

INFECTIOUS AND SEXUALLY TRANSMITTED DISEASES CHAPTER 19



SOME DEFINITIONS

- **PATHOGENS**
 - DISEASE CAUSING AGENTS
- **AUTOINOCULATION**
 - TRANSMISSION OF A DISEASE FROM ONE PART OF YOUR BODY TO ANOTHER
- **TOXINS**
 - POISONOUS SUBSTANCES

SUSCEPTIBILITY

- **MULTIFACTORIAL**
 - INTERACTION OF SEVERAL FACTORS
- **ENVIRONMENT ACCEPTABLE**
- **CHAIN OF INFECTION**
 - CAUSATIVE AGENT
 - SOURCE
 - EXIT
 - TRANSMISSION
 - ENTRY
 - NEW HOST



CONTROLLABLE FACTORS

- **CONTROL STRESS**
- **GOOD NUTRITION**
- **MAINTAIN PHYSICAL FITNESS**
- **HEALTHFUL SLEEP**
- **CONTROL DRUGS/ALCOHOL**
- **REDUCE HIGH-RISK ACTIVITIES**
- **GOOD PERSONAL HYGIENE**

DISEASE TYPES AND TRANSMISSION

- **DIRECT TRANSMISSION**
 - BETWEEN INFECTED PERSONS
- **INDIRECT TRANSMISSION**
 - CONTACTING OBJECT OF INFECTED PERSON
- **TYPES OF DISEASES**
 - RESPIRATORY: COLDS & FLU
 - VECTOR-BORNE: LYME, MALARIA
 - ALVINE DISCHARGE: DYSENTERY
 - OPEN LESION: STD'S, TUBERCULOSIS

THE BODY'S DEFENSE

- **SECRETIONS**
 - SWEAT, OIL GLANDS, TEARS, MUCOUS, FEVER
- **MUCOUS MEMBRANES**
 - TRAP INVADERS, CLIM, ENZYMES IN MUCOUS
- **ENZYMES & BLOOD CAUSES INVADERS TO BURST**
- **IMMUNE SYSTEM**
 - ANTIGEN/ANTIBODY RESPONSE, WHITE BLOOD CELLS, DESTROY
- **INTERFERON**
 - PRODUCES PROTECTIVE PROTEINS

BACTERIA

- BACTERIA
 - SEVERAL THOUSAND SPECIES
 - 100 CAUSE US HARM
 - PRODUCE TOXINS
- STAPHYLOCOCCAL
 - ON OUR SKIN ALL THE TIME
 - RESISTANT HOSPITAL STRAINS
- STREPTOCOCCAL
 - STREP THROAT, SCARLET & PNEUMATIC FEVER
- PNEUMONIA, LEGIONNAIRE, TUBERCULOSIS, PERIODONTAL

VIRUSES

- SMALLEST PATHOGEN 150 KNOWN
- ATTACH TO HOST CELL
- INCUBATION: DAYS - MONTHS - YEARS
- COMMON COLD: 100 DIFFERENT ONES
 - MOST CONTAGIOUS IN FIRST 24 HOURS
- INFLUENZA: A-B-C
- MONONUCLEOSIS: EPSTEIN-BARR-CONTACT
- HEPATITIS: INFLAMMATION OF LIVER
 - A-INFECTIOUS, B-SERUM, NON A, NON B & D
 - MORE INDIVIDUALS AT RISK THAN HIV

OTHER INVADERS

- FUNGI INFECTIONS
 - CANDIDIASIS (VAGINAL YEAST INFECTION), ATHLETE'S FOOT, RING WORM, ETC.
- PROTOZOA
 - TROPICAL DISEASES LIKE AFRICAN SLEEPING SICKNESS, MALARIA, IN US. - TRICHOMONIASIS, A STD
- PARASITIC WORMS
 - LARGEST PATHOGEN PINWORMS TO TAPEWORMS

IMMUNE SYSTEM

- ANTIGENS PRODUCE IMMUNE RESPONSE
- BODY FORMS ANTIBODIES
- "CELL-MEDIATED IMMUNITY"-
 - FORMS LYMPHOCYTES
 - CAN DESTROY VIRUS, FUNGI, PARASITES, SOME BACTERIA

