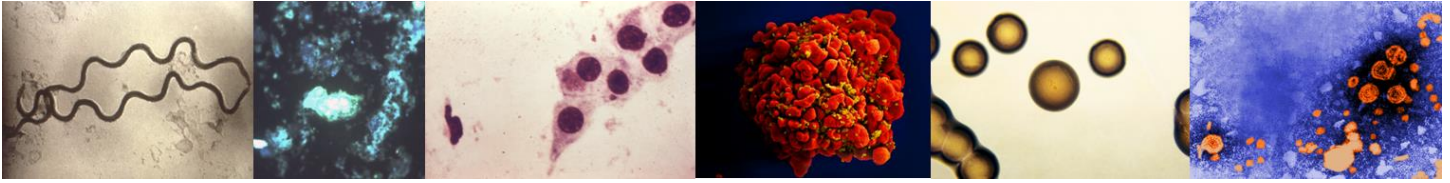


THE FOURS – HIV, STDs and Hepatitis Presentation Information

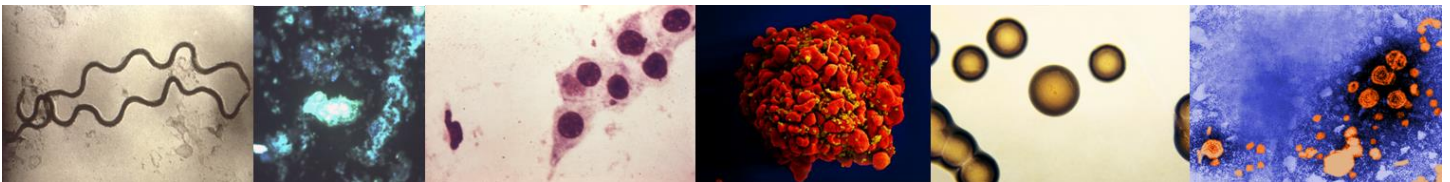


This document was created to provide the basic information on Gonorrhea, Chlamydia, Syphilis, Herpes Simplex Virus (HSV), Human Papillomavirus (HPV), Hepatitis A, Hepatitis B, Hepatitis C, and Human Immunodeficiency Virus (HIV).

The charts for each infection show ‘the fours’...

- the stages
- the body fluids that transmit
- the transmission routes
- how to prevent

The presenter notes provide more information on each infection that can be used when presenting information.



THE FOURS – HIV, STDs and Hepatitis Presentation Information

Fours of Gonorrhoea

Stages of Gonorrhoea	Body Fluids
Infection	Semen
Asymptomatic	Vaginal Fluids
Symptomatic	
Late Stage	
Transmission Routes	Prevention
Oral Sex	Barrier Methods
Anal Sex	Sexual Abstinence
Vaginal Sex	Preventative treatment for known exposure
Mother-to-Child	Ocular Prophylaxis

THE FOURS – HIV, STDs and Hepatitis Presentation Information

Fours of Gonorrhea

PRESENTER NOTES:

Stages

Infection

- Symptoms usually appear one to fourteen days after exposure.

Asymptomatic

- Most infected people show no symptoms

Symptomatic (see the more information section)

Body Fluids for Transmission

- Semen
- Vaginal Fluids

Transmission Routes

Gonorrhea is transmitted from person to person:

- Oral sex
- Anal sex
- Vaginal sex
- Mother-to-Child
 - An untreated mother can pass the virus to her infant during the birthing process. This can result in conjunctivitis or pneumonia in some exposed infants.

Prevention

- Utilize a barrier method, consistently and correctly, during sex of any kind (oral, anal, vaginal). Barrier methods include: male condom, female/internal condom, or dental dam.
- Sexual abstinence includes no sexual contact of any kind
- If you have been exposed see your doctor for the appropriate treatment for possible exposure.
- Ocular Prophylaxis includes a prophylactic agent being instilled into both eyes of all newborn infants (required by law). This prevents gonococcal ophthalmia neonatorum which can threaten an infant's sight.

