Pacific Behavioral Health Collaborating Council (PBHCC)

IC&RC Alcohol and Drug Counselor (ADC) Academy Curriculum

Day 4: Core Competencies of Addiction Counselors: Prevention and Treatment of HIV/AIDS and Sexually Transmitted Infections

Trainer Guide

Developed in 2018 by the Pacific Southwest Addiction Technology Transfer Center and UCLA Integrated Substance Abuse Programs

Pacific Southwest ATTC (HHS Region 9)

UCLA

IC&RC Alcohol and Drug Counselor Academy, Day 4

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IC&RC Alcohol and Drug Counselor Academy, Day 4

Background Information

The IC&RC Alcohol and Drug Counselor (ADC) Academy curriculum is a weeklong training designed to prepare individuals based in the six U.S.-affiliated Pacific Jurisdictions to successfully pass the IC&RC ADC certification exam. The duration of the ADC Academy is forty hours of content spread across five full days of training. Funding for the development of the ADC Academy was provided by the Pacific Behavioral Health Collaborating Council (PBHCC). The curriculum is broken into five modules/days, which include:

- Day 1: Introduction to the IC&RC ADC Performance Domains and Review of Psychoactive Drugs
- Day 2: Core Competencies of Addiction Counselors – Knowledge and Skill Acquisition of Screening, Intake, Orientation, Assessment, Treatment Planning, and Counseling
- Day 3: Core Competencies of Addiction Counselors – Knowledge and Skill Acquisition of Case Management, Crisis Intervention, Client and Family Education, Referral, Report and Record Keeping, and Consultation
- Day 4: Core Competencies of Addiction Counselors – Prevention and Treatment of HIV/AIDS and Sexually Transmitted Infections
- Day 5: Course Review and Test-Taking Strategies

What Does the Training Package Contain?

- PowerPoint Training Slides (with notes)
- Trainer's Guide with detailed instructions for how to convey the information and conduct the interactive exercises

What Does This Trainer's Guide Contain?

- Slide-by-slide notes designed to help the trainer effectively convey the content of the slides themselves
- Supplemental information for select content to enhance the quality of instruction
- Suggestions for facilitating group discussions

How is This Trainer's Guide Organized?

For this guide, text that is shown in bold italics is a "***Note to the Trainer.***" Text that is shown in normal font relates to the "Trainer's Script" for the slide.

It is important for trainers to become acquainted with the slides and practice delivering the content of the presentation, ensuring a successful, live training experience.

General Information about Conducting the Training

The training is designed to be conducted in medium-sized groups (30-50 people). It is possible to use these materials with larger groups, but the trainer may have to adapt the small group exercises/case studies and discussions to ensure that there is adequate time to cover all of the content.

Materials Needed to Conduct the Training

- Computer with PowerPoint software installed (2010 or higher version recommended) and LCD projector to show the PowerPoint training slides.
- When making photocopies of the PowerPoint presentation to provide as a handout to training participants, it is recommended that you print the slides three slides per page with lines for notes. Select "**pure black and white**" as the color option. This will ensure that all text, graphs, tables, and images print clearly.
- Flip chart paper and easel/white board, and markers/pens to write down relevant information, including key case study discussion points.

Overall Trainer Notes

It is critical that, prior to conducting the actual training, the trainer practice using this guide while showing the slide presentation in Slideshow Mode in order to be prepared to use the slides in the most effective manner.

Icon Key

	Note to Trainer		Activity
	References		Audience Response System (ARS)-Compatible Slide
	Image Credit		Video Source

PBHCC Alcohol and Drug Counselor (ADC) Academy, Day 4

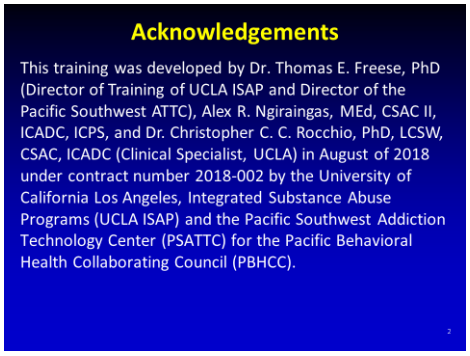
Core Competencies of Addiction Counselors: Prevention and Treatment of HIV/AIDS and Sexually Transmitted Infections

Slide-By-Slide Trainer Notes

The notes below contain information that can be presented with each slide. This information is designed as a guidepost and can be adapted to meet the needs of the local training situation. Information can be added or deleted at the discretion of the trainer(s).

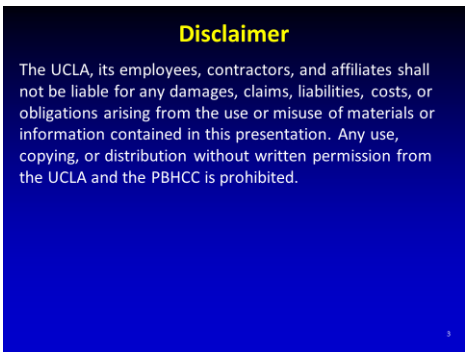
Slide 1: [Title Slide]

- ***Welcome participants to day 4.***
- ***Ask participants if they have any questions from day 3.***



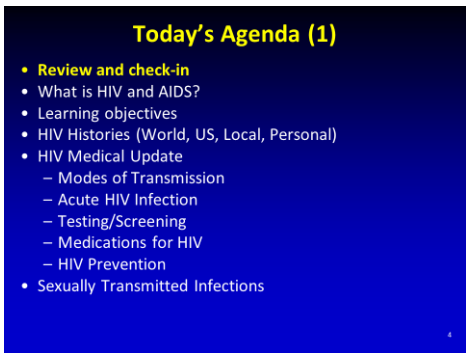
Slide 2: Acknowledgements

This training was developed by Drs. Thomas Freese and Christopher Rocchio from the University of California Los Angeles, Integrated Substance Abuse Programs (UCLA ISAP) and with Alex Ngiraingas, an addictions counselor and educator from the Republic of Palau. We would like to acknowledge and thank the Pacific Behavioral Health Collaborating Council (PBHCC) for their commitment to train individuals across the Pacific to effectively prevent, treat, and support individuals in their own recovery from substance use disorders, and for their financial support for the development and delivery of this curriculum. We would also like to acknowledge Thomas Donohoe, MBA, from the Pacific AIDS Education and Training Center, who provided many of the slides that appear in the Day 4 curriculum. Additional resource provided by SAMHSA, grant number UR1TI080211.



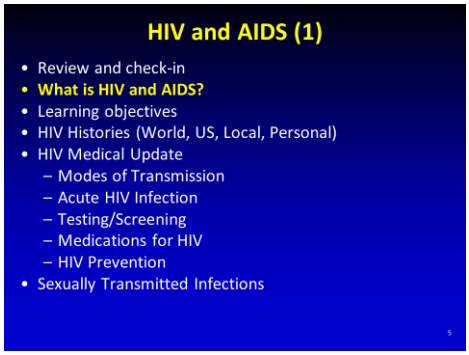
Slide 3: Disclaimer

- ***[READ THE SLIDE]***



Slide 4: Today's Agenda (1)

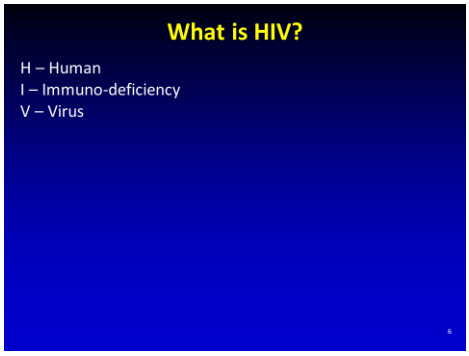
- ***Be prepared to distribute paper copies of the practice exam. Participants are expected to complete the practice exam on their own after class.***
- ***[ASK PARTICIPANTS] Do you have any questions regarding the 12 core functions?***
- ***[ASK PARTICIPANTS] Do you have any questions regarding any of the materials we had covered the first three days of this training?***
- ***Orient participants to the day's agenda.***



Slide 5: HIV and AIDS (1)

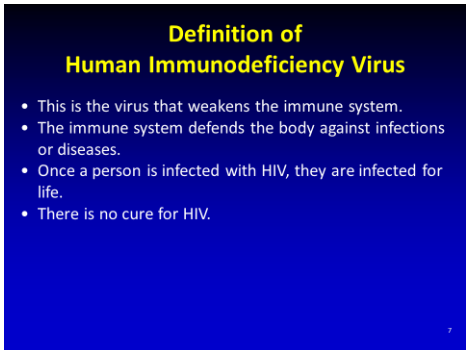
PEDAGOLOGICAL SUGGESTIONS

- ***[ASK PARTICIPANTS] What do you know about HIV and AIDS?***
- ***[ASK PARTICIPANTS] What do you hope to learn in today's session?***



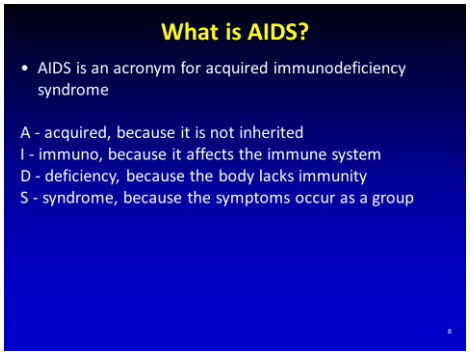
Slide 6: What is HIV?

- HIV stands for "human immunodeficiency virus."



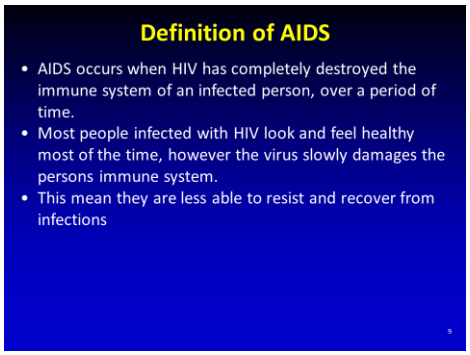
Slide 7: Definition of Human Immunodeficiency Virus

- ***[READ THE BULLETED LIST ON THE SLIDE]***



Slide 8: What is AIDS?

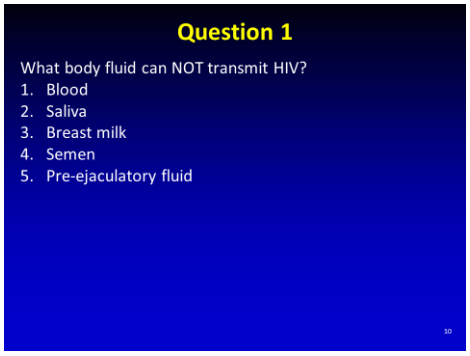
- **Acquired** means that you catch it even though you may be a very healthy person. **Immune** refers to one of the body systems called the immune system. The job of the immune system is to protect the body against sickness and disease. **Deficiency** refers to "a lack of." Immunodeficiency means that the body's natural defence system does not work properly. **Syndrome** refers to a set of symptoms. For example, some of the symptoms for the common cold include a runny nose, sore throat, and cough. When a person contracts AIDS, there is a common set of symptoms.



Slide 9: Definition of AIDS

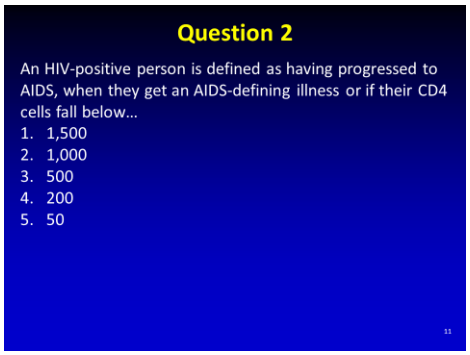
- In short, AIDS is a disease that attacks the human immune system so that when a person dies of AIDS the direct cause of death includes such things as pneumonia, tuberculosis, and cancer.

- ***[READ THE BULLETED LIST ON THE SLIDE]***



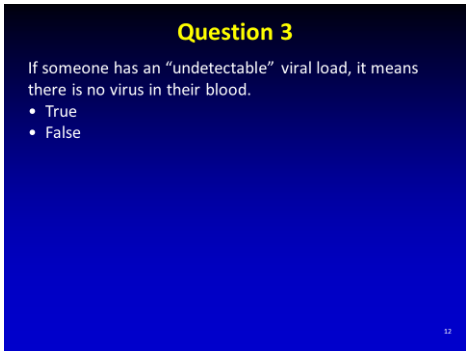
Slide 10: Question 1

- ***Before getting started, let's see what you already know about HIV and AIDS.***
- ***[ASK PARTICIPANTS] What body fluid can NOT transmit HIV?***
- The correct answer is saliva. All others can transmit HIV.



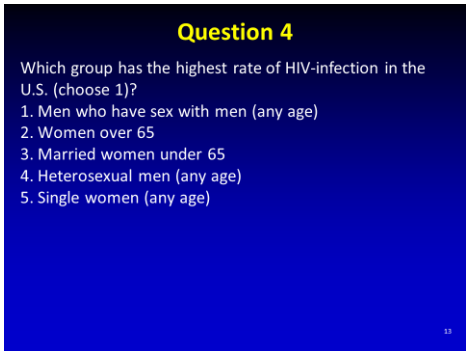
Slide 11: Question 2

- ***[ASK PARTICIPANTS] An HIV-positive person is defined as having progressed to AIDS, when they get an AIDS-defining illness or if their CD4 cells fall below…***
- The correct answer is 200. Once a person living with HIV has their CD4 cells or T cells drop below 200 they are defined as having AIDS.