IMMUNE RESPONSE

- WHITE BLOOD CELLS
 - MACROPHAGES, PHAGOCYTES
 - LYMPHOCYTES: T-CELLS, B-CELLS
- IMMUNITY DEVELOPS THROUGH
 - HAVING DISEASE
 - VACCINE
- FEVER
- PAIN & INFLAMMATION

SYMPTOMS OF STD'S

- | | |
|----------------------------|--------------------------------|
| • MEN SYMPTOMS | • WOMEN'S SIGNS |
| BUMPS/BLISTERS | VAGINAL DISCHARGE/ODOR |
| BURNING URINATION | PAIN IN |
| SWELLING/REDNESS IN THROAT | ABDOMEN/PELVIC AREA DURING SEX |
| FEVER, CHILLS, ACNES | BURN/ITCH |
| SWELLING OF LYMPH | BLEEDING FROM VAGINA |
| NODES NEAR GENITALS | |
| FREQUENT URINATION | |
| PENIS DRIP/DISCHARGE | |

MODE OF TRANSMISSION

- INTIMATE SEXUAL CONTACT
 - INTERCOURSE, ORAL-GENITAL, HAND-GENITAL, ANNUALLY
- RARELY BY MOUTH-TO-MOUTH OR CONTACT WITH FLUIDS FROM SORES
- STD TRANSMISSION
 - DARK, MOIST PLACES, MUCOUS MEMBRANES IN REPRODUCTIVE ORGANS
- PATHOGENS SENSITIVE TO
 - LIGHT, EXCESS HEAT, COLD, DRYNESS

CHLAMYDIA

- 5 X AS MANY AS GONORRHEA
 - MOST COMMON IN WHITE HETEROSEXUALS
- 10%+ OF COLLEGE STUDENTS
- MALES.
 - PAIN IN URINATION, WATERY, PUSLIKE DISCHARGE
- FEMALES.
 - DISCHARGE, SPOTTING, OR NO SYMPTOMS
- SECONDARY INFECTIONS IN MALES
 - REPRODUCTIVE, ARTHRITIS, HEART, DISEASES.
- PID IN WOMEN:
 - BLOCKS FALLOPIAN TUBES, STERILITY
- ANTIBIOTICS TO TREAT

PELVIC INFLAMMATORY DISEASE (PID)

- UTERUS, FALLOPIAN TUBES, AND OVARIES
- UNTREATED STD'S
- SYMPTOMS:
 - ACUTE INFLAMMATION - PAIN
 - MENSTRUAL IRREGULARITIES
 - FEVER - NAUSEA,
 - PAINFUL INTERCOURSE

PID (CONT.)

- RISK FACTORS
 - AGE OF 1ST INTERCOURSE
 - MULTIPLE SEX PARTNERS
- LONG-TERM CONSEQUENCES
 - TUBAL PREGNANCIES
 - INFERTILITY

GONORRHEA

- BACTERIA INFECTS LININGS OF URETHRA, GENITAL TRACT, PHARYNX, RECTUM
- MALE
 - WHITE MILKY DISCHARGE
 - PAIN & BURNING (2-8 DAYS AFTER)
- FEMALE
 - 20% EXPERIENCE THE SYMPTOMS.
 - MAYBE ONLY SLIGHT FEVER
- CONTROLLED BY ANTIBIOTICS
 - SOME BACTERIA ARE PENICILLIN-RESISTANT

SYPHILIS

- PRIMARY SYPHILIS.
 - CHANCRE (2-4 WEEKS AFTER)
 - FEMALE IT MAY BE INTERNAL.
 - DISAPPEAR IN 3-6 WEEKS
- SECONDARY SYPHILIS.
 - RASH/WHITE PATCHES OF MOUTH, THROAT, GENITALS, OTHER (MAY DISAPPEAR)
- LATENT SYPHILIS.
 - NO SYMPTOMS - RARELY TRANSMITTED
- LATE SYPHILIS.
 - MAY BE YEARS LATER, HEART, CNS, BLIND, DEAF, PARALYSIS, SENILITY, INSANITY

PUBIC LICE

- SMALL PARASITES
 - USUALLY DURING SEXUAL CONTACT, ATTACH TO PUBIC HAIR
- WASH CLOTHING, FURNITURE, LINERS
- 2-3 WEEKS TO KILL LARVAL FORMS
- CAN GET LICE ON INFECTED SHEETS