More Information:

Symptoms: Most individuals are asymptomatic and lack physical findings upon examination. When present symptoms may include:

- Urethral infection including abnormal discharge (white, yellow or green in color), in men and women
- Burning sensation during urination
- Bleeding between periods in women
- Rectal infection in both men and women that could include rectal pain, discharge, and/or bleeding
- Pharyngeal infection may cause a sore throat

Untreated/Complications:

- Pelvic inflammatory disease (PID) in women. PID can lead to internal abscesses and chronic pelvic pain. PID can also damage fallopian tubes enough to cause infertility or increase the risk of ectopic pregnancy.
- Epididymitis in men (i.e., unilateral testicular pain, tenderness, and swelling)
- If left untreated, Gonorrhea can also spread to the blood and cause disseminated gonococcal infection (DGI). DGI is usually characterized by arthritis, tenosynovitis, and/or dermatitis. This condition can be life-threatening.
- A pregnant woman, if untreated, may give the infection to her baby as the baby passes through the birth canal. This can cause blindness, joint infection or a life-threatening blood infection.

Antimicrobial-Resistant Gonorrhea

- Treatment is complicated by the ability of this infection to develop resistance to antimicrobials.

<https://www.cdc.gov/std/gonorrhea/stdfact-gonorrhea-detailed.htm> and <https://www.cdc.gov/std/tg2015/gonorrhea.htm>

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Fours of Chlamydia

Stages of Chlamydia	Body Fluids
Infection	Semen
Asymptomatic	Vaginal Fluids
Symptomatic	
Transmission Routes	Prevention
Oral Sex	Barrier Methods
Anal Sex	Sexual Abstinence
Vaginal Sex	Preventative treatment for known exposure
Mother-to-Child	

THE FOURS – HIV, STDs and Hepatitis Presentation Information

Fours of Chlamydia

PRESENTER NOTES:

Stages

Infection

- The incubation period of chlamydia is poorly defined. Symptoms may not appear until several weeks after exposure.

Asymptomatic

- Most infected people show no symptoms

Symptomatic (see the more information section)

Body Fluids for Transmission

- Semen
- Vaginal Fluids

Transmission Routes

Chlamydia is transmitted from person to person:

- Sexual Contact: oral sex, anal sex, vaginal sex
- Mother-to-Child
 - An untreated mother can pass the virus to her infant during the birthing process. This can result in conjunctivitis or pneumonia in some exposed infants.

Prevention

- Utilize a barrier method, consistently and correctly, during sex of any kind (oral, anal, vaginal). Barrier methods include: male condom, female/internal condom, or dental dam.
- Sexual abstinence includes no sexual contact of any kind
- If you have been exposed see your doctor for the appropriate treatment for possible exposure.

More Information:

Symptoms: Most individuals are asymptomatic and lack physical findings upon examination. Symptoms may not appear until several weeks after exposure.

- Cervicitis in women (e.g., mucopurulent endocervical discharge, easily induced endocervical bleeding)
- Urethritis in both men and women (e.g., pyuria, dysuria, urinary frequency), meaning there could be abnormal discharge, and/or a burning sensation during urination.
- Proctitis in both men and women (e.g., rectal pain, discharge, and/or bleeding)

Untreated/Complications:

- Pelvic inflammatory disease (PID) in women “Symptomatic PID occurs in about 10 to 15 percent of women with untreated chlamydia. However, chlamydia can also cause subclinical inflammation of the upper genital tract (“subclinical PID”). Both acute and subclinical PID can cause permanent damage to the fallopian tubes, uterus, and surrounding tissues. The damage can lead to chronic pelvic pain, tubal factor infertility, and potentially fatal ectopic pregnancy
- Epididymitis in men (i.e., unilateral testicular pain, tenderness, and swelling)

<https://www.cdc.gov/std/chlamydia/stdfact-chlamydia-detailed.htm>

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Fours of Syphilis

Stages of Syphilis	Body Fluids/Contact
Primary	Primary – Chancres
Secondary	Secondary – Mucous membrane lesions
Latent	
Tertiary	
Transmission Routes	Prevention
Oral Sex	Sexual Abstinence
Anal Sex	Barrier Methods
Vaginal Sex	Preventative treatment for known exposure
Mother-to-Child	

THE FOURS – HIV, STDs and Hepatitis Presentation Information

Fours of Syphilis

PRESENTER NOTES:

Stages:

Primary:

- Presents with small, round painless sore(s) called a chancre. It appears at the location where syphilis entered the body.
- Lasts 3 to 6 weeks and heals regardless of whether a person is treated or not.

