. If William had not established his credibility and asked clustering questions, he might never have learned about Betty, Chris, Robin, Jay, and June.

rash on one of the three guys he regularly eats with down at the soup kitchen. The guy with the Palmer/Plantar rash is Robin (AR-1) and the other two guys are Chris and Jay (AR-3). John doesn't know their last names, but he knows they are into "shooting drugs." "They show up for a meal every now and then, at least two or three times a week."

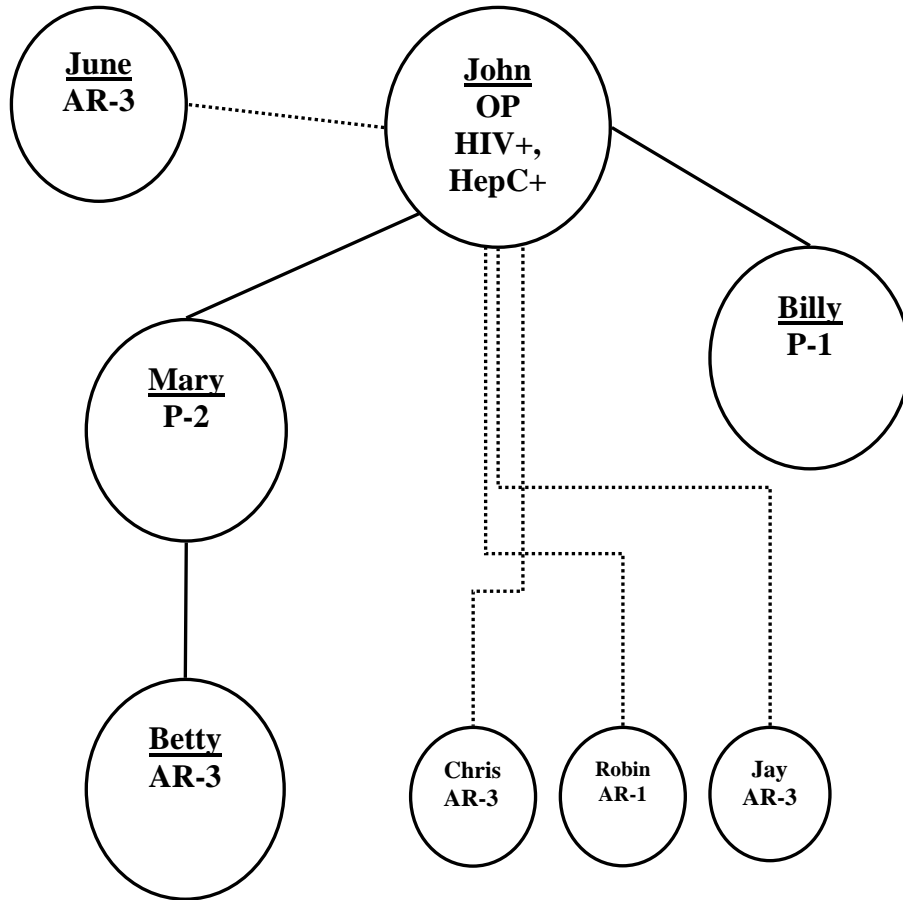
- When asked if he knows of anyone else who may benefit from examination, he mentions that he spoke to his sister, June, three months ago, and that it sounds like she is involved with the same crowd he used to run with in the old neighborhood. From John's description, she may benefit from a screening, too. (AR-3)

Analysis:

1. This is John's interview. Therefore, DIS William enters him as the OP.
2. John's information may be innocently or deceitfully incomplete.
3. Mary lives in the same town as John.
4. Mary and Billy are high priority for testing and interview because they are named as needle-sharing and/or sex partners to a known infected individual.
5. Betty is a high priority for interview because she is likely a needle-sharing partner to a needle-sharing partner of a known infected individual. Also, Betty may be dealing heroin and thus may be a link to many other IV drug users. When Mary is interviewed, DIS William will be looking for Betty to be named as a partner.
6. Chris, Robin and Jay (last names are unknown) are somewhat lower priority in that they are not known to be partners, sexual or otherwise, to anyone else identified thus far. However, because of their reported signs and symptoms and because of the implied IV drug use, DIS William and his colleagues will attempt to locate and test, treat and interview them.
7. For *testing*, June is a lower priority since she is not a named partner, she is not a partner's partner, and she is not known to show signs and symptoms of an STD. For a *Cluster Interview*, however, she is actually a high priority because:
  - She is running with John's old crowd on the other side of town and is in a good position to corroborate information that John provided and more importantly, to potentially provide additional information regarding Billy and other possible partners of John.
8. Subsequently, DIS William located June, offered her a series of tests where she was negative for HIV, Hep C, and syphilis. During the cluster interview, June said that John parties with *Billy and Billy's friends*. DIS William makes note of this and will have this in mind when he interviews Billy. This would also be a point to clarify during the re-interview of John.

**A diagram of John's relationships would look something like this:**

(Note: Many veteran DIS diagram the patient relationships in much the same way as you see below, using circles and lines and dotted lines. Feel free to adopt this convention, if you are not doing so already.)



There will be more on how to use clustering techniques in Section 6.

- In the meantime, how will DIS William make the decision of who to interview first from John's story?
- Can William exclude anyone in John's original interview from interview consideration?
- How does a DIS decide?

Think about your answers to these questions before going on to the next section.

Veteran DIS suggest that William start with partners (P). At this point there is no way to conclusively exclude anyone from the list of interview consideration. If William had blood test results he could confirm exposure and finalize his list, but he doesn't have those results and must move on without them.

### Useful Links & Reference Information

There is more information on Community Based Outreach including social network Analysis at the CDC website. Check it out at <http://www.cdc.gov/std/program/partner/9-PGpartner.htm>

## Section 4: Prioritizing Candidates for a Cluster Interview

### Introduction

Prioritizing the interview candidates and ranking the individuals by how “promising” or “appropriate” each one is helps the DIS make the best use of limited resources. Interviewees must be evaluated for **significance, frequency, and time frame**. Each of these has an impact on candidate prioritization and case management. By the end of this section you should be able to define the terms “significance,” “frequency,” and “time frame.”

### Key Points

After assessing for the opportunity for Primary or Secondary disease intervention, each individual needs to be evaluated based on three criteria:

**Significance** – How involved or important an individual is in the case of the OP or Interviewee? Importance and significance should not be confused with intimacy or emotional closeness. For example, an addict’s wife is more emotionally close than the “ground’s keeper” who watches the front yard at the crack house where the addict buys his supply, yet the grounds keeper will know much more about the addict’s buying habits, who the addict hangs out with, if he buys with cash or with sex, if he leaves right away or if he stays awhile, if he comes alone or with someone. In this sense of the word, the grounds keeper is more “significant” in the case of the OP.

**Primary Disease Intervention:**

Intervening in the spread of disease before someone has the opportunity to develop signs or symptoms or a positive lab result.

**Secondary Disease Intervention:**

Intervening in the spread of disease by providing prompt and accurate treatment for individuals testing positive for disease thus limiting complications and eliminating the potential to spread the infection.

**Frequency** – Think about the scenario above. In the case of a cluster interview, the interviewee might not necessarily have had any sexual contact with the client, but may have knowledge of the client’s life style, including how many times others have come into contact with/had sex with the client? (This is sometimes called *sexual frequency*.)

Veteran DIS indicate that if frequency is just one time, the likelihood that the interviewee knows much about the client is low and is therefore of lower interest. More than once and the individual is of greater interest.

**Time Frame** – Was the individual in contact with, or know of others in contact with, the client during the infectious time period? The infectious time period may be indicated by obvious signs of infection such as sores, lesions, drainage, etc.. It is important to remember that signs and symptoms may be painless, undetectable, and/or exacerbated by co-infection, and that critical times of infectious spread varies by disease.