GENITAL WARTS

- HUMAN PAPILLOMA VIRUSES (HPV)...
 - PENETRATION OF SKIN OR MUCOUS LINING OF GENITAL/ANAL LININGS (6-8 WEEKS)
- MANY HAVE NO SYMPTOMS
 - PROTRUDING OR FLAT WARTS
- MAY DISAPPEAR ON OWN OR GROW
 - IF NOT TREATED - DYSPLASIA (PRECANCEROUS CONDITION)

CANDIDIASIS

- YEASTLIKE FUNGUS OF VAGINAL TRACT
 - BIRTH CONTROL PILLS, ANTIBIOTICS, MAKE VAGINA LESS ACIDIC.
- SYMPTOMS
 - VAGINAL ITCHING
 - WHITE CHEESY DISCHARGE
 - IRRITATION, BURNING, "VAGINITIS"
- TX: ANTIFUNGAL DRUGS...
- AGGRAVATED BY
 - SOAPS, CHLORINATED WATER, SPERMICIDES, TIGHT FITTING JEANS, PARTY HOSE

HERPES

- SORES OR ERUPTIONS ON THE SKIN.
- "HERPES SIMPLEX" CAUSED BY VIRUS
 - 1 = COLD SORES & FEVER BLISTERS
 - 2 = GENITAL SORES & BLISTERS
- MOST HAVE HERPES VIRUS BY 5 YRS.

GENITAL HERPES

- BURNING SENSATION AT SITE OF ENTRY
- BLISTER CONTAINING VIRUS (AUTOINOCULATE)
- BLISTER DISAPPEARS
 - VIRUS TO BASE OF NERVE & LIES DORMANT
- SUSCEPTIBILITY
 - STRESS, DIET, IMMUNE SYSTEM, SUNLIGHT
- TREATMENT
 - ACYCLOVIR
- RISKS & CONSEQUENCES
 - CANCER, CEASAREAN DELIVERIES

ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS)

OVER 1 MILLION INFECTED IN US,
"HUMAN IMMUNODEFICIENCY VIRUS"
(HIV)

- MULTIPLE PARTNERS, UNPROTECTED SEX AND SHARING OF IV NEEDLES
- REPORTING HIV
 - 20 STATES REQ.
 - 12 REQ. ANONYMOUS
 - 18 DO NOT REQ. ANY



TRANSMISSION OF HIV

- TRANSMITTED BY BODY FLUIDS
 - SHARING NEEDLE
- ENTRY-MUCOUS MEMBRANES OF GENITAL ORGANS AND THE ANUS
- VIRUS INVADERS BLOOD & SPINAL FLUID
 - KILLS HELPER T-LYMPHOCYTES
 - DECREASES IMMUNITY
- NUMBER OF EXPOSURES
- MOTHER TO CHILD - UTERUS OR BIRTH CANAL
- AIDS IS NOT HIGHLY CONTAGIOUS

AIDS SYMPTOMS

- MAY BE SYMPTOM-FREE FOR YEARS
- IN ADULTS
 - 8-10 YEARS BEFORE BEFORE IMMUNE SYSTEM DEGENERATES
- PRE-AID SIGNS
 - COLDS, SORE THROATS, FEVER, TIREDNESS, NAUSEA, NIGHT SWEATS

HIV TESTS

- ELISA...A TEST FOR PRESENCE OF ANTIBODIES
- WESTERN BLOT...MORE EXPENSIVE TO CONFIRM POSITIVE ELISA
- FALSE POSITIVES & FALSE NEGATIVES ARE POSSIBLE FOR BOTH TESTS
- TX: DIFFERENT DRUGS ARE USED TO PROLONG LIFE...BUT NO CURE...EXCEPT ABSTINENCE...OR SAFE MONOGAMY...CONDOMS CAN FAIL TOO

ALLERGY

- BODY PRODUCES ANTIBODIES IN RESPONSE TO
 - ANTIGENS (DUST, POLLEN, ETC)
 - ANTIBODIES TRIGGER HISTAMINE
 - DILATES BLOOD VESSELS, INCREASES MUCOUS & SWELLING
- HAYFEVER, ALLERGIC RHINITIS, ASTHMA
- AGE, STRESS LEVEL ARE FACTORS
- TREATMENTS: AVOIDANCE, ANTIHISTAMINE, SHOTS