Secondary:

- Rash (on palms of the hand and soles of the feet)
- Mucous membrane lesions (sores in mouth, vagina or anus)

Latent:

- The 'hidden stage' with no visible symptoms
- Can last for years

Tertiary:

- Can appear 10-30 years after first acquired
- Can affect multiple organ systems including the brain, eyes. Heart, blood vessels, liver, bones and joints.

Body Fluids/Contact for Transmission:

- Syphilis Sore (Chancre)-Primary Stage
- Mucous Membrane Lesion-Secondary Stage

Transmission Routes:

Syphilis is transmitted from person to person by direct contact with a syphilis sore (chancre) or contact with a mucous membrane lesion. This contact usually occurs during:

- Sexual Contact: oral sex, anal sex, vaginal sex
- Mother-to-Child
 - A mother may pass the virus to her infant during the birthing process.

Prevention:

- Sexual abstinence includes no sexual contact of any kind
- Utilize a barrier method, consistently and correctly, during sex of any kind (oral, anal, vaginal). Barrier methods include: male condom, female/internal condom, or dental dam. However, it is important to know that condoms may not cover some areas of the body that could have a syphilis sore or mucous membrane lesion.
- If you have been exposed see your doctor for the appropriate treatment for possible exposure.

More Information:

Symptoms

- The main symptom for a newly acquired syphilis infection includes a syphilis sore, called a chancre. See the Stage portion for other symptom by stage.

Neurosyphilis

- Syphilis can invade the nervous system at any stage of infection and cause a wide range of symptoms, including headache, altered behavior, difficulty coordinating muscle movements, paralysis, sensory deficits and dementia.

Ocular Syphilis

- Can occur at any stage of infection and can involve almost any eye structure. Symptoms include vision changes, decrease vision and blindness.

Syphilis and Pregnant Women

- Pregnant women should be tested for Syphilis
- An infected woman who is pregnant has a high risk of having a stillbirth or giving birth to a baby who dies shortly after birth.
- There is treatment for pregnant women to prevent mother-to-child transmission

<https://www.cdc.gov/std/syphilis/stdfact-syphilis-detailed.htm>

THE FOURS – HIV, STDs and Hepatitis Presentation Information

Fours of Herpes (HSV=Herpes Simplex Virus)

Stages of HSV	Body Fluids/Contact
Infection	Herpes sore(s)
Asymptomatic, No or mild symptoms	Mucosal surfaces
Outbreak	Genital fluids
Asymptomatic	Oral fluids
	Asymptomatic Shedding
Transmission Routes	Prevention
<p>Through direct contact with a lesion/HSV infected skin during:</p> <ul style="list-style-type: none"> • Oral sex • Vaginal sex • Anal sex <p>Skin to Skin contact</p> <p>Mother-to-Child during delivery</p>	<p>Sexual abstinence</p> <p>Barrier Methods</p> <p>HSV medication for infected individuals</p>

THE FOURS – HIV, STDs and Hepatitis Presentation Information

Fours of Herpes (HSV=Herpes Simplex Virus)

PRESENTER NOTES:

Stages of HSV

- Infection
 - Average incubation period for initial infection is 4 days (range of 2 to 12 days)
- Asymptomatic- No symptoms
- Outbreak
- Asymptomatic
 - Reoccurring alternating asymptomatic/symptomatic episodes – outbreaks reduce in frequency

Body Fluids/Contact for Transmission

- Infection occurs when contact with lesions (herpes sore/blisters), mucosal surfaces, genital secretions, or oral secretions, takes place.
- Asymptomatic HSV-2 infections can have genital HSV shedding (shedding of the virus through the skin without symptoms). The skin will appear normal.