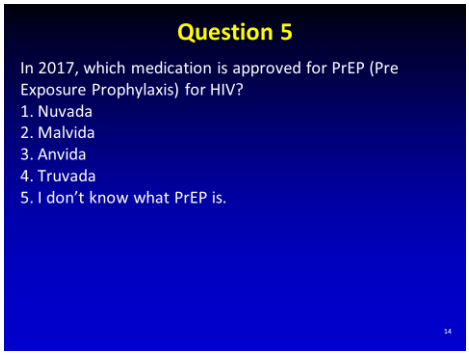
Slide 12: Question 3

- ***[ASK PARTICIPANTS] If someone has an "undetectable" viral load, it means there is no virus in their blood.***
- The correct answer is false. Someone is "undetectable" because the test (often called a viral load test) cannot detect any virus. Usually it means they have fewer than 200 or even 20 copies of virus per microliter of blood. However, if they stop taking their medications the HIV virus will rebound.



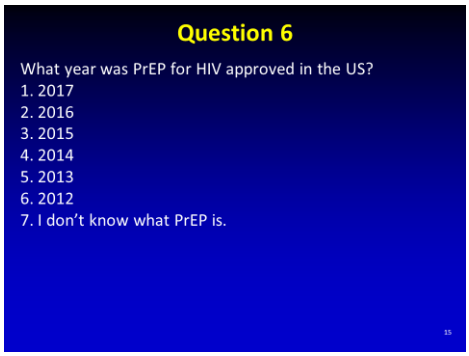
Slide 13: Question 4

- ***[ASK PARTICIPANTS] Which group has the highest rate of HIV-infection in the US?***
- The correct answer is number 1: men who have sex with men.



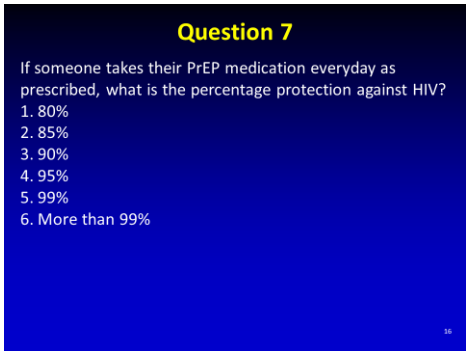
Slide 14: Question 5

- ***[ASK PARTICIPANTS] In 2017, which medication is approved for PrEP (Pre Exposure Prophylaxis) for HIV?***
- The correct answer is Truvada.



Slide 15: Question 6

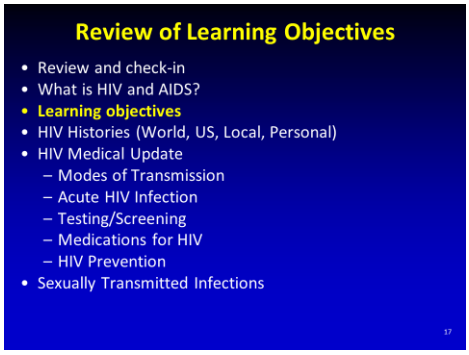
- ***[ASK PARTICIPANTS] What year was PrEP for HIV approved in the US?***
- The correct answer is 2012. It was approved for adults 18 years of age and older. In 2018, the FDA approved it for adolescents between the ages of 13-18.



Slide 16: Question 7

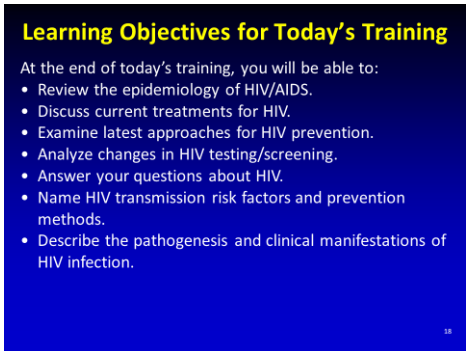
- ***[ASK PARTICIPANTS] If someone takes their PrEP medication everyday as prescribed, what is the percentage protection against HIV?***
- The correct answer is more than 99%. However, this is if they take the medication everyday. If you don't take, it can't protect you. It also does not protect against sexually transmitted infections.

- ***[ASK PARTICIPANTS] How many of the seven questions did you get correct?***



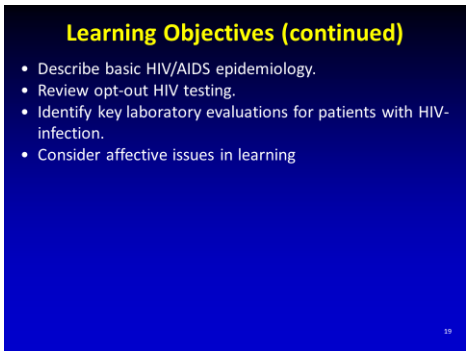
Slide 17: Review of Learning Objectives

- ***Orient participants to the day's agenda***.



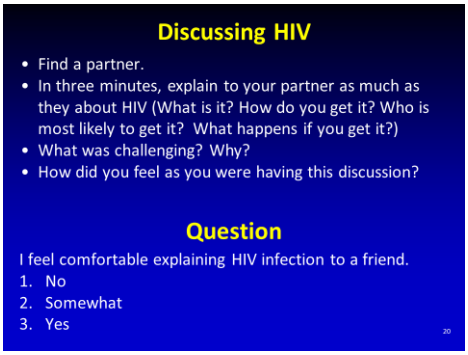
Slide 18: Learning Objectives for Today's Training

- *[READ THE SLIDE]*



Slide 19: Learning Objectives (continued)

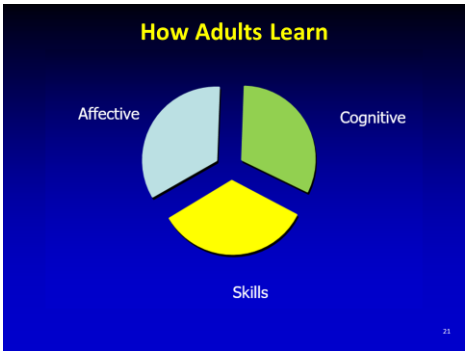
- *[READ THE SLIDE]*



Slide 20: Discussing HIV

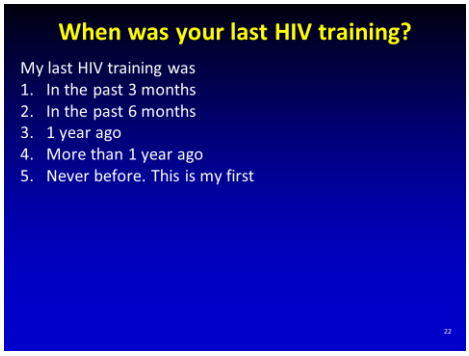
- This slide uses animation.

- ***[READ THE FIRST TWO BULLETS]***
- After participants had an opportunity to complete the activity, ***[CLICK]*** and
- ***[ASK PARTICIPANTS] What was challenging about this activity? How did you feel as you were having to answer these questions?***
- ***After, [ASK PARTICIPANTS] How do you feel explaining HIV infection or HIV disease even to a friend? Please raise your hand if (1) you are comfortable, (2) you are somewhat comfortable, and (3) you are not comfortable.***



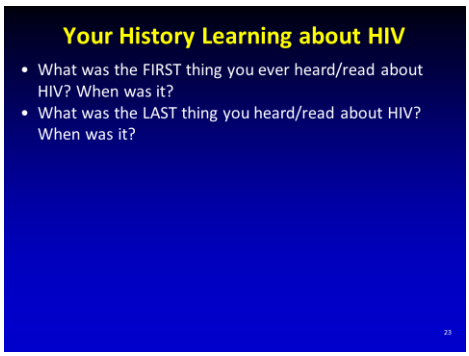
Slide 21: How Adults Learn

- As adults, we learn in 3 broad domains. The first domain is **cognitive** – our ability in how we process information. The second domain is **skill** – our ability to do something. The third domain is **affective** – how we feel about it and our attitudes towards particular subjects. This is perhaps the most important domain of the three. We all have feelings. As healthcare providers and addictions counselors, however, we can't let our feelings get in the way of providing good information or services, especially when discussing HIV, AIDS, and sexually transmitted infections or STIs. We invite you to focus and reflect on your feelings today. Hopefully at the end of today, you will feel more comfortable talking about HIV concepts and about sexually transmitted infections.



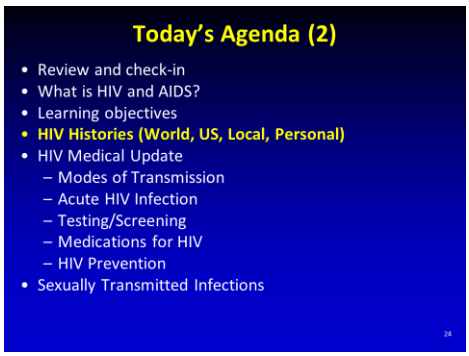
Slide 22: When was your last HIV training?

- ***[ASK PARTICIPANTS] Please raise your hand if your last HIV trainings was (1) in the past 3 months, (2) in the past 6 months, (3) 1 year ago, (4) More than 1 year ago or (5) This is my first training.***



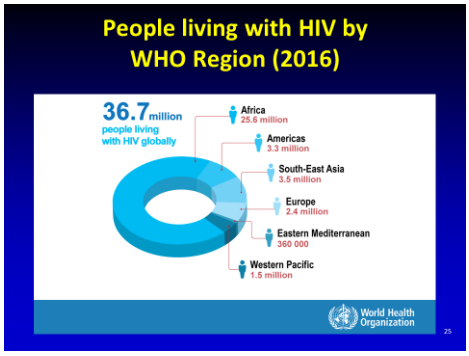
Slide 23: Your History Learning about HIV

- ***[ASK PARTICIPANTS] What was the FIRST thing that you ever heard/read about HIV? When was it?***
- ***[ASK PARTICIPANTS] What was the LAST thing you heard/read about HIV? When was it?***



Slide 24: Today's Agenda (2)

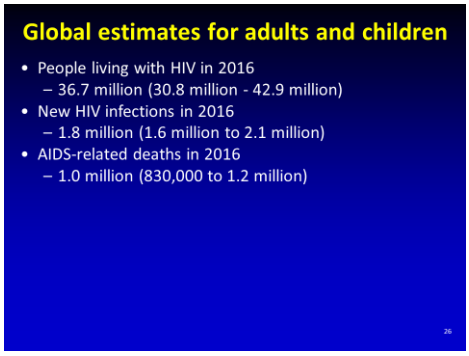
- ***[ASK PARTICIPANTS] Are there any questions or comments before we move forward with discussing the history of HIV and AIDS?***



Slide 25: People living with HIV by WHO Region (2016)

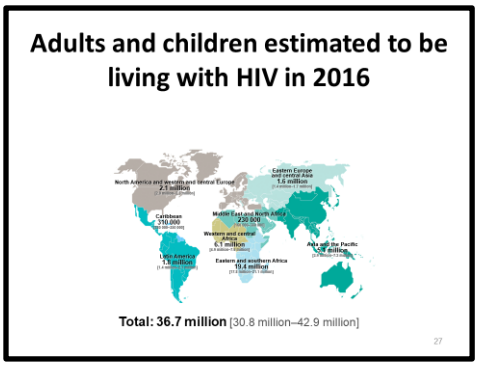
- Now let's look at the Global Epidemic. In 2016, the World Health Organization estimated that there were 36.7 million people living with HIV in the world. About 1.1 million in the U.S.

- ***[ASK PARTICIPANTS] Where do most of the people who have HIV live?***
- The answer is Africa



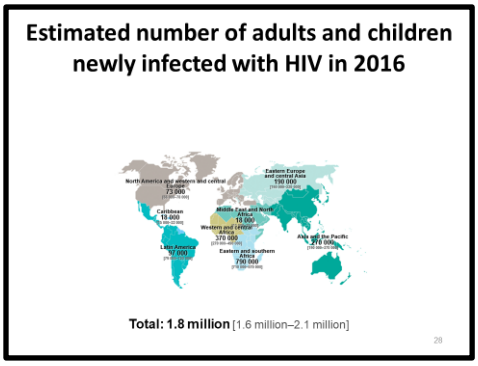
Slide 26: Global estimates for adults and children

- ***[READ THE BULLETED LIST ON THE SLIDE]***
- Of these 36.7 million total, the United Nation's Program on AIDS estimates that 1.8 million were infected that same year and approximately 1 million died that year.



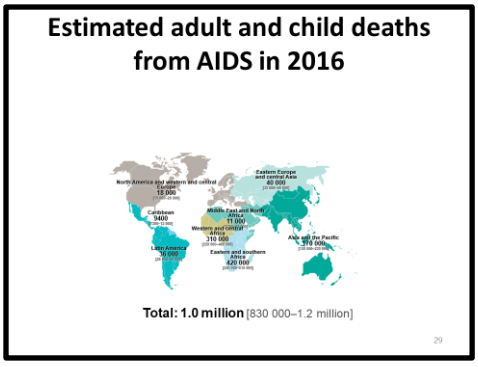
Slide 27: Adults and children estimated to be living with HIV in 2016

- Here is a map of where people living with HIV live.



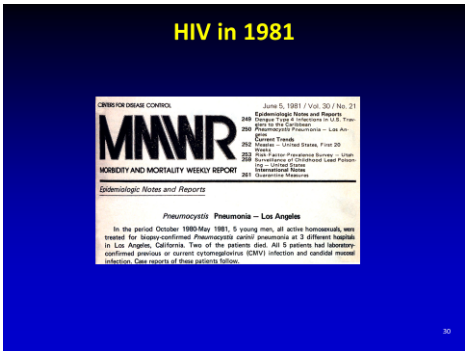
Slide 28: Estimated number of adults and children newly infected with HIV in 2016

- And the new infections in 2016 by region.