<b>Sidebar</b>			
<b>INTERVIEW PERIODS BY DISEASE</b>			
From the CDC web site <a href="http://www.cdc.gov/std/program/partner/ApA-PGpartner.htm">http://www.cdc.gov/std/program/partner/ApA-PGpartner.htm</a>			
<b>Disease Code</b>	<b>Disease Type</b>	<b>Interview Period Guidelines<sup>1</sup></b> (Pre-Interview)	<b>Critical Period Guidelines<sup>2</sup></b> (Post-Interview)
200/300	Chlamydia/ Gonorrhea	<b>Symptomatic:</b> <u>60 days</u> prior to the <u>onset of symptoms</u> through the date of adequate treatment.  <b>Asymptomatic:</b> <u>60 days</u> prior to the <u>initial positive diagnostic test</u> through the date of adequate treatment. ( <i>Source: CDC STD Treatment Guidelines 2006.</i> )	Same as Pre-Interview Guidelines
490	Pelvic Inflammatory Disease	<b>60 days prior to the onset of symptoms through the date of adequate treatment.</b> ( <i>Source: CDC STD Treatment Guidelines 2006.</i> )  ( <i>If no sexual exposure has occurred within the specified exposure periods, the recent sex partner is presumed to be at increased risk for Chlamydia infection and should be evaluated.</i> )	Same as Pre-Interview Guidelines
710	Primary Syphilis	It is derived by adding the maximum 90-day incubation period and the five-week maximum duration of a primary lesion.	<b>From the date of adequate treatment back 3 months prior to the onset date of symptoms</b> (90 days is the maximum possible incubation period).
720	Secondary Syphilis	It is derived by adding the maximum 90-day incubation period; five-week maximum duration of a primary lesion; the ten-week maximum latency period; and the six-week maximum duration of secondary symptoms.	<b>From the date of adequate treatment back 6 ½ months prior to the onset date of symptoms.</b> (Derived by adding the 90 day incubation period, the five week long primary, the ten week latency between the end of the primary and the onset of secondary symptoms equals 28 weeks, or 6 1/2 months.)
730	Early Latent Syphilis <sup>3</sup>	<b>Early Latent—from the date of adequate treatment back 12 months.</b>	<b>From the date of adequate treatment back 12 months.</b>
900/950	HIV/AIDS	<b>1) 1 year prior to the date that the positive specimen was collected through the date of the interview</b> (extended interview period may be warranted by individual circumstances), or <b>2) 6 months prior to the last negative HIV test</b> [through the date of the interview.] ( <i>Source: CDC PCRS Guide 1999</i> ), or <b>3) 10 year interview period for current or any previous spouses.</b> Ryan White Reauthorization	Same as Pre-Interview Guidelines

		<p>Act requires that health departments receiving Ryan White funds show “good faith” * efforts to notify marriage partners of infected patients within the last 10 years, or</p> <p>4) <b>Other Considerations:</b></p> <ul style="list-style-type: none"> <li>·As far back as the patient requests</li> <li>·Local program requirements</li> </ul> <p>(Source: CDC PCRS Guide 1999)</p> <p>*As defined by state/local guidelines.</p>	
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<sup>1</sup>The Interview period is not to be confused with the Critical period. The Interview Period is the interval from the date of treatment back to the earliest date that the patient could have been infected. It includes the maximum incubation period, the source period, and the spread period.

<sup>2</sup>The Critical Period is the most likely time a patient could have been infected or infected others, based on their own personal symptom history. Note: Critical periods may be modified if a history of symptoms, a negative test result, or incidental treatments 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.

<sup>3</sup>When the stage of syphilis is undetermined at the time of interview, a one-year interview period should be used. That is, STD prevention programs should initially interview a patient as early latent syphilis (730) and then, if appropriate, reclassify at case closure as late latent syphilis (745), latent syphilis of unknown duration (740), or not syphilis (serofast). To reclassify an early latent case as late latent or unknown duration, the following criteria must be met: no history of exposure to a known case of syphilis (as determined by interviewing the case and following up on sex partners), no history of symptoms in the last year, no history of a negative blood test in the last year, and no rise in titer of two dilutions or more. A case should be reported even if treatment is not verified.

This table shows how the Interview Periods for Syphilis are derived. It is important to use these maximum timeframes for the best possible disease intervention. These timeframes ensure that both the source and spread periods are covered in their entirety.

Stage of Syphilis	Maximum Duration of Syphilis Incubation	Maximum Duration of Primary Symptoms	Maximum Duration of Latency	Maximum Duration of Secondary Symptoms	Total	Interview Period
Primary (710)	3 months/ 90 days	5 weeks/ 35 days			125 days	4 months and 1 week
Secondary (720)	3 months/ 90 days	5 weeks/ 35 days	10 weeks/ 70 days	6 weeks/ 42 days	237 days	8 months
Early Latent (730)						12 months

For the best possible disease intervention, the maximum timeframes are used when calculating the interview period to ensure that all partners/suspects potentially exposed are offered an examination, testing and possible treatment.

## Context

In John's case each of the people he named seem to be compelling for the next interview. Who will DIS William interview first? Let's hear the rest of the story...

### **John's Story – Part II**

DIS William decided to interview Mary first. Why Mary? Although Mary's disease status is unknown, there may still be time for Primary Intervention. She will get a presumptive interview as it is likely that she may already be positive for the disease(s) at hand, secondary to her lifestyle and frequency of contact with the OP. (Mary will receive a blood test and DIS William will perform the Presumptive Interview, along with partner elicitation. Once Mary is motivated to submit John's name, the DIS will be able to perform "clustering" around him and every other partner or at-risk individual named by Mary.) How does she fit the other three criteria?

Significance: As a probable dealer and drug shooting partner, Mary is significant to John and may know a lot about him and his lifestyle.

Frequency: John saw Mary just 2 days ago and has shot up with her 2 times a week for the last 3 months. Their mutual drug use was more than just casual which means she is of greater interest to DIS William.

Time Frame: Injecting HIV infected blood into your own vein (sharing drug needles) is an invitation to rapid seroconversion<sup>v</sup>, one that is independent of an infectious time frame. In this case the time frame is still not certain, since DIS William is not yet certain where the HIV came from.

Additional factors William took into consideration,

- Mary is a needle-sharing partner, but not only that, Mary lives in the same town as John and can be reached quickly, whereas Billy is traveling most of the time. Mary has had recent contact with John and has ongoing contact. Mary and John do not have sex, but they do heroin together.
- Mary *might* give DIS William information on Betty, who was named as a source for the drugs. If Mary gives Betty's name, William can then perform clustering around Betty to possibly find others who may be at risk for this disease.
- If Mary gets enough heroin for her and John, she may be dealing to others and sharing needles with them, too.
- When Mary is interviewed, DIS William will be looking for Betty to be named as a partner. Betty is probably a high priority for interview because she is a needle-sharing partner of a needle-sharing partner of a known infected individual. Also Betty may be dealing heroin and thus may be a link to many other IV drug users.

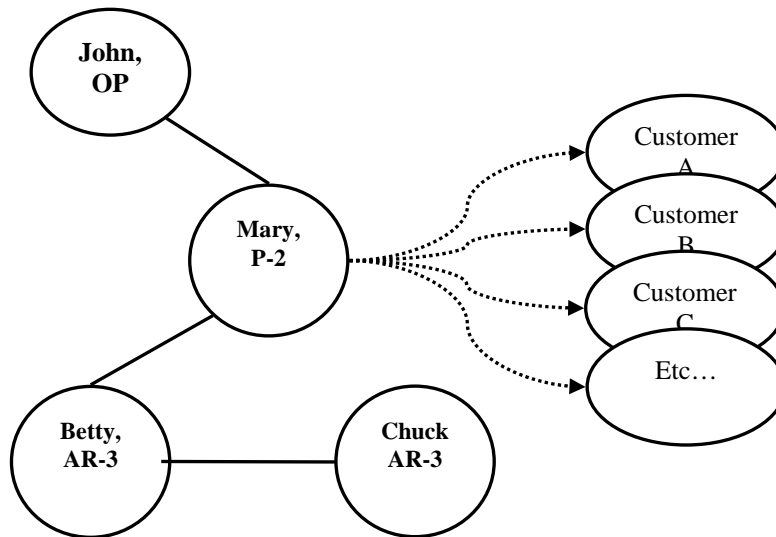
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<sup>v</sup> Seroconversion is the development of antibodies in blood serum as a result of infection or immunization. Prior to seroconversion, the blood tests seronegative for the antibody; after seroconversion, the blood tests seropositive for the antibody.

The word is often used in reference to blood testing for anti-HIV antibodies.