Transmission Routes

- Generally, a person can only get HSV-2, more commonly known as genital herpes infection, during sexual contact with someone who has a genital HSV-2 infection.
- Transmission most commonly occurs from an infected partner who does not have visible sores who may not know he or she is infected.
- HSV doesn't require body fluids to transmit!
- Fluids found in a herpes sore carry the virus, and contact with those fluids can cause infection
- Genital skin-to-skin contact, even when there are no symptoms (asymptomatic shedding)
- oral, anal, or vaginal sex
- HSV can be spread from Mother-to-Child during delivery

Prevention

- Barrier methods. Correct and consistent use of condoms can reduce, but not eliminate, the risk of transmitting or acquiring genital herpes because herpes virus shedding can occur in areas that are not covered by a condom.
- The surest way to avoid HSV is to abstain from sexual contact, or to be in a long-term mutually monogamous relationship with a partner who has been tested for STDs and is known to be uninfected.
- Persons with herpes should abstain from sexual activity when herpes lesions or other herpes symptoms are present. It is important to know that even if a person does not have symptoms, he or she can still infect sex partners.
- Suppressive antiviral therapy medication is also available to help suppress (but not cure) the infection. Antiviral medications can help prevent or shorten outbreaks and help reduce transmission to partners.

More Information:

- There is not cure for herpes. Antiviral medications can help prevent or shorten outbreaks and help reduce transmission to partners.
- Symptoms
 - Most individuals infected with HSV are asymptomatic or have very mild symptoms that go unnoticed or are mistaken for another skin condition.
 - When symptoms do occur, herpes lesions or small blisters, they typically appear on or around the genitals, rectum or mouth.
 - Herpes lesions/blisters appear and break leaving painful ulcers that may take two to four weeks to heal. Experiencing this is referred to as having a first herpes "outbreak" or episode.
 - Other systemic symptoms include fever, body aches, swollen lymph nodes, or headache.
- Women should be counseled to abstain from intercourse during the third trimester with partners known or suspected of having herpes. Infants born to women who acquire genital herpes close to the time of delivery and are shedding virus at delivery are at a much higher risk of developing neonatal herpes, an infection that is potentially fatal.

<http://www.cdc.gov/std/herpes/STDFact-herpes-detailed.htm>

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Fours of HPV (Human Papillomavirus)

Stages of HPV	Body Fluids/Contact
Infection	Contact with Wart
Asymptomatic (No symptoms)	Asymptomatic Shedding
Symptomatic	
Resolution (90%)	
Chronic (10% can include cancer)	
Transmission Routes	Prevention
Does NOT require body fluids to transmit!	Sexual Abstinence
Oral, Anal, Vaginal Sex	Barrier Methods
Genital to Genital Contact	Vaccines
Mother-to-Child during delivery (rare)	Recommended Exams

THE FOURS – HIV, STDs and Hepatitis Presentation Information

Fours of HPV (Human Papillomavirus)

PRESENTER NOTES:

Stages of HPV

- Infection
- Asymptomatic- No symptoms
- Symptomatic
 - Including genital warts, itching or burning
- Resolution/Chronic
 - 90% of these infections may go away on their own, but sometimes (10%) remain chronic and can cause serious health problems including certain cancers

Body Fluids/Contact for Transmission

- Direct contact with a wart
- Asymptomatic HPV/DNA Shedding of perianal region (shedding of the virus through the skin without symptoms)
 - More potential for transmission if person has HIV

Transmission Routes

- HPV doesn't require body fluids to transmit!
- Skin-to-skin contact with genital warts or perianal region;
- oral, anal, or vaginal sex;
- Genital to Genital Contact;
- Mother-to-Child during delivery (even though rare) can spread HPV from person to person

Prevention

- HPV can be prevented by sexual abstinence and avoiding contact with genital warts on the skin or genitalia.
- Barrier methods such as latex condoms can prevent infection but latex condoms are not 100% effective, as the genital warts could be located on parts of the body not covered by a barrier.
- The Gardasil vaccine is recommended for females, males, and gay/bisexual males, ages 11-26.
- Exams such as a pap and pelvic exam for women with HPV are recommended yearly and a rectal exam is also recommended yearly for anyone engaging in anal sex, regardless of their gender.