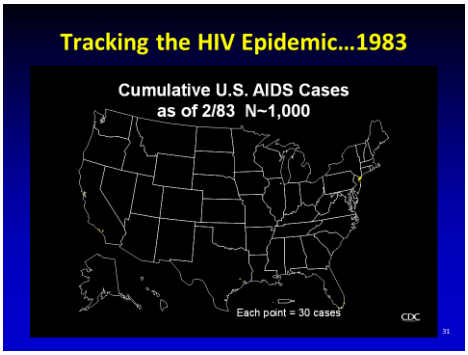
Slide 29: Estimated adult and child deaths from AIDS in 2016

- And the deaths in 2016 by region.



Slide 30: HIV in 1981

- The first scientific report of HIV in the US was in the Centers for Disease Control and Prevention's Morbidity and Mortality weekly report on June 5, 1981 when a doctor at the University of California, Los Angeles reported on 5 young men who were diagnosed with pneumocystis carinii pneumonia, a form of pneumonia normally seen in older men in the Mediterranean. All 5 young men had sex with other men. We didn't have a word for what was happening yet. We didn't know what was happening. Was this an infection? A virus? It would take years until we knew their answers.



Slide 31: Tracking the HIV Epidemic…1983

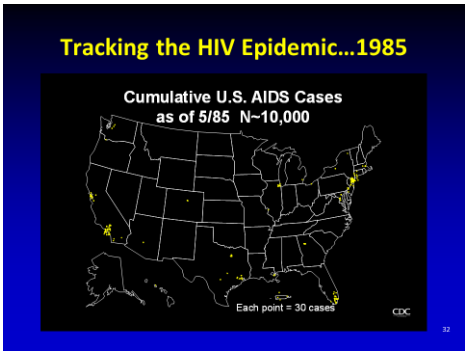
- In February of 1983, there were approximately 1,000 AIDS cases in the US. The next few slides are maps of the US. Each dot represent 30 cases of AIDS. At this time, the physician who filed the report in the MMWR used the term "Acquired Immune Deficiency Syndrome – AIDS." In the East Coast, many individuals and health care providers are using the term G.R.I.D.

- ***[ASK PARTICIPANTS] Does anyone know what that stand for?***
- Gay Related Immune Deficiency.

(Notes for Slide 31, continued)

Slide 31: Tracking the HIV Epidemic…1983

- At this point, the Center for Disease Control and Prevention and others knew that people were getting sick very quickly and there were risk groups, including:
    - Men who have sex with men (and their partners including women)
    - Sex workers
    - Hemophiliacs
    - Haitians
    - People who share needles – IDUs – injection drug use
    - Children of infected women

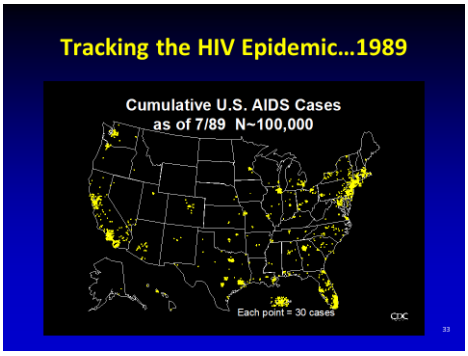


Slide 32: Tracking the HIV Epidemic…1985

- By May of 1985, there were10,000 cases and major epicenters. At this point, the CDC knows it's a viral disease and have HIV antibody test.

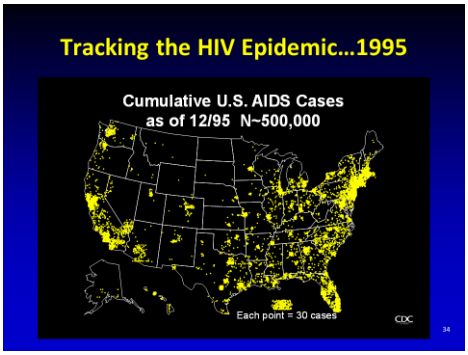
- ***[ASK PARTICIPANTS] Why would a smart, rational, brave person in 1985 chose not to take the HIV antibody despite having risks for HIV?***
- First, there were no laws to protect people from discrimination. Second, there was no medical treatment that could improve one's health. So many people chose to "not know" even if they had risks.

- ***[ASK PARTICIPANTS] What reason can someone give today for not knowing their HIV status?***
- Discrimination and stigma.



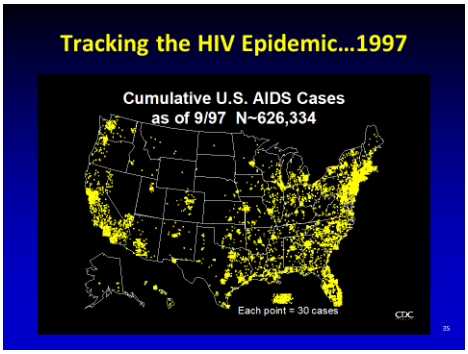
Slide 33: Tracking the HIV Epidemic…1989

- In July of 1989, there were 100,000 cases of AIDS in the US. The epidemic on the east coast was now increasingly one of IDUs and therefore heterosexual transmission and therefore women. Indeed, half of all new HIV cases at this time in Newark, New Jersey are among women.



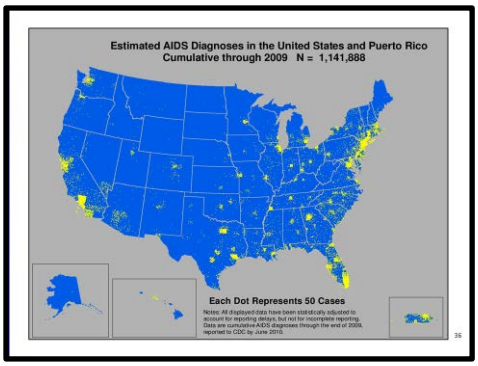
Slide 34: Tracking the HIV Epidemic…1995

- In December of 1995, there were more than 500,000 cases of AIDS in the US.



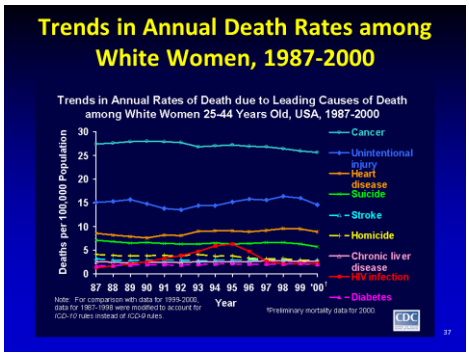
Slide 35: Tracking the HIV Epidemic…1997

- In September of 1997, there were 626,334 AIDS cases in the US. This map highlights that HIV moved from urban centers to rural regions. It is increasingly a disease of poor people and people of color.



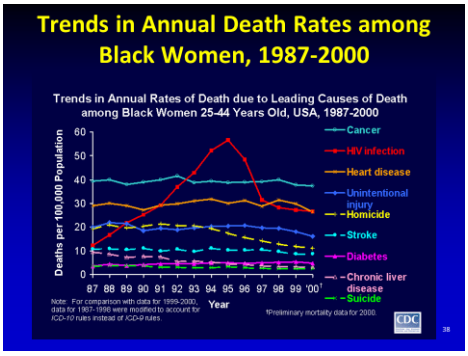
Slide 36: Estimated AIDS Diagnoses in the United States and Puerto Rico Cumulative through 2009 N=1,141,888

- In 2009, there were 1,141,888 cases of AIDS in the US. In this map, each dot represents 50 cases of AIDS.



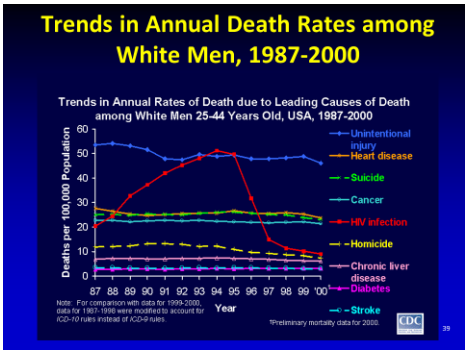
Slide 37: Trends in Annual Death Rates among White Women, 1987-2000

- How did HIV impact different US populations during these years? Let's look at the US population by gender, race, and ethnicity from 1987-2000 for 25-44 years olds. These are usually very healthy/productive years where not much can kill us. Here you can see for white women HIV infection was the 4th or 5th leading cause of death, but starts to drop off when effective anti-retrovirals were introduced in the mid 1990s.



Slide 38: Trends in Annual Death Rates among Black Women, 1987-2000

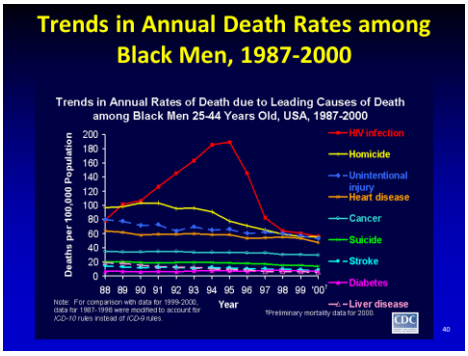
- For Black women, however, HIV infections was the leading cause of death and was rising dramatically until the mid 1990s when HIV medications became widely available through the Ryan White Emergency Care Act. See how fast deaths came down when anti-retroviral medications were made available.



Slide 39: Trends in Annual Death Rates among White Men, 1987-2000

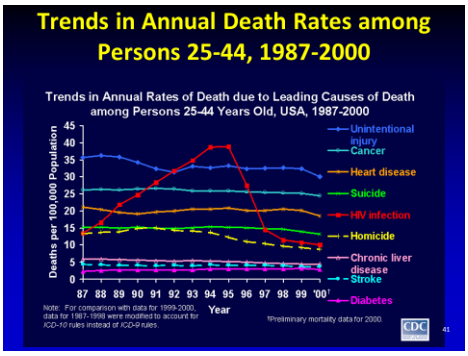
- However, for white men, you can see the decline is even more dramatic and sharp.

- ***[ASK PARTICIPANTS] Why? Do the medications work better in white men?***
- No. It's because white men in the US have better access to and trust in the healthcare system in general. Think about what access to and trust in the healthcare system is like here? What's it like for different populations?



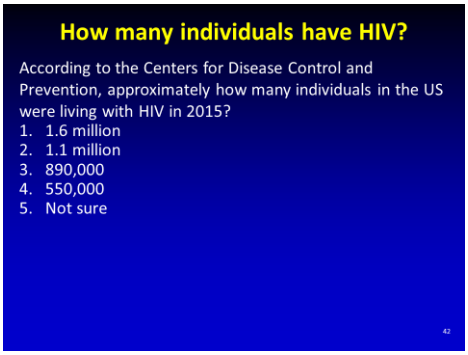
Slide 40: Trends in Annual Death Rates among Black Men, 1987-2000

- Finally for black men you can see the sharpest increase. It was by far the leading case of death until medications became available. What was #2? Homicide. Many young black men at this time thought they were at more risk from violence yet the #4 risk at this was time was HIV – especially for young black men who have sex with other men. These slides highlight social disparities in healthcare in the US.



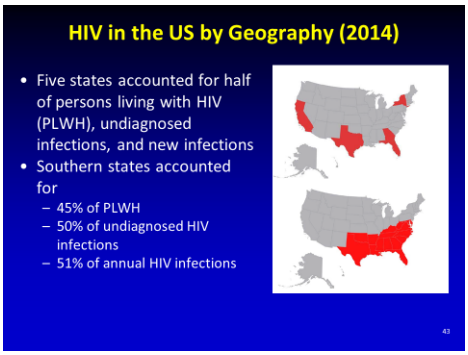
Slide 41: Trends in Annual Death Rates among persons 25-44, 1987-2000

- When you look at all Americans, regardless of gender or ethnicity, you can see a rapid drop in deaths thanks to the widespread availability of HIV medications through the Ryan White Program, which provides medications even when someone can not afford these medications or they cannot afford health insurance. Ryan White is considered a “payer of last resort.”



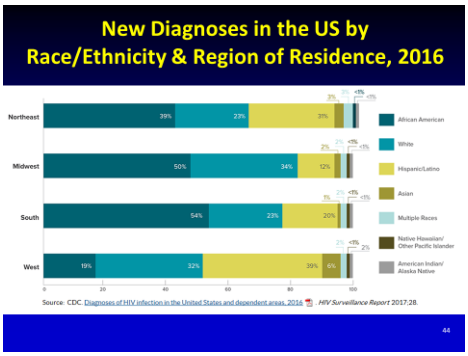
Slide 42: How many individuals have HIV?

- ***[ASK PARTICIPANTS] Approximately how many individuals in the US were living with HIV in 2015?***
- The correct answer is 1.1 million.



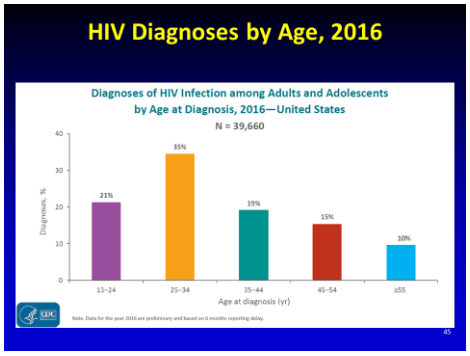
Slide 43: HIV in the US by Geography (2014)

- So, where do these people live? 5 states account for half of all cases and southern states for about the other half.