## Mary's Interview

- Mary tested positive for Hepatitis C nine months ago. Mary names John as a needle sharing partner and as a personal friend. Mary says she wishes it could be more, but John “thinks he’s gay.” DIS William is pleased to hear this because he believes Mary might know more about John’s private life if they are friends and not just in a dealer – buyer relationship.
  - Mary names her sister, Betty, as a needle-sharing partner, but doesn’t indicate that Betty has anything to do with supplying the heroin, only that she does it with her several times a month.
  - Mary tells DIS William that Betty is married to Chuck.
  - Mary says Chuck does not do drugs. Chuck has never made sexual advances on Mary. And Mary has never had sex with Chuck.
  - Mary does sell heroin to other people, but never stops to shoot up with them. She says she has never given or traded needles with anyone other than John and Betty.
- Expanding on Mary, who is a partner to John, a diagram of Mary’s relationships might look something like this:



## Practice

Choose the best answer from the following options.

1. DIS William is very interested in interviewing Billy, but it is hard to get in touch with him since he travels most of the week. Billy ranks high on the list of prioritized candidates for which of the following reasons? Circle the best answer.
  - a. Because Billy is significant to John
  - b. Because Billy is a named partner to a known HIV+ case
  - c. Because Billy travels and is probably spreading the disease nationwide
  - d. Because John has a bacterial form of HIV that is curable if caught early
  
2. What happens to Betty's status if Mary tells DIS William that Betty is pregnant?
  - a. High significance, medium frequency, low time frame
  - b. Betty jumps to the top of the list and William enlists help to locate and counsel Betty
  - c. William asks Mary for POP (proof of pregnancy) so he can enlist state and federal aid
  - d. DIS William makes note of the comment and refocuses the interview on John and John's partners, and John's partner's partners. William will counsel Betty when he gets to Orlando
  
3. In John's Story – Part I, Mary's Interview - If Mary tests negative for HIV today, how would we classify Chuck for this case?
  - a. P-3
  - b. AR-1
  - c. AR-2
  - d. AR-3
  
4. Chris, Robin, and Jay have finally been located. They test negative for HIV, but all three of them test positive for syphilis. In John's file, how is each classified?
  - a. P-3 for all
  - b. AR-1 for Robin, AR-3 for Jay and Chris
  - c. AR-2 for Robin, AR-1 for Jay and Chris
  - d. AR-3 for Robin, AR-2 for Jay and Chris
  
5. In John's Story – Part II, DIS William decided to interview Mary first. This was based on her significance as a needle-sharing partner, the frequency with which Mary and John saw each other, and the fact that the disease is within the time frame for spread. What one other factor was important to DIS William in deciding who to locate and interview next?
  - a. Mary might reveal incriminating information on an entire heroine drug ring which will be important when John reports everything to law enforcement.
  - b. Mary is in town and easily accessible.
  - c. John said Mary didn't look too healthy and needs a doctor soon.
  - d. Mary had a ride to the clinic today.

## Practice Feedback

1. b. Yes, significance is an important criterion, but most importantly, *Billy is a named partner to a known infected individual*. It is not okay to assume Billy is spreading the disease everywhere he goes. We don't know his disease status or about his life-style choices yet. Finally, there is **NO** "easily curable, bacterial form" of HIV. (This answer was there to see if DIS William knew his diseases and disease processes.)

2. b. With every disease and every case, a pregnant Client jumps to the top of any list. In fact, the CDC recommendation as noted in the Program Operating Guidelines, Partner Services pp PS-7 and PS-8, states that "...some programs have developed priorities similar to the following:

*1 - Pregnant females testing positive for HIV, syphilis, gonorrhea, or chlamydia*

3. d. He is an AR-3. Since Chuck is named by Mary who we now know to be not infected, he becomes an Associate 3 (A3) - Someone named by a non-infected person and who could benefit from an exam. For our purposes here, this translates to an AR-3 or an At-Risk Individual who could benefit from an exam. It is important to be able to correlate both of these associated designations to the case at hand.

4. b. Robin remains an AR-1, and Jay and Chris remain AR-3s on John's case; however, they will now have their own files -- as OP's -- and their files will complement John's in the cases Lot Folder.

5. b. Mary is in town and is easily accessible.

## **Billy's Interview**

DIS William finally got a hold of Billy by leaving a message at Billy's work. DIS William left just enough information to get Billy's attention, but not enough to cause embarrassment or reveal John's identity. Billy met William at the CHD and had the full set of STD tests, and was interviewed. Once it was impressed on him that he was in contact with an HIV+ and hep C+ case, Billy began to cooperate and gave stories of his travels. It turns out Billy liked to have sex in every layover city the airline landed him in. He had both male and female partners, but the partners changed with each layover. John was the only consistent lover he had. At first, it was just to have fun and save money on hotels, but later it was because he had true feelings for John. Billy named as many partners in as many cities as he could remember. He gave as much information as possible. Billy came back for his screen results, and was HIV+, and Hep C+. Billy was reinterviewed and appropriate referrals were made.

## Further Practice

In addition to the message left for Billy at work, the DIS also left one on his answering machine. Using the information from **Billy's Interview**, write a script for the phone message that DIS William may have left for Billy at home. What will DIS William's phone message to Billy sound like? It must be effective in getting the client to call without revealing too much. Do you think this message should be long or short? Think about these things as you create your script for DIS William to leave for Billy.

Discuss your script with your Supervisor. (Message samples can be found on the next page. They were written by DIS with varying number of years of experience.)

### **Disease Time Frames**

For more on specific CDC recommendations regarding disease time frames see <http://www.cdc.gov/std/program/partner/ApA-PGpartner.htm>.

#### **Sample message scripts for Billy's answering machine:**

- Hi. This message is for Billy. This is Debra. I have important personal information for you. I am not the law or a bill collector, however this is very important. I need to talk with you as soon as possible. My cell number is xxx-xxxx. Thank you –
- This message is for Billy. This is Jackie from the Dept. of Health. It is very important that I speak with you as soon as possible. My number is xxx-xxxx.
- This is Mr. Henderson with the health department. Please give me a call as soon as possible. My number is xxx-xxxx.
- Hello, this call is for Billy. My name is Kathy Braham and I am calling you in reference to a very urgent matter. Please call me back at xxx-xxxx. Thank you and have a great day.

Always use the first and last name of the client if available.

### **Useful Links & Reference Information**

#### **Setting Priorities**

From the CDC: <http://www.cdc.gov/std/program/partner/3-PGpartner.htm#priorities>  
And <http://www.cdc.gov/std/program/partner/5-PGpartner.htm#prioritization>

**NOTES**

## Section 5: Planning for the Cluster Interview

### Introduction

In the EDG and during ISTD I each new DIS is introduced to the planning process needed to conduct a thorough Cluster Interview. This process is important to all interviews, whether it is an Original Interview (OI), subsequent Re-Interview (RI), or a Cluster Interview. The same interpersonal skills needed to perform the OI and the RI are implicit to the success of the Cluster Interview. Remembering that the disease status is "negative" or "unknown", it is important to maintain the true focus of the interview in order to maximize the information you elicit. The Cluster Interview should never become an automatic or rote event.

By the end of this section you should be able to state the reasons and conditions for conducting a Cluster Interview, identify the elements of the Cluster Interview format, identify the difference between the Cluster Interview and the Original Interview format, and prepare for a Cluster Interview utilizing the Cluster Interview Record.

### Key Points

The CDC has created form 73.54C, "The Cluster Interview Record." This form helps you organize the facts you are looking for in the interview before the actual interview is performed. This is done during the pre-interview analysis. The DIS must not go into an interview cold and unprepared. The DIS must know the specific things he or she is after. As part of the planning for the cluster interview the DIS must generate an Individualized Cluster Interview plan. A typical plan may contain important elements like:

- AR-1's
- AR-2's
- Confirm OP's address, as necessary
- 710/720 Lesion History depending on diagnosis (for syphilis)
- Who the OP is living with
- OP's Work/Source of Income
- Locating Information for named individuals, etc.

These elements will vary with each interview. Each interview will be different.

Think: Which is more important: Getting a detailed description, sexual life history and contact information about one individual during a cluster interview, or getting seven names and partial contact information about them? Many veteran DIS would tell you to get partial information on seven people instead of a complete history on just one. (See sidebar titled "Veteran Advice" on page 33.)

(This form is available in **Appendix T** and at <http://www.cdc.gov/std/program/partner/AppendixT/partner.htm> )

## Context

### **During the cluster interview...**

- One of the important main purposes is for the AR to name back the OP. Listen for it. But don't lead the client to it.
- A second main point is to expand the information gathered on the social network of the OP.
- A third purpose is to identify any previously unidentified partners of the OP.