More Information:

- HPV or Human Papilloma Virus is the most common viral STI (Sexually Transmitted Infection).
- Symptoms
 - A person can be infected with HPV and have no visible symptoms. Or other symptoms can include the development of genital warts, which are small raised, red, growths that resemble red cauliflower. There can be some itching or burning associated with genital warts or there may be no symptoms.
- HPV can cause certain cancers
- HPV can affect males and females
- HPV may also be spread when the infected persons has no signs or symptoms
- Treatment is available for genital warts but they may also recur.

THE FOURS – HIV, STDs and Hepatitis Presentation Information

Fours of Hepatitis A (HAV)

Stages of HAV	Body Fluids
Acute	Feces
Transmission Routes	Prevention
Close Person-to Person Contact (fecal to oral) Exposure to fecally contaminated food or water	Vaccination Good hygiene Sexual Abstinence Using barrier protection during sex Use consistent infection control practices

THE FOURS – HIV, STDs and Hepatitis Presentation Information

Fours of Hepatitis A (HAV)

PRESENTER NOTES:

Stages:

Acute: It resolves on its own within 2-6 months

- Can present with or without symptoms
- Once you resolve the infection you **cannot** be infected again.
- Can sometimes cause liver failure or death, although this is rare and occurs more commonly in persons 50 years of age or older with other liver diseases.

Body Fluids for Transmission:

HAV lives in **feces**

- HAV is able to survive the body's highly acidic digestive tract and can live outside the body for months. .

Transmission Routes:

- Person-to-person transmission through the fecal-oral route (i.e., ingestion of something that has been contaminated with the feces of an infected person) is the primary means of HAV transmission in the United States. Examples: when an infected person does not wash their hands properly after going to the bathroom and touches other objects or food, also transmission can occur during sex with an infected person.)
- Common-source outbreaks and sporadic cases also can occur from exposure to fecally contaminated food or water. Uncooked HAV-contaminated foods have been recognized as a source of outbreaks. Cooked foods also can transmit HAV if the temperature during food preparation is inadequate to kill the virus or if food is contaminated after cooking, as occurs in outbreaks associated with infected food handlers. Waterborne outbreaks are infrequent in developed countries with well-maintained sanitation and water supplies.

Prevention:

- **Vaccination!!**
- Good hygiene includes frequent handwashing with soap and warm water after using the bathroom, changing a diaper or before preparing food. Also handwashing before and after sex.
- Utilize a dental dam, consistently and correctly, during sexual contact.
- Infection control measures include using gloves, and using proper sanitation procedures for cleaning surfaces or equipment that may come in contact with an infected persons feces.

More Information:

- Symptoms
 - Tiredness, loss of appetite, fever, nausea, abdominal pain, dark urine, clay-colored bowel movements, joint pain, or jaundice (yellowing of the skin and/or eyes)
 - Many do not have noticeable symptom

<https://www.cdc.gov/hepatitis/hav/index.htm>

THE FOURS – HIV, STDs and Hepatitis Presentation Information

Fours of Hepatitis B (HBV)