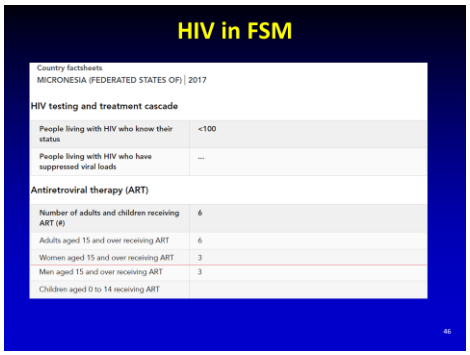
Slide 44: New Diagnoses in the US by Race/Ethnicity & Region of Residence, 2016

- Here you can see new cases in 2016 by region by race and ethnicity.



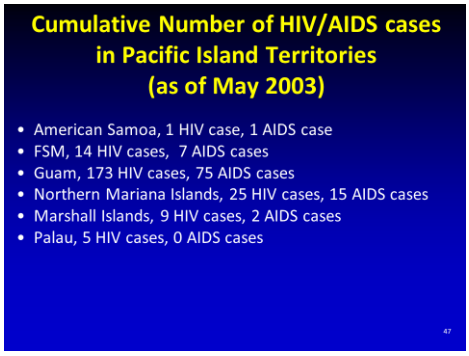
Slide 45: HIV Diagnoses by Age, 2016

- Here is a vertical bar chart of new cases of HIV across different age groups.



Slide 46: HIV in FSM

- Here is regional data on HIV cases in the Federated States of Micronesia.

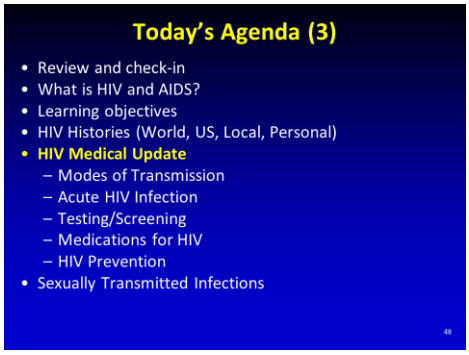


Slide 47: Cumulative Number of HIV/AIDS cases in Pacific Island Territories (as of May 2003)

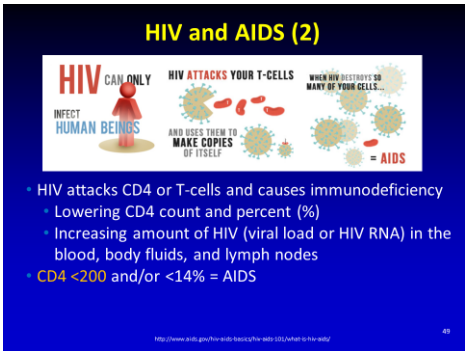
- Here is the most current data on HIV and AIDS cases in the Pacific Island Territories. As you can see, this data is very old.

- ***[READ THE FIRST SIX BULLETS ON THE SLIDE]***
- ***[ASK PARTICIPANTS] What are your thoughts about this data?***

Slide 48: Today's Agenda (3)

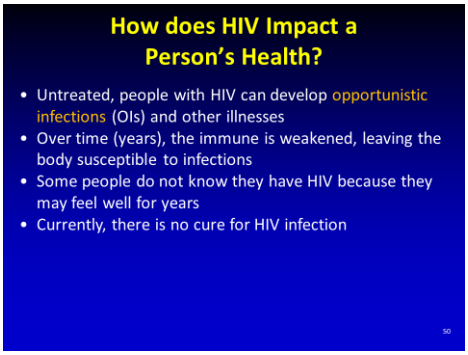


- ***[ASK PARTICIPANTS] What questions or comments do you have regarding the material we just covered?***
- Now let's talk about HIV and the difference between HIV infection (everyone living with HIV has the HIV virus) and an AIDS diagnosis (those people who have advanced HIV disease – or fewer than 200 CD4 cells or an AIDS defining condition).



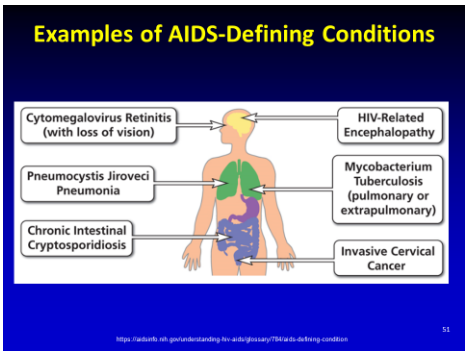
Slide 49: HIV and AIDS (2)

- HIV is a virus that infects the body's immune system. As soon as a person is infected with HIV, the virus begins attacking the immune system. CD4 cells are white blood cells that normally protect us from infections. However, HIV is a virus that infects these cells billions of times each day and uses these cells to replicate and make billions of new virus. Without medication to stop replications a person will eventually lose the number of their CD4 cells and their viral load (#'s of virus in the blood) will increase. When CD4 cells drop (a healthy individual has 800-1200 CD4 cells) below 200 (or 14% of total white blood cells) a person is defined as having AIDS. AIDS is the word used to describe an HIV infected person who's immune system has been greatly damaged by HIV.



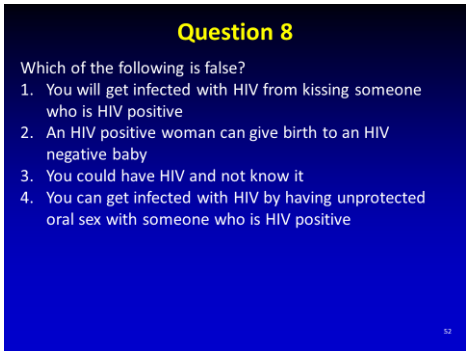
Slide 50: How does HIV Impact a Person's Health?

- It's important to remember that someone infected with HIV may have some immediate symptoms during acute infection, but most people will go many years – often more than a decade – before they get sick or are given an AIDS diagnosis. However some are individuals are considered "rapid progressors" and can have their CD4 levels drop quickly and progress to AIDS after just 1-2 years.



Slide 51: Examples of AIDS-Defining Conditions

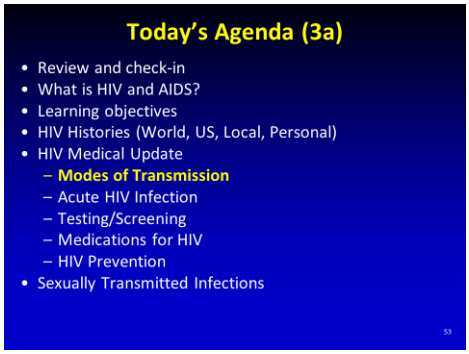
- So there are two ways an HIV infected person progresses to an AIDS diagnosis: 1) their CD4 cells fall below 200 or 2) they get an AIDS defining condition. These are opportunistic infections, cancers --- things that happen because the individual's immune system is compromised. Here are some examples of AIDS – defining conditions.



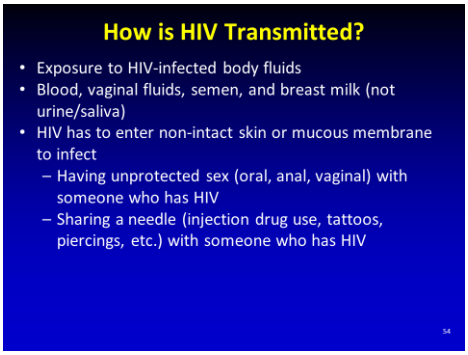
Slide 52: Question 8

- ***[ASK PARTICIPANTS] Which of the following is false?***
- The correct answer is 1: You will get infected with HIV from kissing someone who is HIV positive.
- Although unprotected oral sex is far less likely to transmit HIV than unprotected vaginal or anal sex, it is possible. Let's look at how HIV is transmitted.

Slide 53: Today's Agenda (3a)

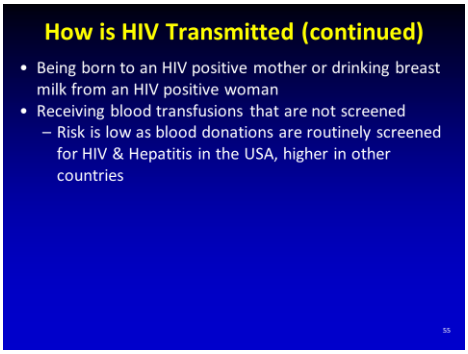


- ***[ASK PARTICIPANTS] What questions or comments do you have regarding the material we just covered?***



Slide 54: How is HIV Transmitted?

- ***Review the slide.***

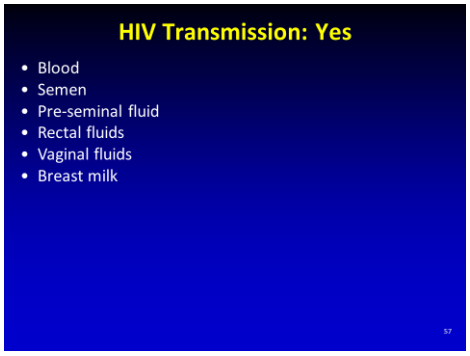


Slide 55: How is HIV Transmitted (continued)

- ***Review the slide.***

Slide 56: HIV is NOT Spread by:

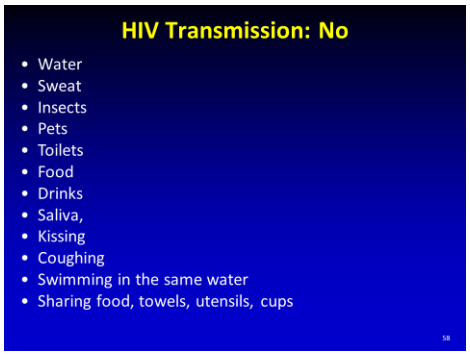
- ***[READ THE BULLETED LIST ON THE SLIDE]***
- ***[ASK PARTICIPANTS] What are some local thoughts, myths about how HIV can be transmitted?***



Slide 57: HIV Transmission: Yes

- So let's review the ways HIV can be transmitted and ways it can't be --- The HIV virus is actually pretty weak and cannot survive in light or air. HIV can be transmitted by

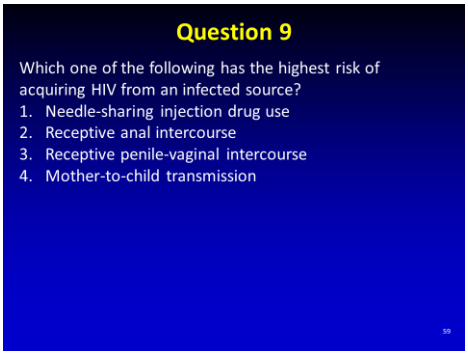
- ***[READ THE BULLETED LIST ON THE SLIDE]***



Slide 58: HIV Transmission: No

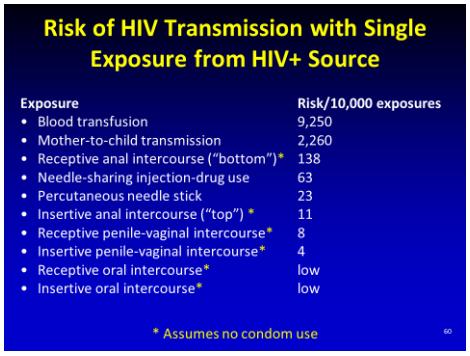
- The HIV virus cannot be transmitted by

- ***[READ THE BULLETED LIST ON THE SLIDE]***



Slide 59: Question 9

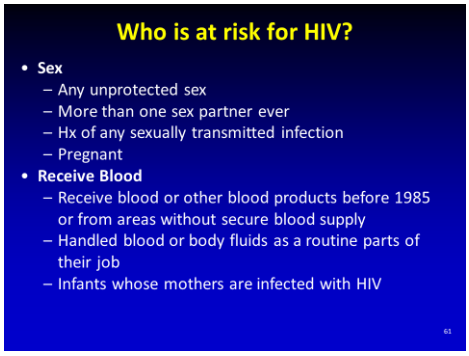
- ***[ASK PARTICIPANTS] Which one of the following has the highest risk of acquiring HIV from an infected source?***
- The correct answer is 4 - mother to child transmission.
- Mother to child transmission is the highest but remember all of these assume there is a viral load high enough to transmit. Remember if the HIV positive person has an undetectable viral load they can not transmit the virus (U=U, undetectable = untransmittable). Now let's look at the relative risks.



Slide 60: Risk of HIV Transmission with Single Exposure from HIV+ Source

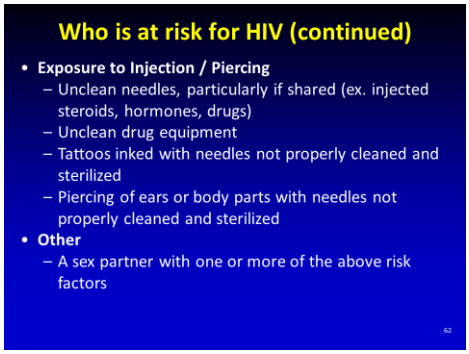
- Here you can see relative risks per 10,000 exposures. Remember if the HIV-infected mom has an undetectable viral load because she is taking medications the risk is essentially zero. We will talk more about that later. Also for sexual contact, if the HIV positive person has an undetectable viral load because they are taking medications they are not transmittable (U=U). Does anything surprise people here? Remember these assume no condom use – and also is someone has a very high viral load (like during acute infection) they are much more infectious.