According to the Centers for Disease Control and Prevention, the purpose of the Cluster Interview is for the DIS to obtain additional information, confirm known information, or clarify conflicting information regarding general, medical, or epidemiologic aspects of the Original Patient's case. However, the "negative" client has a differing perspective and thus a differing purpose. The purpose for the "negative" client is for the DIS to:

- give them information about the disease they have been exposed to, and
- discuss risk-reduction strategies to help them remain negative and protect against future infection or exposure.

Veteran DIS understand the dual purpose of the Cluster Interview. They say one of the most common mistakes made by their new colleagues is forgetting why they are doing the interview in the first place. Once they forget their purpose they are unable to properly motivate the client, miss the verbal cues given by the client, or commit any number of other common mistakes.

In preparing the Cluster Interview Record form (73.54C), you will utilize the documents in the case Lot Folder to determine what information is to be pursued. Depending on your program area, these documents may include the Major Analytical Points Sheet, the Interview Record of the OP and any other Original Interview, Cluster Interview, or Re-interview Records that may help develop meaningful questions for the Cluster Interview.

### **During the Cluster Interview:**

- Listen for the OP's name. This is your sequela into the main purpose of the Cluster Interview.
- Don't forget to expand the information gathered on each contact elicited as well as their social networks (clustering).
- Remember to provide the client with information about the disease they have been exposed to and the reason for treatment (if applicable).
- Utilize the partner elicitation techniques you learned in ISTD and through your observations and personal experiences.

### **C.H.A.R.T. you client! Explain the following to your client:**

- C - Complications of untreated disease
- H - HIV connection
- A - Asymptomatic nature of the disease potentially
- R - Re-exposure or re-infection possibility
- T - Transmission mode(s)

#### **Sidebar Veteran Advice:**

Veteran Advice on Cluster Interview Planning and Execution

“Get the names first!”

“Get the interviewee to name back the OP.”

“Get as many names and relationships as you can first, then go back for details.”

Here is why:

- Interviewees may bail out on you when they find out it takes 15 minutes per person,
- Interviewees may begin to conceal names if they sense the interview is going long or the interview gets uncomfortable.

## Summary and recall

As you recall from Section 1, for each case there is the original patient (OP), and then any number of partners (P). Individuals who are identified during an interview *but who are not partners of that person* are called At-Risk individuals and are divided into three (3) categories based on their likelihood of infection:

- AR-1—People with symptoms suggestive of disease
- AR-2—Partners of other persons known to be infected
- AR-3—Others who might benefit from an STD examination (e.g., pregnant females, roommates)

The most challenging interview is the Cluster Interview. As the examples in the earlier sections demonstrated, infected patients and partners of infected patients are motivated to varying degrees to meet and talk with a DIS. Sometimes they are highly motivated, sometimes they are not. Your interview techniques and ability to motivate are always important issues but especially once you begin pursuing names of at-risk individuals who are not partners of the OP.

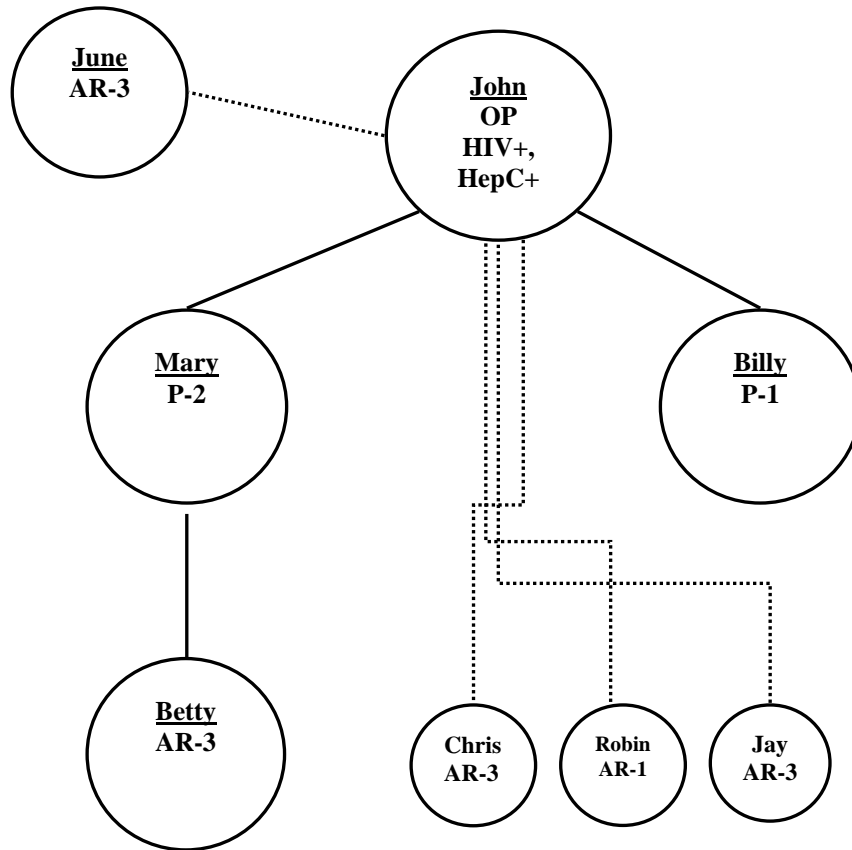
## John's Story, Part III

Looking back at John's Story, John mentioned that he spoke to his sister, June, and he was worried about how she was running with the same crowd that he used to hang out with. At the time of the interview, June is mentioned but most of DIS William's attention is focused on Billy, Mary, Betty and Chuck.

Recall June's information.

*June might seem to be a lower priority interview since she is an AR-3—she is not a named partner, she is not a partner's partner, and she is not known to show signs and symptoms of an STD. However, she is actually a high priority for a Cluster Interview because*

- *she is running with John's old crowd,*
- *she is in a good position to corroborate information that John provided, and*
- *she may potentially provide additional information regarding Billy and other possible partners of John.*



## June's Interview

DIS William contacts June and asks her to come to the CHD. When she arrives William says he has some important information, and informs her she has been in contact with someone who recently tested positive for HIV and she is in need of a test. He offers her a free HIV screen and then interviews her before the results are known. Among other things revealed during this interview, June tells DIS William that she talks to John on the phone. Last time they spoke John mentioned weekly parties with Billy and Billy's friends. June doesn't know their names, but John sees them at the Aileron – the club where all the pilots and attendants hang out. June says John is smitten and does whatever Billy tells him to do. June talks of sex parties, slave auctions, multiple partners, internet cameras, etc. William asked when and where these parties took place and June said she does not know. When William asked for the names and locating addresses of some of the other participants, or a web address of a web cam, June said she didn't have any names, no proof, only stories and hearsay.

## Practice

1. DIS William contacts June and asks her to come to the CHD. When she arrives, William says he has some important information, and informs her she has been in contact with someone who recently tested positive for HIV and she is in need of a test. He offers her a free HIV screen and an interview before the results are known. DIS William explains the purpose of the interview with June in terms that are relevant to her. Among other things during this interview June tells DIS William that she talks to John on the phone. The last time they spoke John mentioned weekly parties with Billy and Billy's friends. June doesn't know their names, but John sees them at the Aileron – the club where all the pilots and attendants hang out. June says John is smitten and does whatever Billy tells him to do. June talks of sex parties, slave auctions, multiple partners, internet cameras, etc. William asked when and where these parties took place and June said she does not know. When William asked for the names and locating addresses and web addresses or screen names of some of the other participants, June said she didn't have any names, no proof, only stories and hearsay.

During June's cluster interview, DIS William does his best to fulfill the three main objectives.

1. Did June name back the OP?
2. Did DIS William gather additional information on the social network of the OP?
3. Did June help identify any previously unidentified partners of the OP?

Correct answers:  
1. yes  
2. yes  
3. no, but she provided more information for a reinterview.

## Section 6: Conducting the Cluster Interview

### Introduction

As you recall, the Original Interview is described as the initial comprehensive interaction with an infected patient designed to perform partner elicitation, to ensure the patient understands their infection, and to ensure the patient is sufficiently educated to take actions to avoid STD exposures in the future. However, the original interview does not end when all of the infected patient's critical period partners (*see interview period chart page 21*) have been elicited with adequate locating information. The DIS, as case manager, must explore the possibility that there may be other individuals within the infected patient's social network, with whom the patient may deny recent or other sexual contact, and who may benefit from receiving STD examinations. These socio-sexual contacts can often expand the parameters of a case through the information they are able to provide, confirm, or clarify regarding the Original Patient. Hence the need for other interviewing strategies such as the Cluster Interview and "clustering".

