

University Health & Counseling Services

The Basics of Women's Reproductive Health

Hi, welcome to the university's health and counseling services personalized reproductive care clinic. We offer routine health care including pelvic exams, PAP tests, and a variety of birth control methods. All visits to UHCS and personalized reproductive care clinic are private and confidential.

I'm here today to take you on a guided tour of what you can expect during an exam visit. I'm going to give you the necessary information about anatomy and physiology of the female reproductive system, the PAP test and pelvic exam, sexually transmitted diseases, safer sex, and contraception methods. Let's go.

(In lobby of University Health and Counseling Services)

Receptionist: Welcome to university health services, how are you doing today?

Student: Good, thank you.

Receptionist: Good. You can fill in the top portion of your encounter form over at the lobby. Here.

(In exam room. Doctor Enter)

Doctor: Hi, I'm Dr. Rowe.

Student: Hi.

Doctor: This is the room we are going to be doing your examination in. Before we do the exam, I'm going to just go through some basic anatomy and physiology of the female reproductive system.

The vagina is a stretchable muscular organ. It can stretch during childbirth to deliver a baby weighing over ten pounds. The cervix is the lower part of the uterus. It dilates during labor so that the baby can move through to the vagina. The uterus is a pear shaped organ, which can grow large enough to accommodate a developing baby or babies. The ovaries are two almond shaped glands located on either side of the uterus, which develop ova or eggs and produce the hormones estrogen and progesterone. The fallopian tubes transport the eggs from the ovaries to the uterus. It is usually in the fallopian tubes that fertilization takes place.

In a fertile woman an egg is usually released once a month from one of her two ovaries. This is called ovulation and usually occurs about 14 days before the first day of menses. Two to five days before and after ovulation is when pregnancy can occur. If unprotected intercourse takes place during this time, the sperm moves up the uterus into the tubes within minutes. If a single sperm joins with the egg, the egg becomes fertilized. This fertilized egg travels down the tube and attaches to the wall of the uterus, which has increased its blood supply in preparation for pregnancy. If the egg is not fertilized, in about 14 days, the lining of the uterus is shed as menstrual flow.

Now that we've covered the basics, it's time for the exam itself. A physician or nurse practitioner will do your exam. You will be seated on an exam table and covered with a paper sheet. The practitioner will do a brief general examination. He or she will listen to your heart and lungs, check the thyroid, which is the gland that controls metabolism, and do your breast exam.

Women should examine their breasts once a month. The best time of the month is right after your menses. Before the menses your breasts are more cystic and tender. By checking your breasts monthly, you'll become more familiar with your own breasts and notice any changes. Changes could be indicative of cancer and the earlier you detect cancer the better chance there is for a cure.

Following the more general examination, the practitioner will perform a pelvic exam. You will be asked to slide your hips down to the edge of the table and put your feet in the stirrups. Then let your knees spread wide apart and relax as much as possible. Relaxing your abdominal and vaginal muscles will help you become more comfortable during the exam.

The practitioner will first exam the soft folds of the vulva, and opening of the vagina to check for signs of redness, irritation, cysts, lesions, or other conditions. Then he or she will insert the closed plastic speculum. It is then opened to separate the walls of the vagina. The cervix is visualized and samples are collected for the PAP

test and, if desired, for sexually transmitted diseases. The PAP test is a cervical cancer-screening test and can also detect other cervical changes due to inflammation and viruses. The PAP test is done by gently rotating a soft brush inside the cervical opening. After all specimens are obtained the speculum is then closed and removed. The PAP test sample is placed in a solution and sent to an area laboratory for evaluation. The practitioner will then do the bimanual exam. He or she will insert one or two gloved fingers into the vagina. The other hand will press down on the lower abdomen feeling for position, size irregularities, or tenderness of the uterus, tubes, or ovaries. A rectal vaginal exam may be done. Again I must emphasize that relaxed muscles help make the exam more comfortable.