- ***[REVIEW THE BULLETED LIST ON THE SLIDE]***



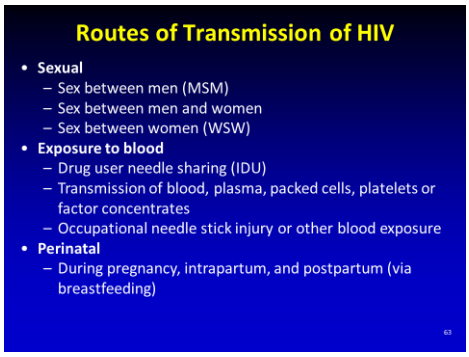
Slide 61: Who is at risk for HIV?

- All these are risk factors for HIV. But the CDC recommends everyone between the ages of 13-64 be tested for HIV regardless of their risk.



Slide 62: Who is at risk for HIV (continued)

- ***Review the slide.***



Slide 63: Routes of Transmission of HIV

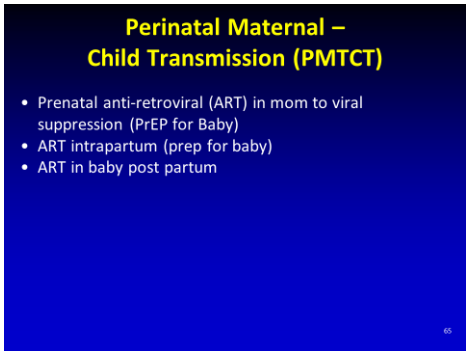
- So let's review some routes of transmission of HIV. While there have no documented cases of transmission of sex between women it is possible, however there are many lesbians with HIV, but they were infected through sex with men or when using drugs. Let's talk a bit about mother to child transmission.

Slide 64: That's why all women of child bearing age need to know their HIV status and all pregnant mom are tested for HIV

- In 1994, one of the first successes in HIV treatment came from a famous study that showed an HIV-infected mom reduced her chance of transmitting HIV to her newborn from about 20 – 25% down to 7% with the use of just one anti-retroviral drug. Today, with much better medications, that chance is almost zero. In Los Angeles over the past decade we have delivered more than 300 babies to HIV-infected mom and guess how many HIV infected babies we have? From 300 births? Zero. That's why all women of child bearing age need to know their HIV status and all pregnant mom are tested for HIV.

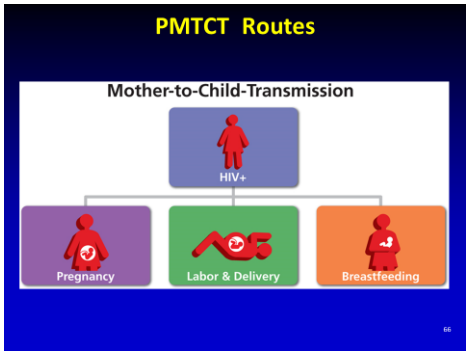
IMAGE CREDIT

Adobe Stock, Purchased Image, 2019.



Slide 65: Perinatal Maternal – Child Transmission (PMTCT)

- If a mom is living with HIV, and in cases where she continues with treatment during pregnancy, the baby can also be given anti-retroviral medications after birth to protect it in case of any exposure during birth. If a mom doesn't know she is infected (usually because she is out of medical care completely) and shows up at the hospital to deliver, a rapid HIV test can administered. If the test indicates positive, both the mother and child can be administered HIV medication to lower chances of transmission.



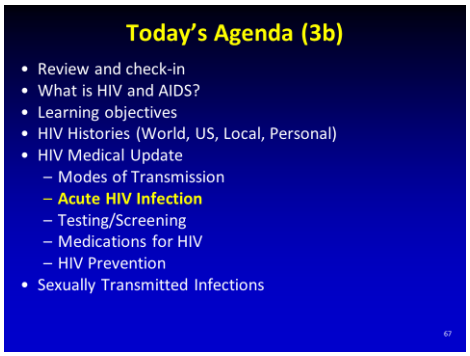
Slide 66: PMTCT Routes

- So mother to child transmission can be greatly reduced from the mother being on medications, medications being administered during delivery, and from mom not breast feeding after delivery. Remember breast feeding often involves blood and not just breast milk.

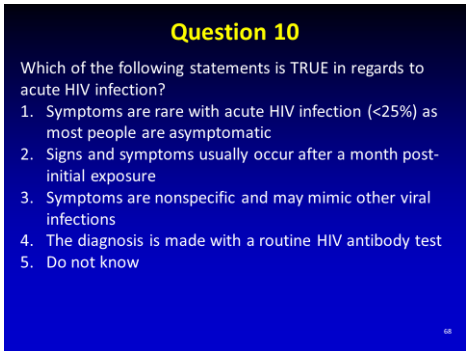
IMAGE CREDIT

Slide with image courtesy of Thomas Donohoe, PAETC.

Slide 67: Today's Agenda (3b)

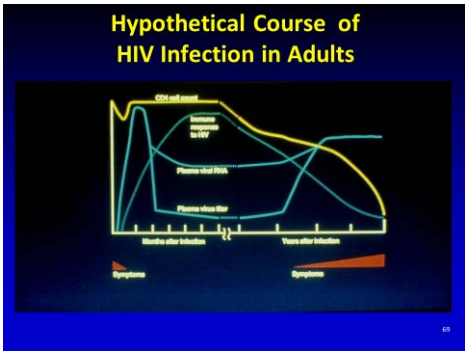


- ***[ASK PARTICIPANTS] Are there any questions before we discuss the period of early or acute infection.***



Slide 68: Question 10

- ***[ASK PARTICIPANTS] Which of the following statements are TRUE in regards to acute HIV infection?***
- The correct answer is 3) Symptoms are nonspecific and may mimic other viral infections.
- The flu-like symptoms can indicate so many things. That's why everyone needs to know their HIV status – not just people who have flu – like symptoms.



Slide 69: Hypothetical Course of HIV Infection in Adults

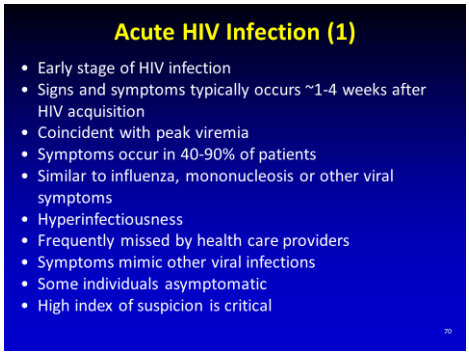
- Here is a hypothetical course of infection as it starts and then progresses over years. Let's follow the gold line first, that's the # of CD4 cells. You can see when someone is first infected with HIV there is an immediate reduction in CD4 cells as the virus explodes (viremia – the blue line shoots up --- this is a huge surge in viral load during acute infection). Then the immune system kicks in (green line) and starts controlling the virus, bringing it down and bringing CD4 back to baseline. It's during this acute infection period that people often experience flu-like and other symptoms like rashes. So everything return to a sort of baseline. But HIV is still there and using CD4 cells to replicate over time – years and years – the # of CD4 cells declines and someone's immune system becomes compromised. Once they go below 200, they receive an AIDS diagnosis.

(Notes for Slide 69, continued)

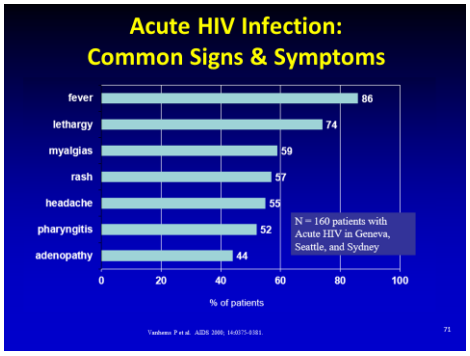
Slide 69: Hypothetical Course of HIV Infection in Adults

- Some peoples' bodies control the virus better than others (even without medications) and these people will lose CD4 cells less quickly but today we know that all people need to start HIV antiretroviral medications as soon as they learn they are infected with HIV.

Slide 70: Acute HIV Infection (1)



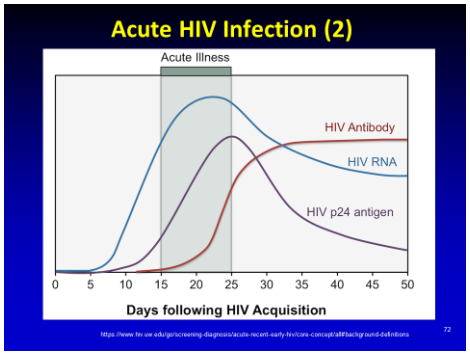
- So acute HIV infection causes symptoms in most patients but they pass quickly and mimic other things like Strep throat or the flu. And remember in the first 1-2 weeks the person will test negative as they have not yet produced antibodies yet they are very infectious as they have a very high viral load. This is why the CDC recommends everyone receive an HIV test. If the patient suspect they may be HIV infected (because of recent risk) the provider can order an HIV viral load test in addition to the HIV antibody test.



Slide 71: Acute HIV Infection: Common Signs & Symptoms

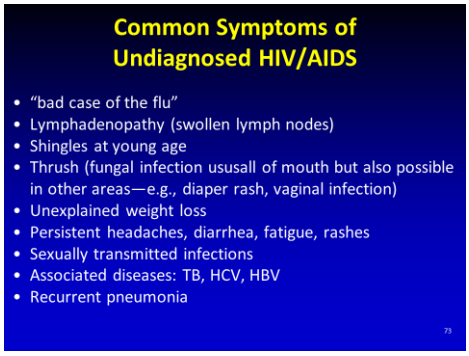
- Here are some examples of symptoms that were present during acute infection in this one study in 2000 in Geneva, Seattle, and Sydney.

- ***[READ THE COMMON SIGNS AND SYMPTOMS]***



Slide 72: Acute HIV Infection (2)

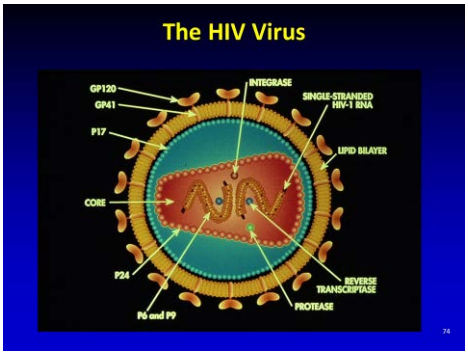
- These are the different indicators that can show up days after infection. You can see HIV RNA (viral load) will show up before HIV antibody or P24 antigen. Newer HIV tests are both anti-body antigen tests and can detect HIV as early as 7-10 days after infection. These tests are often called "4th generation" or "antigen-antibody tests."



Slide 73: Common Symptoms of Undiagnosed HIV/AIDS

- Here are some other symptoms that can occur at any time in an HIV infected patient.

- ***[READ THE BULLETED LIST ON THE SLIDE]***
- Hopefully today more physicians can "think HIV" and order HIV test or just order one automatically as part of every patients annual physical.

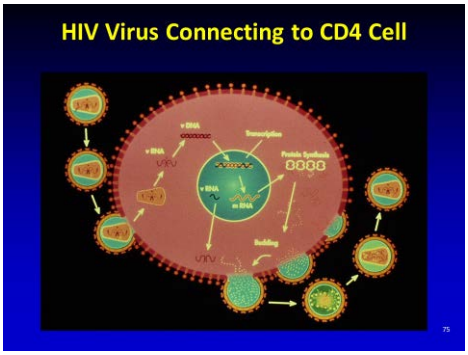


Slide 74: The HIV Virus

- Let's take a quick look at the virus itself. Doing so will help us understand how current HIV medication work to help block viral replication. Here is a cartoon of the virus. Remember HIV is a retro-virus so the genetic material in the core is RNA, not DNA. The outer envelope of the virus is made up of glycol – proteins which antibodies attack, for example. So this virus is searching out those white blood cells – CD4 cells – to insert itself and make new copies. The very thing that would attack it, it uses to make copies of itself. Let's talk a closer look at that process, as it actually causes the reduction in CD4 cells, so blocking it keeps people healthy.

IMAGE CREDIT

Slide with image courtesy of Thomas Donohoe, PAETC.



Slide 75: HIV Virus Connecting to CD4 Cell

- So here is a cartoon of HIV connecting to a CD4 cell. A cell is not infected until it's nucleus is infected (the inner circle). HIV connects to the cells and inserts its genetic material into the cell then the cell swaps it's RNA for the cells DNA. This is called "reverse transcriptase." So the drugs that block this stage are called "reverse transcriptase inhibitors." These are also HIV medications that block HIV from connecting/entering called "entry inhibitors" and "fusion inhibitors." Once the virus enters the nucleus it "integrates" itself into the cells DNA so we have drugs to block that process called "integrase inhibitors." After HIV leaves nucleus it goes through a later stage called protein synthesis. HIV antiretroviral medication to block this stage are called "protease inhibitors." So you can see we have many different HIV medications meant to inhibit replication all these different stages. Today these different medications can be combines into 1 pill that can be taken once a day that is extremely effective with few – if any- side effects.

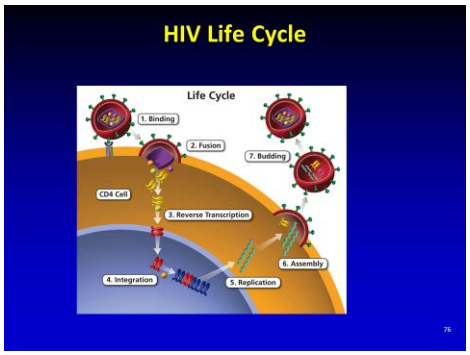
(Notes for Slide 75, continued)

Slide 75: HIV Virus Connecting to CD4 Cell

- Most people who take their medications every day will be able to achieve an undetectable viral load in weeks or a month or two.

IMAGE CREDIT

Slide with image courtesy of Thomas Donohoe, PAETC.