### Key Points

The Cluster Interview is one with a person whose disease status is "not infected" or "unknown" at the time of interview. For more on the Cluster Interview format see Appendix U.

- The purpose of the cluster Interview for the DIS, according to CDC, is:
  - to obtain additional information
  - to confirm information
  - to clarify conflicting information regarding the general, medical, and epidemiological aspects of the Original Patient's case.
  
- The purpose of the Cluster Interview for the negative patient, according to CDC, is:
  - to receive information about the disease they have been exposed to.
  - to discuss ways to remain negative and to avoid re-exposure.
  - to develop risk reduction strategies to prevent future infections or exposures.
  - to aide those in their social network who may also have been exposed or infected.
  - to avoid complications (due to the asymptomatic nature of the disease.)

- The Cluster Interview is always done to expand the parameters of the current disease investigation. (Purposeful, focused, and timely.)
- The Cluster Interview is the tool used to motivate a patient, who has been presented with no evidence of a specific STD, to disclose personal information about partners and other at-risk individuals who may benefit from exam and testing.
- Common candidates for a Cluster Interview include:
  - Roommates
  - Running Buddies
  - Steady sex partners
  - Anyone who can potentially expand the intelligence database for a given case.

## Context

### Common Errors of the Cluster Interview

Common errors new DIS must learn to avoid in order to be successful with the cluster interview include the following:

1. It is a common error for a new DIS to rush through this as if it was just “the next step,” and arrive at the cluster interview without a strategy. DIS must consider what information it is that they need from this interaction. They must also determine what information the client should take away from the interaction.
2. It is a common error to assume you can establish trust and rapport in 5 minutes. In the EDG and ISTD, the DIS is taught to “establish rapport” as an item on the checklist, along with “Hello, my name is \_\_\_\_\_. I am from the CHD.” Veteran DIS recommend instead of trying to *create* rapport, demonstrate that you are “competent.” To do this quickly you can:
  - Communicate that there are confidentiality laws, and that you understand them and that you abide by them; and
  - Show that you know what you are talking about regarding the disease. Do not guess. Do not make up things. Do not offer to find information for the interviewee, unless absolutely necessary. And if necessary, DO find out and then truly follow through with patient. This builds credibility and keeps the door open for more information from the patient.
3. It is a common error to assume that the patient cares about the disease and its spread.
4. It is a common error to believe that the patient cares about you and your job. Remember: The patient ultimately cares about himself and getting rid of the disease. It will be rare to find selflessness! You will have to do something other than show a CHD identification card in order to win cooperation.
5. It is a very common error to somehow react to the name you were looking for. Since this is a cluster interview, someone else gave you a name and you are listening for that name. If you light up, or wrap up the interview, or get excited once the OP is

named back, you have given up the OP and violated confidentiality. So, if the interviewee gives you the OP in the first 5 minutes, you still need to take a full “hour or more” to cover the identification of the OP and any other Partners and At-Risk Individuals that were elicited. The idea is to work all of the names the interviewee gives you.

Early in the interview lay the foundation for why you are there and why this interview is important, at all times remember to protect the OP's confidentiality.

## **The Art of Clustering and the Cluster Interview: Veteran Recommendations**

### *DIS as Communicator and Guide*

Long term, veteran DIS explained how they perfected the cluster interview this way:

- Capture the interviewee with scenarios: “Let me tell you what is going to happen if you cooperate.” “Let me tell you what is going to happen if you don’t cooperate.”
- Communicate to the Interviewee that you are here to help solve this problem with them. The extension is – the veteran DIS becomes a guide in solving the problem with the interviewee. (Without saying it out loud, the veteran implies, “*You* are the one who may get the disease. *You* are the one who was named. *You* are the one in close proximity to the disease. It is *my* job to help you solve *your* problem. It is *my* job to help you solve this issue *with you*. *I* am competent; *I* have a really good handle on this. *You* can trust *me*.”
- Convince yourself that, at least for the duration of this interview, you really care about this patient, whether it is true or not. The “liking the patient” attitude shows in body language and facial expression and is readable by the patient. This is part of winning the patient over.

### **DIS as Problem-Solver**

To the extent that you can, you want to talk to the patients before they are examined and hence, before they know whether they are positive or negative. People can lose their motivation once they learn negative results; or, a positive but treated person can resist giving you names, etc. To a certain degree, the DIS becomes a gatekeeper to managing this exposure, at least to the interviewee. As long as the DIS is a problem solver, you will have the client’s attention and cooperation.

Module 10 of the Employee Development Guide, *STD Interview Activities*, discusses the elements of various interviewing techniques, including key motivators. These motivators are introduced again in ISTD and include, but are not limited to:

- Open-ended Questions
- L.O.V.E.R. Method
- Confrontation techniques
- Possibility of Reinfection or re-exposure

### Open-Ended Questioning

The concept of open-ended questioning is introduced in the EDG and practiced throughout ISTD. Open-ended questions provide for two-way communication and flowing dialog. New DIS must develop the habit of using communication that emphasizes asking positively phrased open-ended questions, active listening skills, and giving appropriate feedback.

### L.O.V.E.R. Method

The ISTD course teaches the technique called the LOVER method of problem solving. The technique is used when in conversation with a client. Each ISTD participant is taught the L.O.V.E.R. acronym which stands for: Listen, Observe, Verify, Evaluate, and Respond.

- Listen to what the person says.
- Observe how they said it and what their body language is telling you also.
- Verify what they said with what you know about the person/case.
- Evaluate the statement
- Respond appropriately

Whether you are in the field or in clinic, the LOVER approach provides insight to both verbal and non-verbal problem indicators and provides a means of verifying and assertively confronting these problems.

### Confrontation

The purpose of confrontation during an interview is to challenge the patient to examine the information they are sharing for content and completeness. This includes challenges to noted discrepancies and conflicts with reality or with appropriately tailored motivations.

### Re-Exposure

One of the most effective motivators for a patient is the possibility of becoming re-exposed to this infection; undergoing testing, exam and treatment; and the possibility of developing complications from untreated infection.

If the interviewee is known to be negative, you must talk about incubation periods and the phenomenon of false negatives (actually positive).

- Explain the potential for more spread and re-infection – “We need to treat your partners.”
- Emphasize to the patient the troubles and the lengths it took to get treated today. “This is why it is important to treat all of your partners.”
- Keep everything personal. Do not refer to ‘contacts,’ use the word ‘person’. Words like ‘exposed’ are clinical; instead use the phrase ‘somebody who cares about you is concerned that they may have given you something.’ Never say a person was

‘named,’ rather they ‘may have been exposed,’ or “you have been exposed, you need to be tested today and again in 6 months.”

## Strategies

### “If”

- Use the role playing strategy of “If.” Once the interviewee gives you a name, ask “if that person was the one who referred you, who else should that person have named?” Do this with each person the interviewee names, thereby hiding the OP.

### “Waiting”

- Leave the impression that you are still waiting for more names. Do not appear satisfied with the list the interviewee has provided. “Who else can you give me?” “Who else should I know about? This list doesn’t seem complete.” This strategy may sound aggressive if not done correctly. To soften the strategy, you can couch the phrase inside praise for the information the interviewee has already given you. For example, “This is a lot of good information; I am going to look it over, but I may need to contact you again tomorrow; this list doesn’t seem complete.”

### Caution

- Use caution with confrontation. The smaller the number of partners named by the interviewee, the more careful you must be with case confidentiality. Some strategies that work with small partner lists include:
  - Claim you don’t believe the list can be this small.
  - Tell the client: "Based on what we’ve discussed about your exposure, surely you can agree that there are more people who are in need of our services. Who else comes to mind?"
  - Imply that the interviewee was named by “someone who may have lied or made a mistake.” But be careful when using this strategy. You don’t want to appear that you have made the mistake yourself. Your credibility is everything.

New DIS must have a plan for these tight situations.

## Common Errors

Some common errors that new DIS make the first few times they engage in patient interviewing include:

- Awkwardness and unfamiliarity with asking open ended questions
- Nervousness
- Forgetting their active listening skills
- Not practicing the LOVER approach
- Not using all the problem-solving tools they have learned

- Not knowing how to appropriately confront a patient who gives incorrect information about his/her disease or out right lies regarding contacts, lifestyle, exposure information, or sexual orientation.
- Not giving correct information regarding tests, treatment, follow-up, etc...

## Additional Information

### Recommended Treatments

Every DIS needs to know the specific information for each diagnosed disease, and deliver correct information on signs & symptoms, incubation periods, infectious periods, interview periods, critical periods, source and spread possibilities, treatment, referral, and prevention messages related to each disease. That information is covered in the EDG under each disease name.