Sexually transmitted diseases are infections transmitted or received during unprotected sexual contact. Some STDs have few or no symptoms so many people are unknowingly infected and spread the STDs.

The college age group is a high-risk group for getting STDs. Practicing safer sex can reduce the chance for getting an STD. Abstinence is the only method that will guarantee that you will not get an STD. Safer sex also includes long-term monogamy with a partner who is disease free. The use of latex and polyurethane condoms along with a spermicide is effective in decreasing your chances of getting sexually transmitted diseases. However, sores caused by STDs may be present in areas not covered by the condom resulting in transmission of infections to another person. Natural condoms DO NOT protect against STDs. Always read the package labels to verify the products effectiveness and correct use.

Gonorrhea, Chlamydia, Syphilis, Trichomoniasis, Genital Warts, Genital Herpes, Hepatitis B, and HIV can ALL be sexually transmitted diseases and may be transmitted during unprotected sex. We encourage and offer testing for all STDs. There are different methods required to test for specific STDs including cervical, urine, and blood samples.

Genital Warts, which are caused by the human papilloma virus, are highly infectious and cause warty masses or barely noticeable flat lesions on both men and women. Certain strains of the wart virus have been known to cause cellular changes of cervix detected on PAP smears.

Herpes Simplex infections are caused by a virus. One type of Herpes, Type I, is traditionally responsible for causing cold sores and fever blisters, usually about the lips or elsewhere on the face and another, Herpes Infection Type II, is traditionally the cause of Genital Herpes infections. These viruses are passed by skin-to-skin contact. That is, by kissing, sexual intercourse, oral-genital sex, and other close associations such as contact sports. The Herpes Virus sores at any site on the body may result in transmission of Herpes infection to a sex partner. Furthermore, in a small percentage of people the virus may be present in body fluids (mucus, saliva, semen) and transmission is possible even without open sores present.

Chlamydia and Genital Warts are very common among the college age group. Often these infections are diagnosed following routine pelvic exams. Chlamydia infections are believed to be the most common STD and are often silent infections. Chlamydia can be effectively treated with an antibiotic but if untreated Chlamydia can have serious consequences including infertility.

Hepatitis B is a serious viral infection of the liver and can cause life-long health problems. It can be sexually transmitted and affects about 80,000 Americans each year. There is no cure for Hepatitis B but protection can be acquired through vaccination against Hepatitis B. The UHCS offers and recommends the Hepatitis B vaccination.

Gonorrhea, caused by a bacteria, infects about 650,000 people annually in the U.S. each year. Women may not have any symptoms or have yellow or bloody discharge. Sometimes they feel as if they have a urinary tract infection. Untreated, it causes serious infections.

Trichomoniasis affects about 5 million people each year. This infection may not have any symptoms in men. Many women have a frothy, yellow-green vaginal discharge.

HIV, Human Immunodeficiency Virus, is the virus that causes AIDS. It may exist in a person's body for years without the signs of illness. The infected person may not know that he or she is infected and unknowingly

transmit the virus. HIV destroys the body's immune system and eventually leads to death. HIV antibody testing is available at the UHCS.

In 1999 there were over 35,000 case of Syphilis reported in the United States. Syphilis is called the "great imitator" because the symptoms it can cause are similar to many other diseases. Syphilis primarily occurs in young adults and is caused by direct contact with an infected sore. The newly infected person will usually have a sore appear anywhere from 10 to 90 days after contact.

A woman today has numerous options to choose from when deciding on a method of contraception. Factors she and her partner should consider when choosing a method are: how effective the method is; how convenient the method is; whether her and her partner will be consistent in using the method; and cost. Let's see what the health center has to offer.

Abstinence is the only method of contraception that guarantees pregnancy and STDs will not occur. Abstinence means making a conscious decision not to have sexual contact and sticking to it.