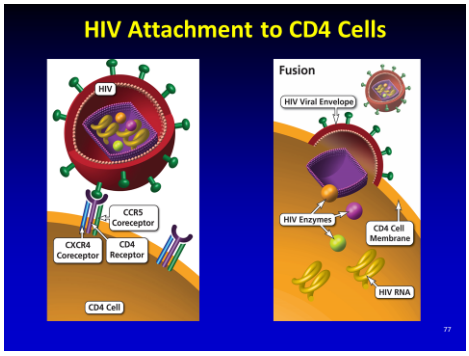
Slide 76: HIV Life Cycle

- So here is good look at the steps:
  - Binding
  - Fusions
  - Reverse transcription
  - Integration
  - Replication (protein synthesis)
  - Assembly and budding

Now let's look at each one.

IMAGE CREDIT

Slide with image courtesy of Thomas Donohoe, PAETC.

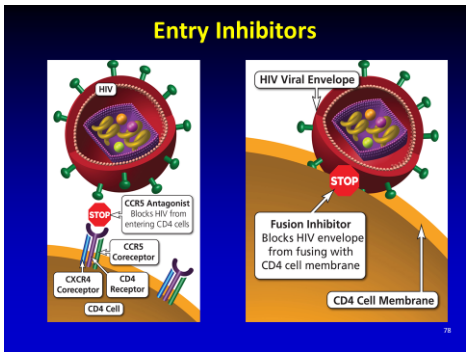


Slide 77: HIV Attachment to CD4 Cells

- There are receptors on the virus (CCR5) that connect to co-receptors on the CD4 cell. Some people (less than 1%) don't have this CCR5 receptor and are naturally somewhat protected from HIV. I'm showing you all this to show you how many different avenues we have to develop new and even better drugs than the very good ones we have today.

IMAGE CREDIT

Slide with image courtesy of Thomas Donohoe, PAETC.

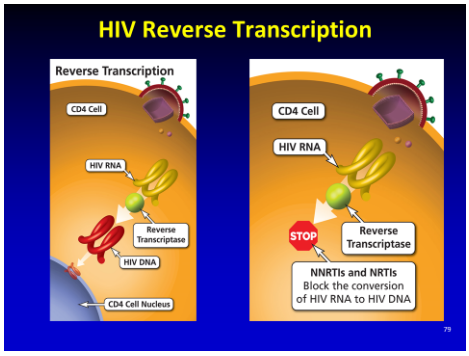


Slide 78: Entry Inhibitors

- So today we have a class of drugs called entry inhibitors or fusion inhibitors.

IMAGE CREDIT

Slide with image courtesy of Thomas Donohoe, PAETC.

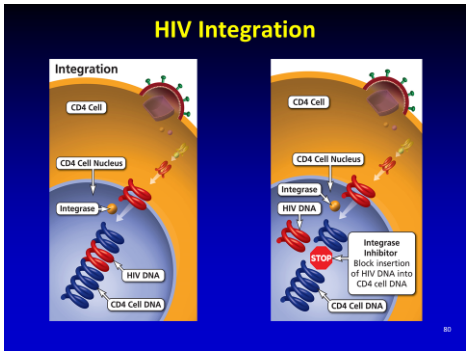


Slide 79: HIV Reverse Transcription

- And reverse transcriptase inhibitors (like AZT).

IMAGE CREDIT

Slide with image courtesy of Thomas Donohoe, PAETC.

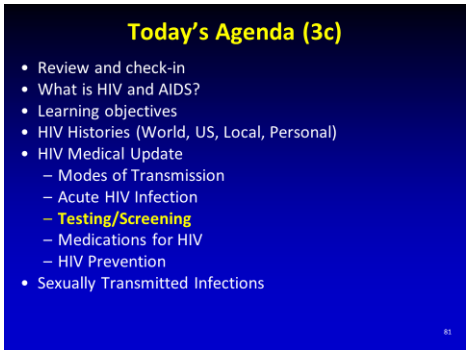


Slide 80: HIV Integration

- And integrase inhibitors.

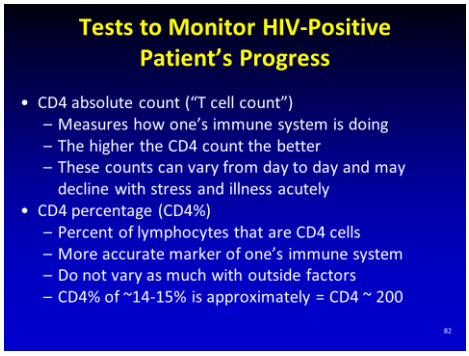
IMAGE CREDIT

Slide with image courtesy of Thomas Donohoe, PAETC.



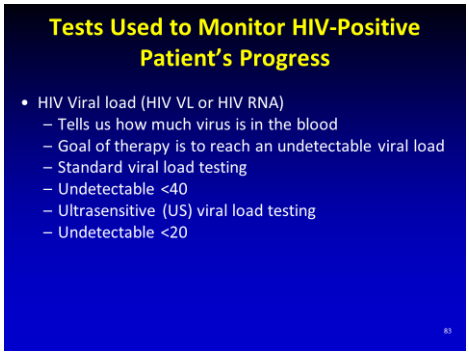
Slide 81: Today's Agenda (3c)

- ***[ASK PARTICIPANTS] Do you have any questions regarding transmission or acute HIV infection.***



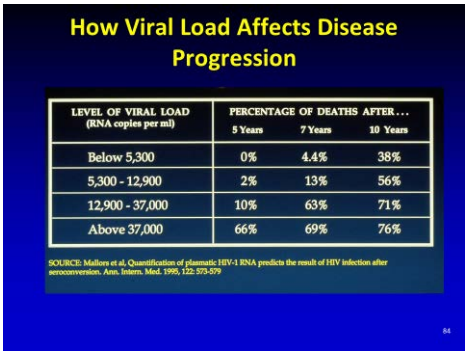
Slide 82: Tests to Monitor HIV-Positive Patient's Progress

- So what monitoring tests do people living with HIV receive. When they are first diagnosed they'll get a resistance test to see if their virus is already resistant to any current antiretroviral medications. After, the two measures every HIV patient will know are their CD4 cell count and viral load. CD4 can be expressed as a # or as a % (percent of lymphocytes). Remember CD4 < 200 = AIDS.



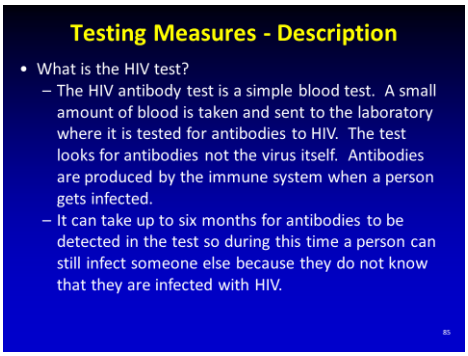
Slide 83: Tests Used to Monitor HIV-Positive Patient's Progress

- The other test – which is increasingly more important than CD4 cell count/percentage– is a HIV patient's viral load. When a patient's viral load is "undetectable" they can not transmit the virus. We have had viral load tests for more than 20 years.



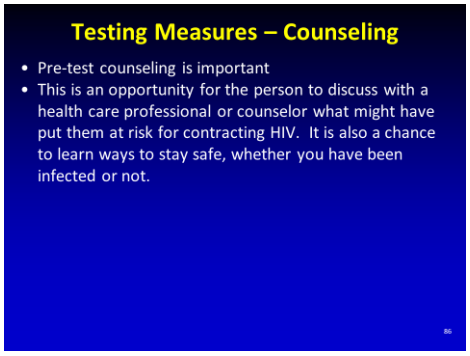
Slide 84: How Viral Load Affects Disease Progression

- So, let's look back to 1995 at one of the first studies to see if this new viral load test was showing us something important. This researcher actually had frozen blood samples going back 10 years on his HIV positive patients and measured their viral load. He divided these more than 700 patients into 4 quantiles, the 25% who had less than 5,300 copies, the 25% who had 12-37,000, and 25% over 37,000. You can see the direct line relationship between viral load and (in this case) progression to death. Nobody with a viral load below 5,300 had died after 5 years. With todays HIV medications we can get it to less than 20 fairly quickly.



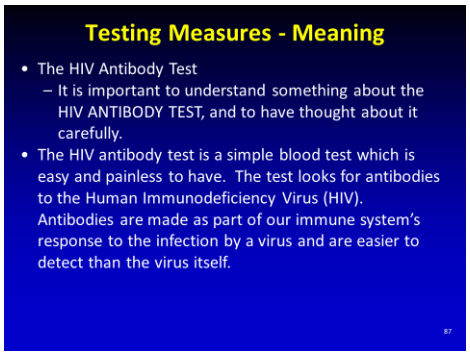
Slide 85: Testing Measures - Description

- A simple blood test allows us to test whether someone has been infected with HIV. It can take up to 6 months for detection, so it is important that we endorse harm reduction strategies to prevent that person from infecting others.



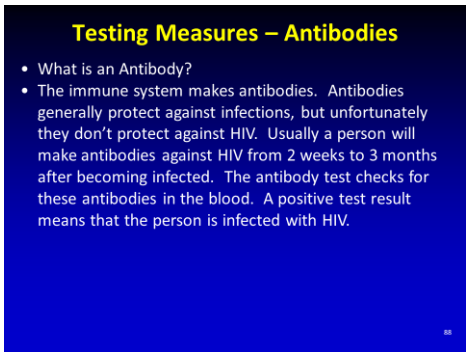
Slide 86: Testing Measures - Counseling

- Counseling is critical to preventing the spread of HIV. We use counseling as an opportunity to discuss risk factors and strategies for preventing transmission of HIV.



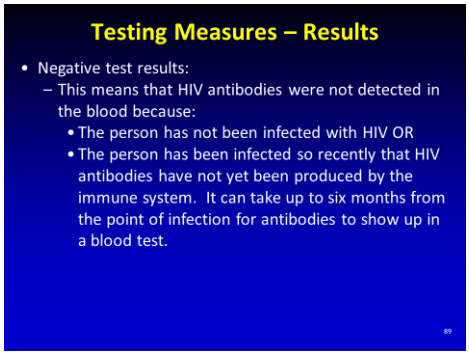
Slide 87: Testing Measures - Meaning

- As mentioned in a previous slide, the HIV antibody test is a simple blood test that looks for antibodies of HIV.



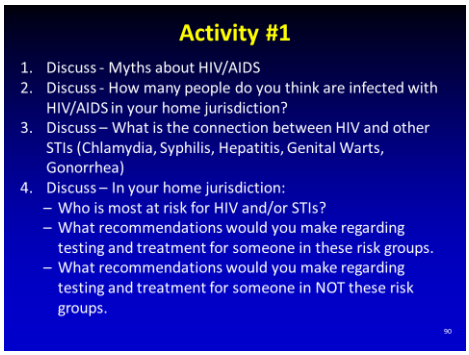
Slide 88: Testing Measures - Antibodies

- Antibodies protect us against infection, but not against HIV. The test looks for antibodies for HIV.



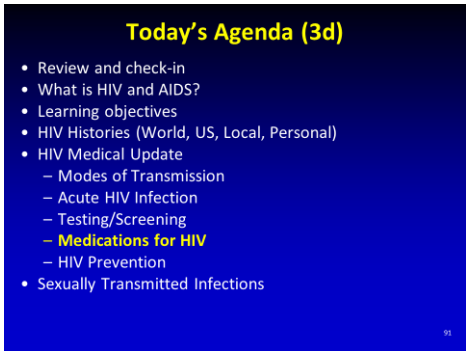
Slide 89: Testing Measures – Results

- Although someone may test negative for antibodies, it is possible that the infection was recent and that antibodies have yet to be produced in the immune system.



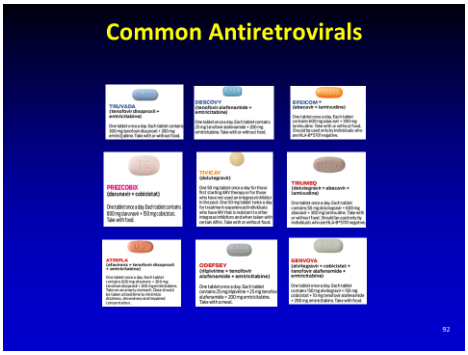
Slide 90: Activity #1

- ***Organize participants into groups of 5.***
- ***Distribute paper and pens to each group.***
- ***Instruct participants to discuss the four topics and answer questions for each topic.***
- ***Instruct participants to select a group recorder and to have one member from each group be prepared to report out to the larger group.***
- ***Allow groups to meet for 20 -25 minutes.***
- ***Report out should take approximately 15 – 30 minutes.***



Slide 91: Today's Agenda (3d)

- ***[ASK PARTICIPANTS] Are there any questions regarding testing or screening for HIV?***
- Before moving on to discuss some of the medications for HIV, I want to highlight that some of the biggest challenges are getting people tested, linked to medical care, retained in care, and taking medications. If all that can happen, people can have a normal life. HIV, like other chronic disease, is manageable. However, individuals with HIV must take their medications as prescribed and take care of themselves as they should with other chronic, medical disorders. We can also prevent and treat complications (like if someone does have <200 CD4 cells they receive Bactrim to prevent PCP pneumonia) and know that people with HIV are more likely to thrive when they receive emotional support and employ self care.