The following is a link to the guidelines of current recommended treatments:

<http://www.cdc.gov/std/treatment/>

For more on interviewing skills and tailoring information to the patient see the section on *Prevention Messages* in Appendix H in Module 3.

Practice:

Upon completion of this section, discuss your responses with your supervisor.

1. Larry Jordan, a DIS assigned to the Orange County Health Department, was asked to locate and engage in partner services (PS) on an individual in Orlando who had been mentioned as an occasional sex partner (P-1) by an Original Patient (OP) newly diagnosed with HIV in Richmond, Virginia. When Larry met the partner, Saleem, at a fast food restaurant near his job, his objectives were to talk to him and have him consent to field HIV and syphilis testing, including a Presumptive Interview to identify other individuals within the partner's social network who could benefit from similar counseling and testing. Saleem consented to the tests, but was reluctant to discuss other individuals within his social network who could be contacted for testing. He finally agreed to provide the information that was requested after DIS Larry used the following motivators:

- A. DIS Larry reminded Saleem that he had not disclosed any information to him regarding the individual who wanted to make sure that he was aware of his possible exposure to HIV and that he be tested. He was assured that his identity would be similarly protected when individuals that he mentioned were contacted (Confidentiality).
- B. Because of the possibility of indirect exposures within specific social environments, an infected individual, with whom he may never be exposed, could possibly infect someone with whom he could be exposed in the future. Testing that individual would decrease the chances of his being indirectly exposed (Re-exposure).
- C. Larry explained that exposure to HIV opens the possibility of exposures to other STD's and that HIV and AIDS have become pandemic. Saleem was reminded of his responsibility as a global citizen to do his part in helping to prevent those conditions.
- D. Larry emphasized the benefits of medical intervention with early HIV detection. That could benefit both partners and non-partners who are not aware of their HIV status.
- E. Saleem was assured that the contacted individuals would be grateful to him for assisting Larry in his efforts to offer them counseling and testing, even though they would never know his identity.

If you assume that the best motivators appeal to matters of personal interest and concern for the interviewee, which of the above motivators are likely to be **least** effective.

- a. A and C
- b. C and E
- c. B and D
- d. A and E

2. Larry Jordan is a five-month post-ISTDI DIS. He was in an outlying clinic yesterday where he post-tested a new HIV positive 24 year old married bi-sexual black male who also has an additional diagnosis of secondary syphilis. Larry is back at the outlying clinic today to complete chart reviews and perform the remainder of the field investigations for the six individuals elicited during the Original Interview. As he is reviewing charts a nurse approaches him saying that the brother of the OP from yesterday is here with two unknown females and is demanding to speak to Larry regarding his brother.

Should Larry meet with the brother of the OP? Pick the best response.

- a. Larry should not meet with the brother of the OP as this is a breach of confidentiality and the HIPPA Guidelines.
- b. Larry should not meet with the brother of the OP as this will interrupt the plans for the day he has already made.
- c. Larry should meet with the OP's brother to find out what his concerns are.
- d. Larry should meet with the OP's brother because the brother probably already knows what is wrong and is just trying to help his brother.

3. Larry tells the nurse he will meet with the brother. Upon meeting with the brother of the OP, the brother, who is also bi-sexual, produces Larry's business card and states he knows that Larry spoke to his brother and he needs to know what is going on with him. He states he knows it is bad because his mother and brother can't quit crying, yet neither would tell him what the matter was. He is demanding to know what is wrong with his brother. How should Larry respond to this demand?

- a. Larry should inform the brother that he cannot talk to him due to confidentiality laws and send him on his way.
- b. Larry should advise him of the OP's diagnosis.
- c. Larry should advise the brother that he is aware of his concern for his brother but due to confidentiality is unable to discuss any of his brother's information with him just as he would not discuss any of his confidential information with anyone else. He should then ask the brother how else he can help him.
- d. Larry should ask the OP's brother who the OP is having sex with and obtain locating and identifying information of them thereby conducting a Cluster Interview.

4. Once Larry has advised the brother of the confidentiality issue and asked how else he can help him, the brother of the OP states that he is extremely concerned because he and his brother share many of the same sex partners, including the two females who are in the waiting room now. The brother of the OP also states that one of the females is three months pregnant with his child. How should Larry proceed?

- a. Larry should now inform the OP's brother and the two females of the disease(s) they have been exposed to and test them accordingly.
- b. Larry should inform the brother and the two females separately that he is unable to disclose any information about the OP or any other patient as stated earlier but that he can offer them all of the services he provides free of charge right now while they are still in the clinic. The ARNP or MD should be informed of the situation and asked to presumptively treat each of the three partners in light of the situation without disclosing/discussing the OP's status. During the time that the three people are being seen by the ARNP or MD, Larry should perform Cluster Interviews on each one separately to include clustering around the OP once he is named.
- c. Larry should assure the brother and the two females that they have nothing to worry about and then disposition the field record to another worker to contact each of them separately for testing and treatment as necessary.
- d. Larry should encourage the three to make an appointment as soon as possible and then contact his supervisor to update him or her on the case.

5. Larry gets the initial test results back. The brother of the OP and one of the females is negative for Syphilis and HIV. The pregnant female is negative for HIV but positive for Early Latent Syphilis. How many Cluster Interviews did Larry perform?

- a. One
- b. Two
- c. Three
- d. Four

Correct answers: (Larry)  
1. b  
2. c  
3. c  
4. b  
5. b - The brother of the OP and the negative female. The interview with the pregnant female becomes the Original Interview for her.

*The next two scenarios should help you prepare for the clustering questions portion of the Floridan STD Prevention Certification Exam. Answer the questions that follow each scenario. Write out your answers, and then discuss them with your supervisor.*

1. OP Kenny, a 710, named several recent partners, including Rebecca, indicating they had sex after meeting at an off-campus party following the big game. DIS Cindy located Rebecca and met her at the CHD where a stat RPR was performed and returned as negative. However, before the results were known, Cindy interviewed Rebecca regarding her own sex or needle sharing partners. Rebecca said that she drank beer on occasion, but was disturbed that anyone would think she would “do drugs.” She went on to say that her last sexual encounter was over a year ago “back home in Wisconsin.” Despite prodding and motivating by Cindy, Rebecca insisted that she had not had intercourse with anyone since coming to college. The interview dragged, and an exasperated Cindy asked if Rebecca might have engaged in sex “the night you went to the party after the Homecoming game.” Rebecca was stunned and asked “How do you know about that party?”
  - a. Quick, she needs to save the OP and the interview. How can Cindy respond to Rebecca’s question? Write your answer.
  - b. If the reference to the party leads Rebecca to “recall” Kenny, is the interview “over?”
  - c. Has Cindy breached her obligation of confidentiality to Kenny, even though she never mentioned his name?

2. Reginald is named as a partner by an OP. New DIS Jack is managing the case. Even though his stat RPR is negative, Reginald accepts the epi-treatment. During the cluster interview, Jack thought Reginald must be the best networked “p4r7i-13oi” (“party boy”) ever! He talked to DIS Jack for four hours, happily giving him the skinny on who’s who at every exclusive party, happenin’ club, and bath house in the city. Jack is pleased with Reginald’s enthusiasm at first, but after awhile Jack thinks to himself, “This guy is either a lunatic or a liar.” After the interview, Jack looked over his notes and realized he didn’t know which of the dozens of individuals named or described to pursue first. In fact, Jack isn’t even sure how to organize the information. Jack thinks to himself, “What exactly am I expected to do... interview every one of these people? Heck, half of them don’t even have names!
- a. There are so many crazy names and descriptions here—isn’t it possible that Reginald is making some of this up?
  - b. How would you advise Jack to make sense of such an abundance of gossip?
  - c. How can Jack prioritize within the interview names? Write your answer.