Stages of HBV	Body Fluids
<p>Acute</p> <p>Chronic</p> <ul style="list-style-type: none"> • Liver disease • Cirrhosis • Liver cancer 	<p>Semen</p> <p>Vaginal Secretions</p> <p>Blood</p> <ul style="list-style-type: none"> • Can live and remain infectious outside the body for days, even in dried blood
Transmission Routes	Prevention
<p>Unprotected Sexual Contact</p> <p>Sharing needles/syringes or other drug use equipment</p> <p>Shared personal items</p> <p>Mother to Child during childbirth</p> <p>Unregulated Tattoos and Piercings</p> <p>Blood Transfusion/Organ Transplant before 1992</p> <p>Healthcare Associated/Occupational Exposure</p>	<p>Vaccination</p> <p>Sexual Abstinence</p> <p>Using barrier protection during sex</p> <p>Don't share</p> <ul style="list-style-type: none"> • needles for drugs, tattooing, piercing or any other reason; • other drug use equipment; • toothbrushes; • razors; • nail clippers <p>Use consistent infection control practices</p>

THE FOURS – HIV, STDs and Hepatitis Presentation Information

Fours of Hepatitis B (HBV)

PRESENTER NOTES:

Stages:

Acute: If it resolves on its own within 6 months

- Can present with or without symptoms
- Once you resolve the infection you **cannot** be infected again.

Chronic: If an infection lasts longer than 6 months, it is considered chronic.

- Individuals can go for many years or even decades without symptoms.
- An individual with chronic hepatitis B may develop chronic liver disease including cirrhosis or liver cancer.

Body Fluids for Transmission:

HBV lives in **semen, vaginal secretions and blood**

- HBV can live in blood outside the body, from days to weeks depending on the environment.
- HBV is 50-100 times more infectious than HIV and can be spread even when the amount of blood is too small to be seen.

Transmission Routes:

Listed are ways that blood and body fluid contact can be made. It is important to note that these are routes that may have happened recently or in the past, either way they are still a risk.

- Contracting hepatitis B through sex is the highest risk factor. The risk increases even more with multiple partners, having sex with HIV/STD infected partners or engaging in rough sex.
- Sharing needles, syringes for any reason (most commonly happens in drug use)
- Sharing other drug paraphernalia that may be contaminated with blood, including straws used to snort drugs.
- A mother may pass the virus to her infant during the birthing process.
- Tattoo and piercing equipment and the ink can spread the virus if not cleaned or disposed of properly. An unregulated tattoo or piercing means that it is performed somewhere or by someone that is not being supervised by regulation or laws. In Missouri artists and businesses register for licensure and are required to follow a set of rules and licensing requirements.
- 1992 is when blood screening for HBV became available.
- Healthcare-Associated/Occupational Exposure- As long as infection control practices are used consistently, medical and dental procedures generally do not pose a risk for the spread of HBV. However, HBV has been spread in health care settings when injection equipment, such as syringes, was shared between patients or when injectable medications or intravenous solutions were mishandled and became contaminated with blood. (For more on infection control basics go to www.cdc.gov/infectioncontrol/basics.)

Prevention:

- **Vaccination!!**
- Sexual abstinence includes no sexual contact of any kind
- Utilize a barrier method, consistently and correctly, during sex of any kind (oral, anal, vaginal). Barrier methods include: male condom, female/internal condom, or dental dam.
- Do not share any item that may have blood on it. Make sure your family is aware of the risks and items that should not be shared as well as procedures for properly cleaning up blood spills.
- Infection control measures include using gloves, wearing a mask if there is a splash risk, cleaning up spills correctly, using proper sanitation procedures for equipment that may come in contact with blood.

More Information:

- Education and awareness is the first defense against the spread of HBV.
- Symptoms
 - Tiredness, loss of appetite, fever, nausea, abdominal pain, dark urine, clay-colored bowel movements, joint pain, or jaundice (yellowing of the skin and/or eyes)
 - Many do not have noticeable symptom

THE FOURS – HIV, STDs and Hepatitis Presentation Information

Fours of Hepatitis C (HCV)