Latex and polyurethane condoms, when used with a spermicide, are 90% to 98% effective in preventing pregnancy and also help prevent the transmission of STDs when used correctly. Condoms are available dry and lubricated. If the non-lubricated form is used it is important to use an additional lubricant. Use only water-based lubricants such as KY jelly or lubricants with spermicide. Oil based lubricants such as Vaseline, tanning oils, and cocoa butter should not be used. Remember that sores, caused by STDs, may be present in areas not covered by the condom resulting in transmission of the infection to another person.

Spermicides are available in a variety of forms: jellies, creams, suppositories, and foams. It is important to read the directions to determine the correct application and any specific time intervals so the product can be most effective.

The condom should be put on before there is any contact with the genitals. Pinch the reservoir tip about $\frac{1}{2}$ inch leaving space for collection of semen. If the condom does not have a reservoir tip, be sure, again, to pinch $\frac{1}{2}$ inch at the tip of the condom. Put the condom on the erect penis. Smooth out any air bubbles or wrinkles. The penis should be withdrawn immediately after ejaculation and before it softens. Hold onto the base of the condom as the penis is withdrawn to prevent leakage of semen into the vagina. Dispose of properly. Remember condoms break more often if they are not put on correctly. The female condom is a sheath that a woman inserts into her vagina before intercourse. The female condom resembles the male condom but it's larger with two flexible rings on either end. One ring is used to insert the device and hold it in place. The other ring stays outside the vagina after insertion to keep it from being pushed into the vagina during intercourse. It is about 87% effective in preventing pregnancy and also helps prevent the transmission of STDs.

The morning after pill is a method that may be used for unprotected intercourse or unexpected condom breakage. It is 75% - 98% effective in preventing pregnancy. A woman needs to be seen at the University Health Services within 72 hours of the unprotected intercourse. For further information ask your practitioner.

Oral contraceptives, or birth control pills, the patch, and the ring contain the hormones estrogen and progesterone in specific amounts to prevent ovulation. They also thicken cervical mucus and change the endometrium, the lining of the uterus, making it unreceptive to a fertilized egg. When taken correctly and consistently, the pill, patch, and ring are 95% - 99.9% effective.

For 21 days a woman takes hormone pills and for the following seven days she takes reminder pills.

The patch is changes weekly for three weeks. The fourth week, no patch is worn and this is typically when a period will occur.

The ring is used continuously for three weeks followed by a one week, ring free period. This is when she will get her menses.

The advantages of being on the pill, patch, or ring are regular and predictable periods that are usually lighter and for fewer days, less menstrual cramping, a lower chance of developing ovarian cancer later in life, and less likelihood of developing ovarian cysts and benign breast cysts.

Nuisance side effects that women can experience when using the pill are nausea, breast tenderness, weight loss or gain, headaches, or mood swings. The side effects usually clear up after two to three months of being on the pill. Major risk factors of the pill are related to blood clots. Talk to your practitioner for more information and to see if one of these three methods will suit your body and your needs.

Depo-Provera is an injectable form of contraception that protects against pregnancy for three months. It contains the hormone progesterone and acts by preventing ovulation. Depo-Provera also causes changes in the lining of your uterus making it less likely for pregnancy to occur. To continue protection, Depo-Provera injections are given every three months. Depo-Provera is over 99% effective. Some of its benefits include three-month pregnancy protection, no daily pill to remember, privacy, convenience, and it is safe for nursing mothers to use as well. Its most common side effects include irregular or absent menses or menstrual bleeding, weight gain, nervousness, dizziness, head and stomach aches, weakness or fatigue, and a decreased sexual drive. Many women who experience side effects during the first few months of use report that these decrease over time.

Diaphragms, intrauterine devices or IUDs, Norplant, and tubal ligations are also birth control options that can be considered. Your healthcare provider can discuss these options with you if you would like additional information. A variety of other birth control measures, both for men and women are currently in the research phase and may be available in the next few months or years.

I hope this journey has been informative and helped you with any questions you may have had prior to your examination. Remember, our friendly staff is here to answer any questions you may have. All examinations and visits to the health center are confidential. Remember, we are here for you to help you make decision that are right for your body and your health needs.