## Discussion Answers and Feedback

1.
  - A. Cindy may say something to the effect that she is familiar with how significant dates and popular events such as Homecoming, Spring Break, and so on, spawns parties and subsequently sex. She may tell the patient that part of her job is to help the patient recall any of those significant dates and events and by mentioning Homecoming, she was simply mentioning the most recent significant date or event.
  - B. No. Cindy should salvage the Interview, perhaps as mentioned above, and then continue to mention other significant dates and events, revisit one-time partners, revisit the patient's definition of sex (Rebecca may not consider oral or anal real sex) to elicit more partners and at-risk individuals. Cindy can and should use several different motivators and communication techniques to help "jog" Rebecca's memory.
  - C. Yes! Furthermore Cindy has created doubt in Rebecca's mind that she may not be careful with any of the information that Rebecca may give her.
2.
  - A. It's possible, though not probable.
  - B. The DIS needs to re-focus this interview. There is always a simple truth, even in complicated, anonymous sex situations: The interviewee knows *at least* a circle of regular sex partners. That is a good place to start. Furthermore, there are varying degrees of *anonymity*: There is completely anonymous sex performed between bathroom stalls or through glory holes, but there is also commitment-free sex where names are not exchanged, but descriptions are still possible. With someone as enthusiastic as Reginald, it may be possible to "tour" him through the location allowing him to identify his partners and his partners' partners without revealing Jack's identity. The technique is worth exploring.
  - C. As for the lament, "what am I expected to do...interview everyone of these people?" Depending on the situation your program is in, i.e. an outbreak, then yes, it is possible in such situations to offer a screening at the location, thereby intervening in many cases and using the opportunity to educate the population. Make sure that the targeted screenings are approved by a supervisor, who may want you to concentrate on critical period partners first and foremost.

## Course follow-up

Veteran DIS, Supervisors, and Managers recommend that new DIS seek out opportunities for growth and learning. In order for this module on “clustering” and the Cluster Interview to have a lasting affect, new DIS should consider it “the tip of the iceberg.”

This module should be supported with:

- classroom training on topics such as Advanced Sexually Transmitted Disease Intervention
- positive and professional field demonstrations of both “clustering” and Cluster Interview techniques by supervisors and managers, and
- real world experience with actual “clustering” and Cluster Interviews.

“Clustering” and Cluster Interviews should be performed routinely. Ask your supervisor to review your cases and direct you to any new potential networking opportunities.

# NOTES

**Appendix S:**  
RPR and Titer

**Appendix T:**  
Interview Record and Cluster Interview Record

**Appendix U:**  
Clustering and Cluster Interview Flow Chart

**Appendix V:**  
Glossary of Terms

**Appendix S:**  
RPR and titer

**RPR and titer:**

The venereal disease research laboratory (VDRL) and rapid plasma reagin (RPR) tests are done to screen for syphilis. These tests detect the presence or absence of the antibody reagin. If a screening test is positive (reactive), the strength of the result may be determined by measuring the amount of reagin. The results are then given in titers. A titer is a measure of how much the blood or spinal fluid sample can be diluted before the reagin can no longer be detected.

- A titer of 1 to 32 (1:32) means that reagin can be detected when 1 part of the blood or spinal fluid sample is diluted by up to 32 parts of a salt solution (saline).
- A larger second number means there is more reagin in the sample and generally indicates a higher level of infection. Therefore, a titer of 1 to 128 indicates more reagin, and a more intense infection, than a titer of 1 to 16.

The accuracy of testing often depends upon the stage of syphilis. Syphilis testing may need to be repeated if initial results are uncertain or if there is repeated exposure to syphilis, such as from repeated unprotected intercourse.

A guide to the multipliers is below.

0	1	2	4	8	16	32	64	128	256	512	1024
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**Appendix T:**  
Interview Record and Cluster Interview Record



**CLUSTER INTERVIEW RECORD**

ORIGINAL PATIENT NAME	CASE NUMBER	CONTROL NUMBER	OUTBREAK NUMBER	DATE	WORKER
				/ /	

**INDIVIDUAL INFORMATION (Person Being Clustered)** **FR Number:** \_\_\_\_\_  
 Name: \_\_\_\_\_ Type:  Partner  Suspect  Associate  Other \_\_\_\_\_

**SOCIAL HISTORY:**  
 Marital Status: *S M W D Sp Unk* Primary Language:  English  Spanish  Other \_\_\_\_\_  
 Living Situation:  House  Apt  Jail  Homeless  Transitional (*Shelter, Drug Rehab, Grp Home, Half Way*)  Other \_\_\_\_\_  
 Country of Birth \_\_\_\_\_ Time: In U.S. \_\_\_\_\_ In State \_\_\_\_\_ At Current Address \_\_\_\_\_  
 Living With \_\_\_\_\_ Relationship \_\_\_\_\_

**MEDICAL HISTORY:**  
 Primary Care Provider: \_\_\_\_\_ Date Last Visited: / / Purpose \_\_\_\_\_  
 \_\_\_\_\_

Previously Infected With Syphilis?:  Y  N  U If Yes, Stage \_\_\_\_\_ Date Treated / / With \_\_\_\_\_  
 Date of Last Reactive STS / / Type \_\_\_\_\_ Titer \_\_\_\_\_  Unk Date of Last Negative STS / /  Unk  
 HIV Infected?:  Y  N  U If Yes, Date Diagnosed / / Receiving Antiretroviral Rx?:  Y  N  U  
 Other STD Hx:  CT  GC  HPV  HSV  Other \_\_\_\_\_ Past Year:  CT  GC  HPV  HSV  Other \_\_\_\_\_  Unk  
 Self-Rx:  Y  N  U If Yes, Indicate Source:  Left Over (*own*)  Other Person  Out-of-Country  Other \_\_\_\_\_

**RISK ASSESSMENT:**  
**Past 12 Months:** Sex for \$/Drugs:  Y  N  U Exchanged \$/Drugs for Sex:  Y  N  U Gender of Partners:  M  F  B  U  
 IDU Drug Use:  Y  N  U If Yes, indicate:  Cocaine  Heroin  Methamphetamines  Other \_\_\_\_\_  
 Non-IDU Drug Use:  Y  N  U If Yes, indicate:  Cocaine  Crack  Heroin  Methamphetamines  Other \_\_\_\_\_  
 Currently Incarcerated:  Y  N  U In Past Year:  Y  N  U (*Facilities/Dates*) \_\_\_\_\_  
**Past 3 Months:** Sexual Practices:  Vaginal  Anal, Insertive  Anal, Receptive  Oral Anonymous Sex:  Y  N  U  
 Has Pregnant Partner(s):  Y  N  U Victim of Sexual Assault:  Y  N  U Domestic Violence:  Y  N  U  
 Transgender:  MTF  FTM  N  U Gang Member:  Y  N  U If Yes, Indicate Gang \_\_\_\_\_  
 Condom Used At Last Vaginal/Anal Sex?:  Y  N  U Other Risk Behaviors \_\_\_\_\_  
**HR Loci**es Frequented (*Possible Screening Sites*):  Bars/Clubs  
 Baths/Spas \_\_\_\_\_  Dance Halls \_\_\_\_\_  
 Parks \_\_\_\_\_  Motels \_\_\_\_\_  
 Streets \_\_\_\_\_  Internet \_\_\_\_\_  
 Other \_\_\_\_\_

**OUT-OF-AREA TRAVEL (Interview Period):**  No  Yes

CLUSTER INTERVIEW INFORMATION	CLUSTER INSTRUCTIONS: P = PURSUE / C = COVERED
Original Patient Named Back? <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> A-1s
Original Patient: Sex _____ First _____ Freq _____ Last _____	<input type="checkbox"/> A-2s To: _____
N/S _____	<input type="checkbox"/> Lx Hx: _____
Interviewee: Sex _____	<input type="checkbox"/> OP's Living Situation
N/S _____	<input type="checkbox"/> OP's Source of Income
Current Exam Information:	<input type="checkbox"/> Pregnant Friends
	<input type="checkbox"/> OP's Risk Behaviors
	<input type="checkbox"/> Possible Screening Sites
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>

**ASSOCIATES:**

Name (Last, First)	A-	Ref	Relationship	FR Number	Sex	Disp	Date	DX	Worker Number	Sp Sp	Invest Agency

**Appendix U: The Cluster Interview Format**

## The Cluster Interview Format

### I. Introduction

- A. Introduce yourself and anyone else present.
- B. Explain your role as a trained and experienced DIS.
- C. Define the purpose of the session:
  1. Explain confidentiality (use brief simple terms and explanations).
  2. Provide information about the disease exposed to and the reason for treatment.
  3. Provide information to help prevent future exposures.
  4. Help the patient know what to do if re-exposed.