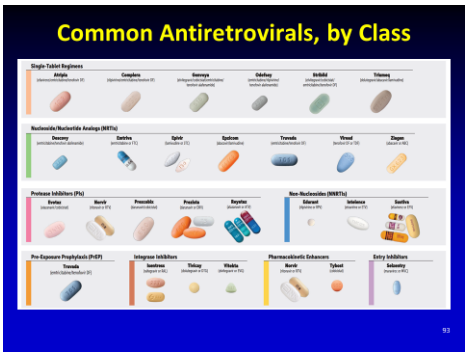


Slide 92: Common Antiretrovirals

- Here are some of the common HIV medication used today. You can see that all are combinations of different compounds that have synergies that make them exponentially better than the "very good" medication we had 15-20 years ago.

IMAGE CREDIT

Slide with image courtesy of Thomas Donohoe, PAETC.



Slide 93: Common Antiretrovirals, by Class

- Here is another look at them by medication class.

IMAGE CREDIT

Slide with image courtesy of Thomas Donohoe, PAETC.

Slide 94: What did an ART Regimen Look Like 20+ Years Ago?

- So 20+ years ago, people were faced taking several pills several times a day.

IMAGE CREDIT

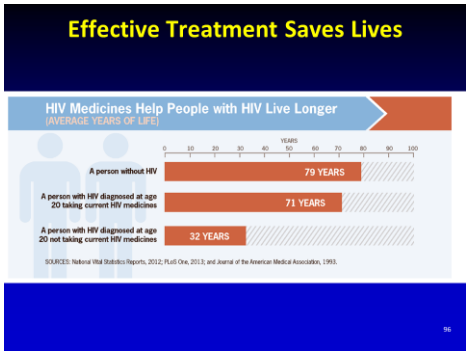
Slide with image courtesy of Thomas Donohoe, PAETC.

Slide 95: What does and ART Regimen Look Like Today?

- Today, there are a variety of treatment options and most people who chose to use medications only have to take the medication once a day and anticipate few if any side effects.

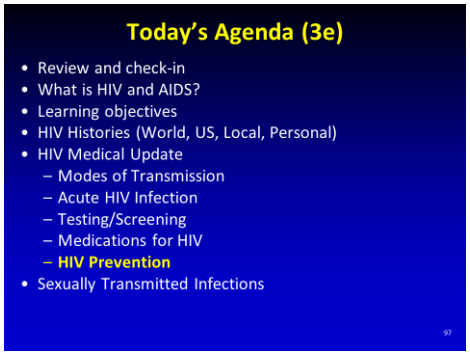
IMAGE CREDIT

Slide with image courtesy of Thomas Donohoe, PAETC.



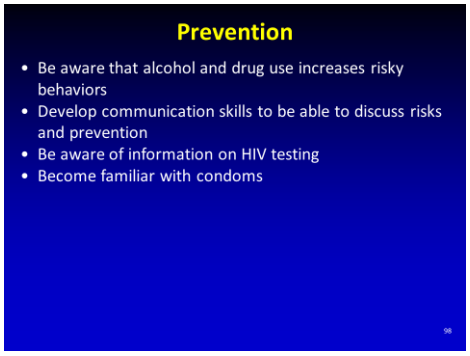
Slide 96: Effective Treatment Saves Lives

- As mentioned previously, a person with HIV can lead a normal lifespan. This study from 6 years ago looked at predicted lifespan for someone living with HIV and taking their medications as prescribed. Since this time we now recommend that people start taking HIV medication as soon as diagnosed with HIV (no waiting for a drop in CD4 cells) so the lifespan is even closer to someone not living with HIV.



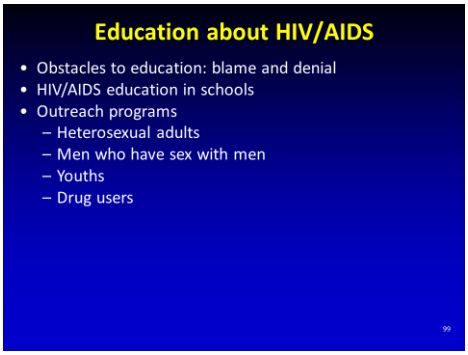
Slide 97: Today's Agenda (3e)

- ***[ASK PARTICIPANTS] Are there any question regarding medication for HIV?***



Slide 98: Prevention

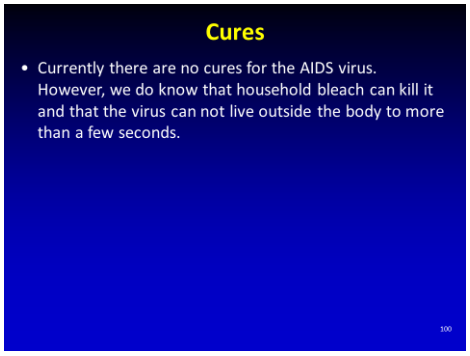
- As counselors, we need to remain vigilant that alcohol and drug use increases risk of contracting HIV.
- We need to develop skills to facilitate nonjudgmental conversations to discuss risk factors and prevention.
- We should encourage regular testing for our client actively using alcohol or drugs. We should always emphasize in our conversations that the health and safety of our clients and of our staff/colleagues are our primary concern.
- Despite our personal beliefs and values, we must endorse the use of condoms and regularly encourage our clients who are sexually active to use condoms. We should also endorse clean needle exchange and other harm reduction strategies. Remember, harm reduction is a public health alternative to abstinence based interventions. Harm reduction protects the community.



Slide 99: Education about HIV/AIDS

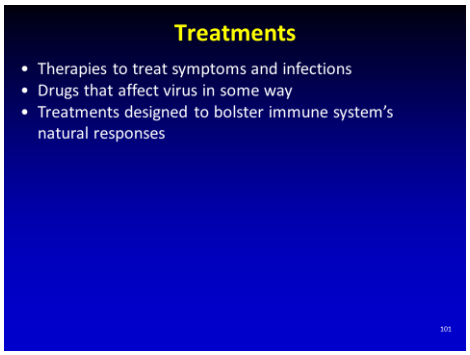
- Education about HIV and AIDS is critical in a variety of programs, including SUD programs, primary care and other healthcare settings, social service agencies and in schools. If we cannot have the conversation, we must find someone who can and will. This conversation should happen with ALL of our clients. We also need to be careful not to allow biases and other beliefs prevent us from sharing information with our clients and their loved ones. For example, in 2018, there has been an increasing trend in sexually transmitted diseases in retirement communities across the State of Florida. Physicians are not talking to residents about sex, and many are not talking about STI's or HIV.

[ASK PARTICIPANTS] Besides older adults, what other biases do people have about different populations and sex?



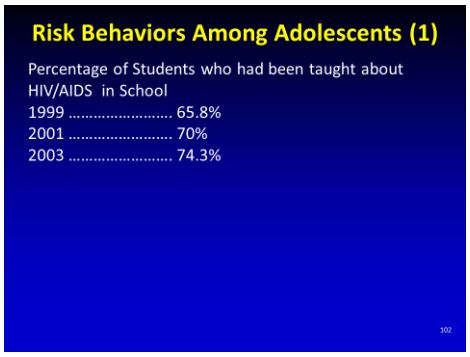
Slide 100: Cures

- No cure currently exists for AIDS.
- As highlighted here, bleach can kill the virus and that the virus does not live for more than a few seconds outside the body.



Slide 101: Treatments

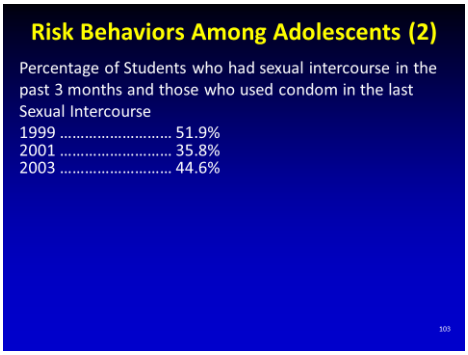
- It is critical that we encourage our clients who are HIV positive to take their medications as prescribed.



Slide 102: Risk Behaviors Among Adolescents (1)

- Not all students are taught about HIV/AIDS in school settings.

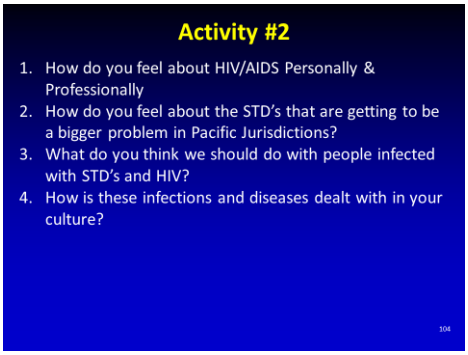
- ***[ASK PARTICIPANTS] What are your thoughts about these numbers?***



Slide 103: Risk Behaviors Among Adolescents (2)

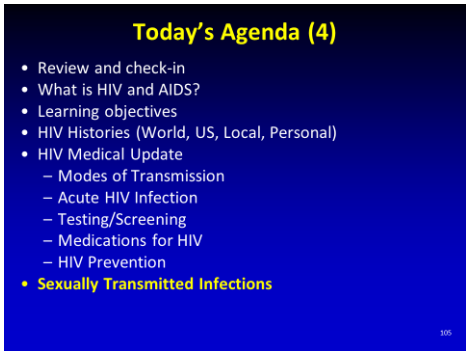
- One of the biggest concerns is less than 50% of young adults who had sexual intercourse in the past three months used a condom.

- ***[ASK PARTICIPANTS] What are your thoughts about this trend? How many young adults in your community have been tested for HIV/AIDS? Does your community provide abstinence-based education on sex? Does the curriculum include information about HIV/AIDS and other STI's?***



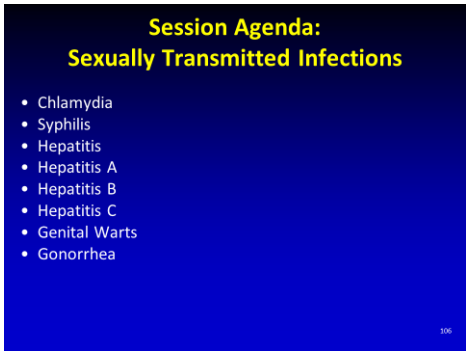
Slide 104: Activity #2

- ***Organize participants into groups of 5.***
- ***Distribute paper and pens to each group.***
- ***Instruct participants to answer the four questions.***
- ***Instruct participants to select a group recorder and to have one member from each group be prepared to report out to the larger group.***
- ***Allow groups to meet for 20 -25 minutes.***
- ***Report out should take approximately 15 – 30 minutes.***



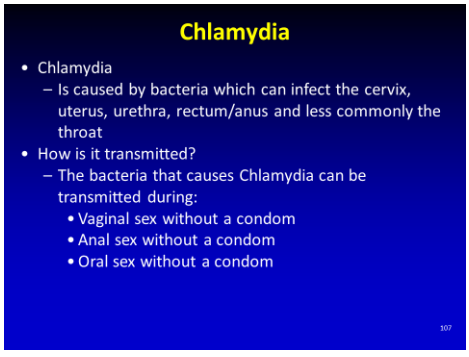
Slide 105: Today's Agenda (4)

- ***[ASK PARTICIPANTS] Are there any questions regarding HIV modes of transmission, acute infection, testing and screening, medications or prevention of HIV?***
- We will now transition to discuss sexually transmitted infection or STI's



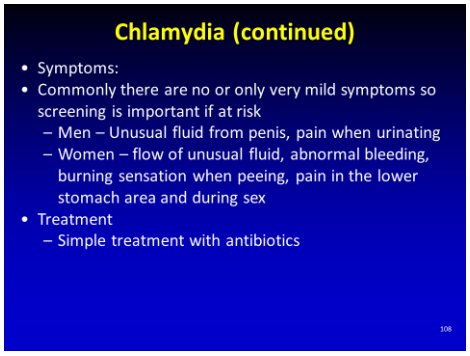
Slide 106: Session Agenda: Sexually Transmitted Infections

- ***Orient the participants to the agenda.***



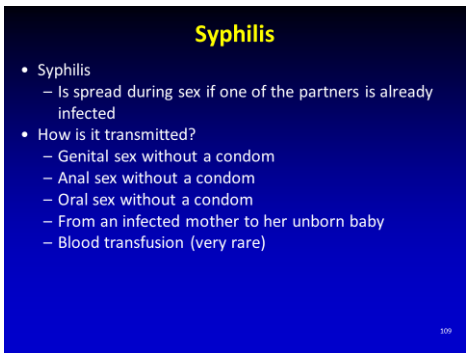
Slide 107: Chlamydia

- We will begin by discussing chlamydia, an STI that is caused by bacteria transmitted through unprotected sex.



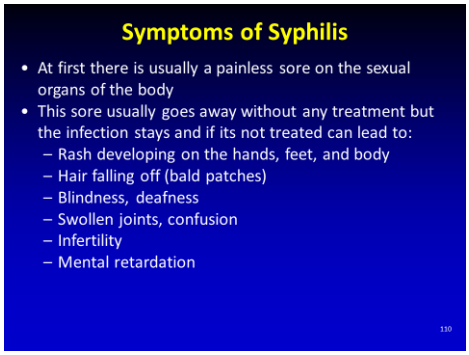
Slide 108: Chlamydia (continued)

- Often there are no or only very mild symptoms for chlamydia infection, but it is still transmittable even if there are no symptoms.
- The symptoms for men include unusual fluid from the penis and pain when they urinate. For women, symptoms include unusual fluid, abnormal bleeding, pain when urinating, and pain in the lower stomach when engaging in sex. Chlamydia can be treated with antibiotics.