Stages of HCV	Body Fluids
<p>Acute</p> <p>Chronic</p> <ul style="list-style-type: none"> • Liver disease • Cirrhosis • Liver cancer 	<p>Blood</p> <ul style="list-style-type: none"> • Can live and remain infectious outside the body for days, even in dried blood
Transmission Routes	Prevention
<p>Sharing needles/syringes</p> <p>Sharing any drug use equipment</p> <p>Shared personal items that may have blood on them</p> <p>Unregulated Tattoos and Piercings</p> <p>Blood Transfusion/Organ Transplant before 1992</p> <p>Healthcare Associated/Occupational Exposure</p> <p>Sexual contact (low risk)</p> <p>Mother-to-Child</p>	<p>Don't share items that may have blood on them.</p> <ul style="list-style-type: none"> • needles for drugs, tattooing, piercing or any other reason; • other drug use equipment; • toothbrushes; • razors; • nail clippers <p>Use barrier protection during sex</p> <p>Use consistent infection control practices</p>

THE FOURS – HIV, STDs and Hepatitis Presentation Information

Fours of Hepatitis C (HCV)

PRESENTER NOTES:

Stages:

Acute: Can present with or without symptoms and resolves on its own within 6 months.

Chronic: If an infection lasts longer than 6 months, it is considered chronic.

- Individuals can go for many years or even decades without symptoms.
- An individual with chronic hepatitis C may develop chronic liver disease including cirrhosis or liver cancer.
- There are treatments available and if successful, a person can achieve a sustained viral response (SVR) and be considered cured.
- You can be re-infected even if cured.

Body Fluids for Transmission:

HCV lives in blood

- HCV can live in blood outside the body, from days to weeks depending on the environment.
- The virus can live inside of a syringe and injection drug use is a major source of the spread of hepatitis C.
- HCV is 10 times more infectious than HIV and can be spread even when the amount of blood is too small to be seen.

Transmission Routes:

Listed are ways that blood to blood contact can be made. It is important to note that these are routes that may have happened recently or in the past, either way they are still a risk.

- Sharing needles, syringes for any reason (most commonly happens in drug use)
- Sharing other drug paraphernalia that may be contaminated with blood, including straws used to snort drugs.
- Tattoo and piercing equipment and the ink can spread the virus if not cleaned or disposed of properly. An unregulated tattoo or piercing means that it is performed somewhere or by someone that is not being supervised by regulation or laws. In Missouri artists and businesses register for licensure and are required to follow a set of rules and licensing requirements.
- Before 1992, when blood screening for HCV became available, blood transfusion was a leading means of HCV transmission.
- Healthcare-Associated/Occupational Exposure- As long as infection control practices are used consistently, medical and dental procedures generally do not pose a risk for the spread of HCV. However, HCV has been spread in health care settings when injection equipment, such as syringes, was shared between patients or when injectable medications or intravenous solutions were mishandled and became contaminated with blood. (For more on infection control basics go to www.cdc.gov/infectioncontrol/basics.)
- The risk of contracting hepatitis C through sex is low but the risk increases with multiple partners, having sex with HIV/STD infected partners or engaging in rough sex.
- A mother may pass the virus to her infant during the birthing process.

Prevention:

- **There is no vaccine for HCV!!**
- Do not share any item that may have blood on it. Make sure your family is aware of the risks and items that should not be shared as well as procedures for properly cleaning up blood spills.
- Even though sexual risk is low it is still good to use a barrier method during sex (oral, anal, vaginal). Barrier methods include: male condom, female/internal condom, or dental dam.
- Infection control measures include using gloves, wearing a mask if there is a splash risk, cleaning up spills correctly, using proper sanitation procedures for equipment that may come in contact with blood.

More Information:

- There are an estimated 2.7-3.9 million (per CDC, January 2107) people in the U.S. with Hepatitis but up to 75% of them are unaware of their infection.
- Chronic HCV infection is the leading indication for liver transplants in the United States.
- Symptoms
 - Tiredness, loss of appetite, fever, nausea, abdominal pain, dark urine, clay-colored bowel movements, joint pain, or jaundice (yellowing of the skin and/or eyes)
 - Many do not have noticeable symptom

THE FOURS – HIV, STDs and Hepatitis Presentation Information

Fours of HIV (Human Immunodeficiency Virus)