### II. Patient Assessment

- A. Patient Concerns
  1. Identify and resolve any patient concerns (why given treatment with a negative test, why talk with DIS if test is negative, confidentiality, time, clinic experience, etc.)
- B. Social History
  1. Pursue accurate locating information (address and telephone number) for the patient.
  2. Collect additional social history as it pertains to the original patient and to the original patient's social groups/network: lifestyle, travel, school, work, social groups, and recreation.
- C. Medical History
  1. Collect the following medical information for the patient: STD history, serologic testing for syphilis (STS), incidental treatment, drug use, and pregnancy.
  2. Collect additional medical information as it pertains to the original patient and to the original patient's social groups/network. Pursue A-1's (e.g., symptom history; clinic visits).
- D. Disease Comprehension
  1. Determine and reinforce what the patient knows about the disease.
  2. Present an individualized discussion, not a medical lecture. Discuss the following points: name, transmission, asymptomatic nature of disease, and seriousness of disease.

### III. Disease Intervention Behaviors

- A. Partner Elicitation
  1. Define the significance of immediate sex partner referral, emphasizing that one or more may have an STD which would re-expose the patient:

*“We found you before you could develop the disease, but we know you are here because someone you are associated with was infected. To prevent you from coming in contact with the disease again we need to talk about your partners.”*

2. Evaluate problems and select appropriate solutions. Use STD motivations:
  - i. · Complications
  - ii. · **HIV Connection**
  - iii. · Asymptomatic
  - iv. · **Re-infection** (in this case it would be possible infection)
  - v. · **Transmission**
  - vi. Others include: congenital infections, preventative treatment, no visits to and from the Health Dept., confidentiality- provider referral.
3. Gather the following information about each sex partner:  
**Number Name Exposure Locating Clustering Description**  
**The goal is to get information about the original patient and their partners. Pursue information about all partners equally, so as to protect confidentiality.**
4. Pursue A-2s and A-3s (**A-2s will include the original patient's sex partners.**)  
*"Who is \_\_\_\_ having sex with?"*  
*Who is having sex with some of the same people you are?"*

B. Risk Reduction

This section sifts attention from the patient's current disease to the behaviors that put him or her at risk to all sexually transmitted diseases, including HIV. This section should be individualized and patient centered and:

1. Help patient identify risks;
2. Identify and support past successes/behaviors that work;
3. Identify one or two steps to reducing risk;
4. Problem solve for potential barriers to implementing steps.

**IV. Conclusion**

- A. Address any remaining patient needs, questions, or concerns of potential compliance problems.
- B. Reinforce any commitments made by the patient.
- C. Provide handouts and information as necessary.

**Appendix V:**  
Glossary of Terms

## GLOSSARY OF TERMS

**Case Closure**—A case is closed when the responsible DIS and the next-level supervisor agree that all reasonable steps to intervene in the disease process have been completed and documented.

**Case Management**—The systematic pursuit, documentation, and analysis of medical and epidemiologic case information that focuses on opportunities to develop and implement timely disease intervention plans.

**Client**—An individual who seeks STD/HIV prevention counseling and testing services.

**Client-Centered Counseling**—Counseling conducted in an interactive manner, responsive to the individual patient's needs and requiring an understanding of the unique circumstances of the patient including behaviors, culture, knowledge, and social and economic status.

**Cluster Interview**—An interview of an person whose disease status is "not infected" or "unknown" at the time of interview, conducted to gather information about previously unnamed or uninitiated partners of known cases and about individuals who may be in need of an STD examination. The cluster interview is conducted with partners, suspects, or associates of known cases.

**Confidentiality**—The concept that information will be released only to persons who need the information to help with the patient's medical care and to protect the public health.

**Contract Referral**—(See also Patient Referral) Notification strategy in which the provider elicits locating information, negotiates a time frame for the infected patient to notify his or her partners of the possibility of their exposure, and refer them to appropriate services. If the patient is unable to do so within an agreed-upon time period, the provider has permission to notify and refer the partner(s).

**Critical Period** -- The critical period is the most likely time the patient could have been infected or infected others based on their personal symptom history. The critical period begins at the earliest point a patient could have been infected and ends on the date the patient is adequately treated. The critical period consists of the maximum incubation period, the period when symptoms were present (according to the patient's elicited symptom history), and any latent periods. All partners within this time period need an examination and possible treatment.

**Disease Intervention**—The process of stopping the spread of a disease and the complications of disease. This is done with two goals in mind: Primary Disease Intervention and Secondary Disease Intervention. *Primary Disease Intervention*: This is the "gold standard." We want to reach those exposed before they develop the disease. This is preventive treatment. *Secondary Disease Intervention*: In this case the person is already infected—we want to get them treated to avoid transmission (to break cycle of transmission) and to reach those infected to prevent development of serious complications.

**Field Investigation**—The process of informing infected persons and their partners of their status by going into the community to find them and to motivate them to accept medical attention and risk reduction counseling.

**Incubation Period**—The time between the entrance of bacteria into the body and the development of symptoms or positive laboratory tests.

**Index Patient**—A patient newly diagnosed with an STD and who is a candidate for interview by trained DIS. The term index patient is often interchanged with original patient. Typically, the index patient is the first infected person identified in a lot involving multiple infections.

**Interview Period**—Interval from the date of treatment back to the earliest date that the patient could have been infected. It includes the maximum incubation period, the source period, and the spread period. All partners within this time frame should be considered for an examination.

**Lot System**—A system of organizing cases so that related cases are filed in the same "lot" or folder. The goal is to assure that all obtainable information regarding the continuing management of related cases contained in a lot is readily available to all responsible workers.

**MAP Sheet**—The major analytical points (MAP) sheet is used for gathering information about members of a "lot" as well as for analysis and communication.

**Original Interview**—The first interview conducted with an infected patient. The objective of the interview is to prevent further spread of disease through the prompt identification and examination of all elicited partners and suspects. The interview is designed to ensure that the patient understands the seriousness of the disease, and motivates them to cooperate with STD/HIV control efforts. It is also designed to increase the likelihood that all at-risk partners and suspects are disclosed so they can be brought in for examination and treatment and to provide client-centered counseling to develop a personalized risk reduction plan.

**Original Patient (OP)**—See index patient.

**Partner**—A person who engages in any type of sexual activity or needle-sharing activity with the infected person.

**Partner Elicitation**—The process of obtaining names, descriptions, and locating information of persons who are either partners, suspects, or associates to the original patient.

**Partner Notification**—The process of locating and notifying partners that they have been exposed to a disease.

**Partner Services**—The wide range of services provided to partners of infected patients. Partner notification is but one aspect of these services. Other services include counseling, testing, and treatment, as well as referrals to appropriate services such as family planning, prenatal, drug treatment, social support, housing, etc.

**Patient**—An individual who is treated for an STD or referred secondary to a positive HIV test.

**Patient Referral** (Also known as Contract Referral)—A notification strategy whereby the infected patient accepts full responsibility for informing partners of the possibility of exposure to an STD and for referring them to appropriate services. With patient referral, the provider coaches the infected patient on when, where, and how to notify and what to expect with reactions.

**Post-Interview Analysis**—An analysis of the information obtained during the interview. The post-interview analysis should be done immediately after the interview when the information is still fresh on the mind of the DIS.

**Pre-Interview Analysis**—An analysis of the patient's situation done by the DIS before the original interview. The pre-interview analysis includes reviewing available medical information and case information, reviewing available socio-sexual information, and assembling necessary materials and supplies needed during the interview.

**Presumptive Interview**—An interview conducted on the basis of a patient presenting with symptoms that are suspicious or lab tests whose results are not yet available. The purpose of this type of interview is to afford the staff additional time and information by assuring the rapid examination and medical evaluation of recent sex partners.

**Provider Referral**—A notification strategy where the provider takes responsibility for confidentially notifying partners of the possibilities of their exposure to an STD.

**Re-Interview**—Any interview following the original interview with an STD patient. Reinterviews are conducted to provide feedback, to gather additional information that may help prove or disprove a hypothesis about case relationships, to address points not covered during the original interview, to identify additional partners or suspects to the original patient, to confront points that are illogical or that are disputed by other information, to solicit assistance in locating previously named persons who have not yet been located or are being uncooperative, to support patient risk-reduction attempts, and to support and reinforce a patient's successful use of referral services.

**Social Network Analysis**—The study of how people connect in social structures and of its implications. See Cluster Interview.

**Source Period**—The interval during which a patient most likely contracted the disease.

**Spread Period**—The time during which a patient is potentially infectious and could have passed the disease on to others.

**Targeted Screening**—An activity to identify infected people in a select group who are engaged in behaviors that put them at greater risk for infection.

**Volunteer**—A person who comes into the clinic without being referred.