Slide 109: Syphilis

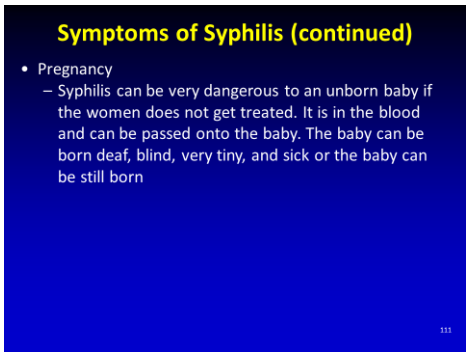
- Syphilis is transmitted through unprotected sex and from an infected mother to her unborn child.



Slide 110: Symptoms of Syphilis

- A painless sore on sexual organs of the body are the first sign of syphilis. Here are a list of other symptoms when untreated.

- ***[READ THE LIST]***

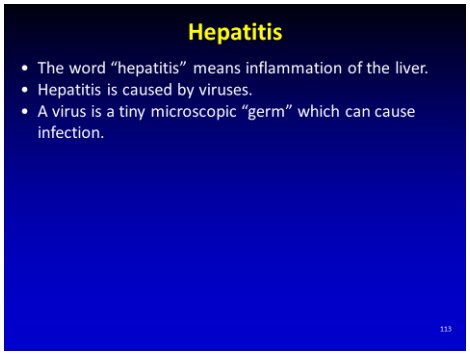


Slide 111: Symptoms of Syphilis (continued)

- It is critical that mothers receive ongoing prenatal care and are screened for syphilis to protect the unborn baby.

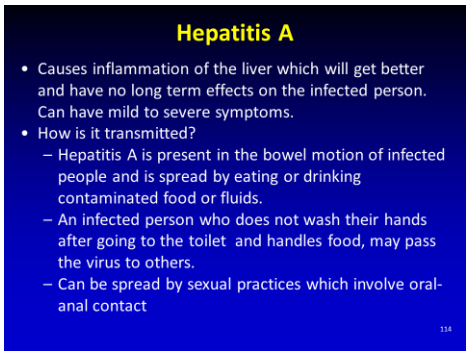
Slide 112: Treatment for Syphilis

- Antibiotics are used to treat syphilis.



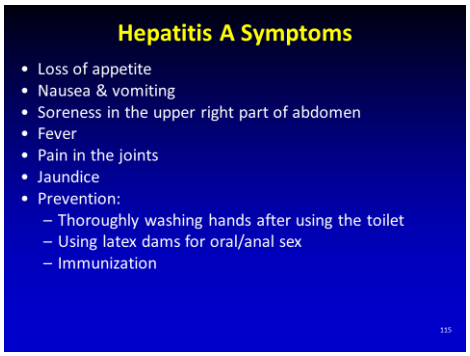
Slide 113: Hepatitis

- We will now move on to discuss hepatitis.



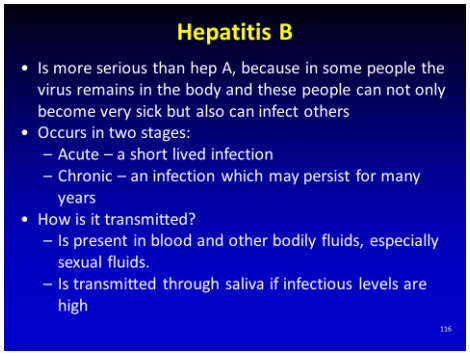
Slide 114: Hepatitis A

- Hepatitis is transmitted through unprotected sex and from consuming contaminated foods and fluids. The virus can be transmitted from an infected person who does not wash their hands after passing a bowel. It is important, especially for those in the food and beverage industry, to wash their hands and to use gloves as a precautionary measure.



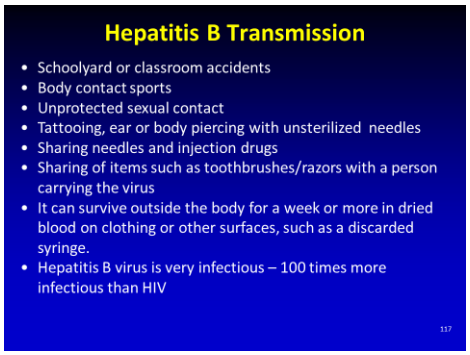
Slide 115: Hepatitis A Symptoms

- Here are a list of different symptoms for persons who have been infected with hepatitis A.



Slide 116: Hepatitis B

- Hepatitis B is transmitted through bodily fluids, including saliva.



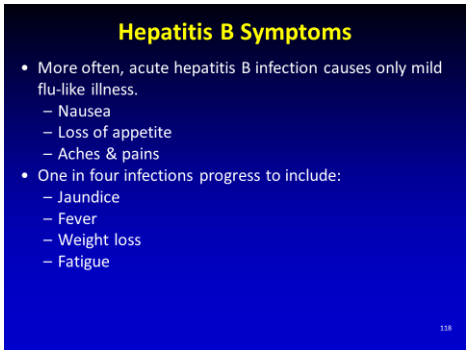
Slide 117: Hepatitis B Transmission

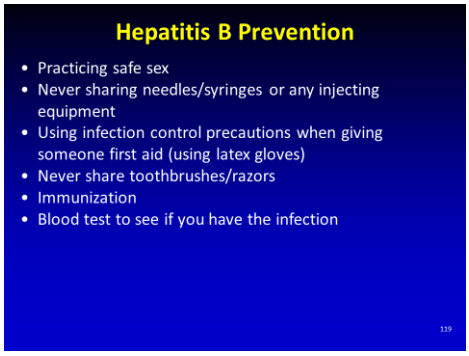
- Here are common scenarios/situations where hepatitis B is transmitted from one person to another.

- ***[READ THE LIST]***

Slide 118: Hepatitis B Symptoms

- Here are the most common symptoms of hepatitis B.

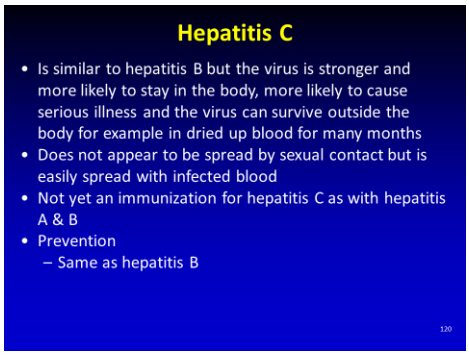




Slide 119: Hepatitis B Prevention

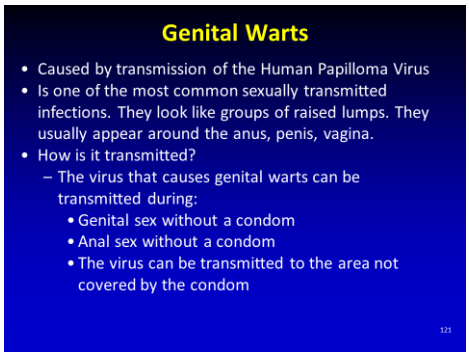
- Let's discuss prevention measures,

- ***[READ THE LIST]***



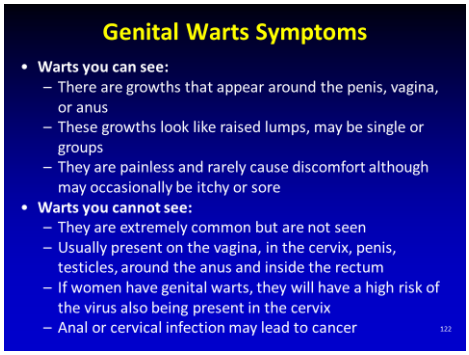
Slide 120: Hepatitis C

- Hepatitis B and C are serious. The primary mode of transmission for hepatitis B is through infected blood. The virus can survive outside the body. As counselors, we must take advantage of available engineering controls and work practices to prevent exposure to blood and other body fluids.



Slide 121: Genital Warts

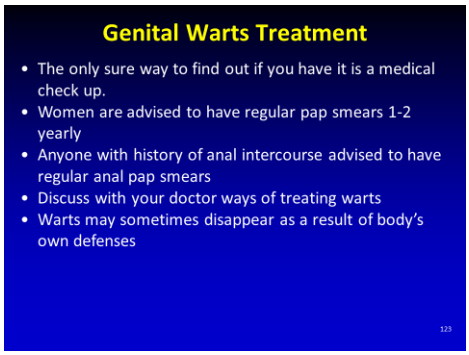
- Genital warts are caused by the Human Papilloma Virus (HPV) and are transmitted through unprotected sex, but also to areas not covered by a condom.



Slide 122: Genital Warts Symptoms

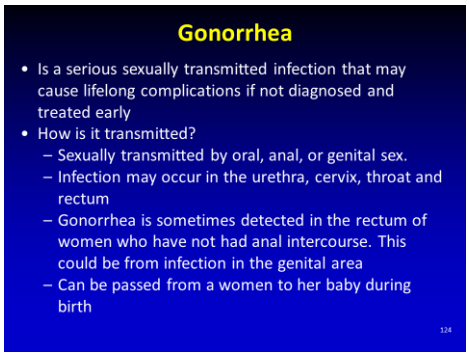
- Here are the symptoms, both what you can and cannot see.

- ***[READ THE LIST]***



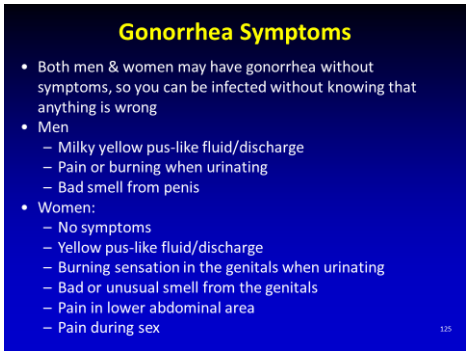
Slide 123: Genital Warts Treatment

- There are different treatments available for genital warts. It's important that we have honest conversations with our doctors and for women to have regular pap smears.



Slide 124: Gonorrhea

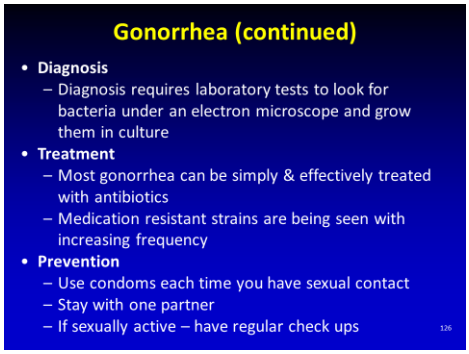
- Gonorrhea, like other STI's is very serious. It is transmitted through unprotected sex and from an infected mother to her baby.



Slide 125: Gonorrhea Symptoms

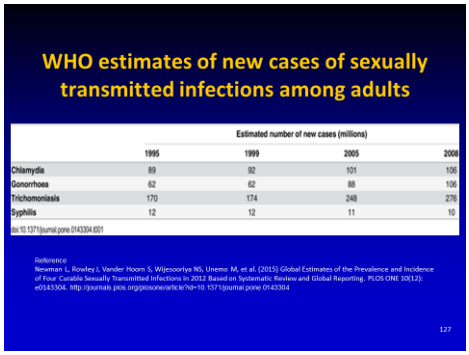
- Here are the most common symptoms of gonorrhea.

- **[READ THE LIST]**



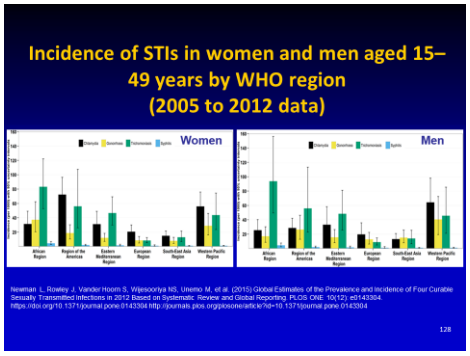
Slide 126: Gonorrhea (continued)

- A laboratory test is needed to confirm presence of Gonorrhea.
- Different treatments exist for Gonorrhea; however, the best treatment is prevention.
- Always use protection and schedule regular medical evaluations if you are sexually active.



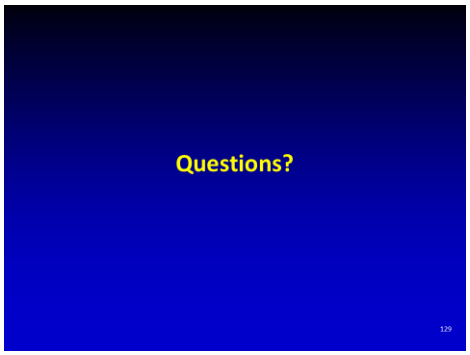
Slide 127: WHO estimates of new cases of sexually transmitted infections among adults

- With the exception of syphilis, the trend appears that more people are being infected with STI's.



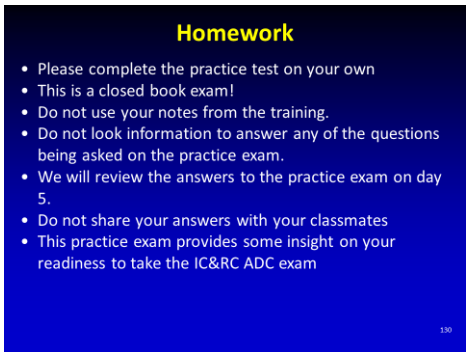
Slide 128: Incidence of STIs in women and men aged 15-49 years by WHO region (2005 to 2012 data)

- This graph shows the incidence of sexually transmitted infections in women and men aged 15-40.



Slide 129: Questions?

- ***[ASK PARTICIPANTS] Are there any questions about the prevention or treatment of STIs?***



Slide 130: Homework

- Distribute copies of the sample test 3

- ***[ASK PARTICIPANTS] Are there any questions before we conclude?***

Acknowledgements

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