Stages of HIV	Body Fluids
Infection	Blood
Asymptomatic (no symptoms)	Semen
Symptomatic	Vaginal Secretions
AIDS	Breast Milk
Transmission Routes	Prevention
Sexual Contact	Sexual Abstinence
Needle/Sharps/Works sharing	Barrier Methods
Mother to Child	Not sharing needles/sharps/works
Blood Transfusions (now rare)	Universal Precautions
	PrEP/PEP
	TasP

THE FOURS – HIV, STDs and Hepatitis Presentation Information

Fours of HIV (Human Immunodeficiency Virus)

PRESENTER NOTES:

Stages of HIV

Stage 0

- A negative or Indeterminate HIV test (antibody/antigen, RNA) test result within 180 days before first confirmed positive HIV test result of any type.

OR

- Sequence of tests performed as part of a laboratory testing algorithm that demonstrate the presence of HIV-specific viral markers (p24 or RNA 1-180 days before or after an antibody test that had a negative or indeterminate result.

Stage 1 (age specific ≥ 6)

- CD4 count ≥ 500 or $\geq 26\%$

Stage 2 (age specific ≥ 6)

- CD4 200-499 or 14-25%

Stage 3, AIDS

- CD4 count < 200 or $< 14\%$
- Criteria for Stage 0 are not met and a stage-3 defining opportunistic illness has been diagnosed, Stage 3 regardless of CD4 count.

Unknown

- If the criteria for Stage 0 are not met and information on the above criteria for other stages is missing, then the stage is classified as unknown.

Body Fluids for Transmission – enters through an opening in skin tissue. The virus is present in all body fluids of an infected person. The concentration in most body fluids is not significant enough to transmit. The following four body fluids are the most likely.

- Blood
- Semen
 - Pre-cum
- Vaginal Secretions
- Breast Milk
- Rectal Fluids

Transmission Routes

- Sexual Contact
 - Anal-most risky due to fragile tissue in the anus
 - Vaginal-higher risk for male to female transmission due to high concentrations of virus in semen and inability to detect sores or abrasions in the vaginal cavity
 - Oral-less risky unless open sores or abrasions are present
- Needle/Sharps/Works sharing
 - Direct blood to blood contact, introduced directly into vein.
- Mother to Child
 - In utero, during delivery
- Blood Transfusions (now rare)
 - Red Cross-Antibody screened for HIV 1 since 1985, HIV 2 since 1992, NAT for RNA screened since 1999

Prevention

- Sexual Abstinence
 - How realistic is this for the client
 - Does client understand what abstinence means
- Barrier Methods
 - Condoms, dental dams, gloves, or other available items (i.e. trash bags) to prevent transmission of the virus
- Not Sharing Needles/Sharps/Works
 - Cleaning with bleach and water will reduce risk if sharing
- Universal Precautions
 - Hand hygiene; use of gloves, gown, mask, eye protection, or face shield, depending on the anticipated exposure; and safe injection practices.

THE FOURS – HIV, STDs and Hepatitis Presentation Information

Fours of HIV (Human Immunodeficiency Virus)

- Pre-Exposure Prophylaxis (PrEP) is a medication that is extremely effective at preventing someone who is HIV[-] negative from getting HIV, should they be exposed.

Prevention Continued

- Post-Exposure Prophylaxis (PEP) is a medication that someone who is HIV[-] negative can take within 72 hours of a possible exposure (like condomless sex) which can reduce their chance of becoming HIV[+] positive. Usually used in emergency situations and it is best to start it as soon as possible.
- Treatment as Prevention (TasP) includes anti-retroviral therapy (ART) which is the medication people living with HIV take to stay healthy. These medications reduce the amount of virus in the body which keeps the immune system functioning and prevents illness and helps prevent the transmission to others.

More Information:

- Early Symptoms
 - Fever
 - Rash
 - Sore throat
 - Muscle pain
 - Mouth sores
 - POSSIBILITY OF NO SYMPTOMS
- Other Possible Symptoms
 - Depression
 - Weight loss
 - Flu-like symptoms
 - Headaches
 - Diarrhea
 - Night sweats