NEUROLOGICAL DISORDERS

- HEADACHES...DILATED BLOOD VESSELS IN THE BRAIN, ORGANIC PROBLEMS, STRESS & ANXIETY
 - TENSION HEADACHES
 - TENSION IN NECK AREA OR NEAR TX:
 - ANYTHING THAT BRINGS RELAXATION
 - MIGRAINE HEADACHES... (20% OF US)
 - ONE SIDE OF HEAD
 - DILATION/CONSTRICTION OF BLOOD VESSELS
 - RELAXATION OR STRONG DRUGS
 - SECONDARY...
 - SINUS, ALLERGIES, LOW BLOOD SUGAR, ETC.
 - ANXIETY, DEPRESSION, EMOTIONAL

SEIZURE DISORDERS

- EPILEPSY ("SEIZURE") ABNORMAL ELECTRICAL ACTIVITY IN BRAIN
- GRAND MAL: CONVULSIONS
- PETIT MAL: MINOR LOSS OF CONSCIOUSNESS
- PSYCHOMOTOR: MENTAL CONFUSION WITH REPETITIVE MOVEMENTS
- JACSONIAN SEIZURE: PROGRESSIVE FROM 1 PART OF BODY TO ANOTHER
- CAUSES: HEAD INJURY, CONGENITAL, DRUGS, ETC.
- MEDICATION: ANTICONVULSANT & SURGERY

FEMALE DISORDERS

- **FIBROCYSTIC BREAST CONDITION**
 - HORMONAL, INHERITED
 - FLUID-FILLED OR FIBROUS (MASS/REMOVED)
 - CAFFEINE, HIGH FAT
- **ENDOMETRIOSIS**
 - AGES 20-40 - ABNORMAL GROWTH OF ENDOMETRIAL TISSUE (UTERUS)
 - IRREGULAR PERIODS & FLOW - BLOATING
- **PMS**
 - 7-10 DAYS BEFORE PERIOD
 - HORMONAL, STRESS
 - AFFECTS 20-40%

DIGESTIVE-RELATED DISORDERS

- **DIABETES**
 - PANCREAS PRODUCES INSUFFICIENT INSULIN TO USE OR STORE GLUCOSE. (ELEVATED BLOOD SUGAR)
 - SYMPTOMS: EXCESSIVE THIRST, FREQ. URINATION, HUNGER, FATIGUE, SLOW HEALING WOUNDS, NUMBNESS/TINGLING, VISION CHANGES, SKIN ERUPTIONS, VAGINAL YEAST INFECTIONS (WOMEN)
 - 25 MILLION IN US (2004 DIAGNOSED)
- **SERIOUS: IMPAIRED BLOOD CIRCULATION, BLINDNESS, STROKE, KIDNEY PROBLEMS, LOSS OF LIMBS, SEVERE INFECTIONS**

DIABETES

- **TYPE 1**
 - INSULIN DEPENDENT
 - EARLY IN LIFE,
- **TYPE 2**
 - INSULIN PRODUCTION IS DEFICIENT,
 - CONTROLLED BY DIET, EXERCISE, WEIGHT CONTROL
 - ADULT ONSET: INJECTION/ORAL
- **RUNS IN FAMILIES, OVERWEIGHT, INACTIVITY, STRESS, ILLNESS, ALCOHOL, SMOKING**

GASTROINTESTINAL

- **COLITIS**
 - INFLAMMATION OF LARGE INTESTINE WALL
 - BLOODY DIARRHEA, CRAMPS,
 - STRESS, FOODS
 - COLORECTAL CANCER
- **IRRITABLE BOWEL SYNDROME:**
 - NAUSEA, PAIN, GAS, DIARRHEA, STRESS
- **PEPTIC ULCER:**
 - LINING OF STOMACH OR SMALL INTESTINE
 - STRESS, BACTERIA

LOW BACK PAIN (LBP)

- 80% WILL SUFFER
- MAJOR CAUSE OF DISABILITY FOR AGES 20-45 IN US. (SUFFER MORE THAN OLDER PEOPLE)
- MORE LOST WORK TIME THAN ANY OTHER ILLNESS EXCEPT UPPER RESPIRATORY INFECTIONS
- LBP COSTS INDUSTRY OVER \$18 BILLION YEARLY
- STRENGTH & FITNESS PREVENT
- STRESS, OCCUPATION, POSTURE CAUSE

ARTHRITIS

- 1 IN 7 AMERICANS
- **OSTEOARTHRITIS**
 - DETERIORATION OF WEIGHTBEARING JOINTS,
 - BREAKDOWN OVERPOWERS REPAIR, PAIN AND SWELLING OCCUR
 - INJURY, HEREDITY, ABNORMAL JOINT USE
- **RHEUMATOID ARTHRITIS**
 - AUTOIMMUNE DISEASE - AGES 20-45
 - JOINT INFLAMMATION & DESTRUCTION
 - HEREDITY
- **ANTI-INFLAMMATORY, STEROIDS, GOLD SHOTS, CHEMOTHERAPY**

SUDDEN INFANT DEATH SYNDROME (SIDS)

- LEADING CAUSE OF DEATH FROM 1 WEEK TO 1 YEAR OF AGE
- 1500 INFANT DEATHS
- MORE COMMON AMONG BOYS
- PREMATURE OR LOW BIRTH WEIGHTS
- MORE FREQ. IN COLD WEATHER
- MORE COMMON IN CHILDREN OF SMOKERS
- BABIES DIE DURING SLEEP
- DISRUPTION OF OXYGEN TO FETUS

RESPIRATORY PROBLEMS

- EMPHYSEMA
 - DESTRUCTION OF ALVEOLI (AIR SACS OF LUNGS). DIFFICULT TO EXHALE.
- CHRONIC BRONCHITIS
 - BRONCHIAL TUBES BECOME INFLAMED & SWOLLEN. SYMPTOMS ARE PRODUCTIVE COUGH & SHORTNESS OF BREATH.

INFECTIOUS AND SEXUALLY TRANSMITTED DISEASES



SOME DEFINITIONS

- PATHOGENS...DISEASE CAUSING AGENTS
- ENDOGENOUS MICROORGANISMS...LIVE IN PEACEFUL COEXISTENCE WITH HOST
- EXOGENOUS MICROORGANISMS...DO NOT NORMALLY INHABIT THE BODY
- AUTOINOCULATION... TRANSMISSION OF A DISEASE FROM ONE PART OF YOUR BODY TO ANOTHER
- TOXINS...POISONOUS SUBSTANCES

WHAT MAKES YOU SUSCEPTIBLE TO DISEASE?

- MOST DISEASES ARE MULTIFACTORAL... THE INTERACTION OF SEVERAL FACTORS BOTH INSIDE AND OUTSIDE THE PERSON.
- FOR A DISEASE TO OCCUR THE HOST MUST BE SUSCEPTIBLE
- AN AGENT CAPABLE OF DISEASE MUST BE PRESENT
- ENVIRONMENT MUST BE ACCEPTABLE
- OTHER RISK FACTORS INCREASE OR DECREASE SUSCEPTIBILITY

UNCONTROLLABLE RISK FACTORS

- HEREDITY...
 - PARENTS LONGEVITY IS A BIG FACTOR;
 - CHROMOSOMES OR INHERITED IMMUNE DEFICIENCIES
- AGING...
 - AFTER 40 WE BECOME TARGETS! OUR IMMUNE SYSTEMS DECLINE
- ENVIRONMENT...
 - POOR SANITATION, DRUGS, CHEMICALS, HAZARDOUS WASTE...THESE WEAKEN IMMUNE SYSTEMS

CONTROLLABLE FACTORS

- CONTROL STRESS
- GOOD NUTRITION
- MAINTAIN PHYSICAL FITNESS
- HEALTHFUL SLEEP
- CONTROL DRUGS/ALCOHOL
- REDUCE HIGH-RISK ACTIVITIES
- GOOD PERSONAL HYGIENE

THE INVASION

- DIRECT CONTACT...BETWEEN INFECTED PERSONS
- INDIRECT CONTACT...CONTACTING OBJECT OF INFECTED PERSON
- AIRBORNE CONTACT...
- FOOD-BORNE INFECTION...
- ANIMAL-BORNE INFECTION...
- WATER-BORNE INFECTION...

THE BODY'S DEFENSE

- ▼ SECRETIONS...SWEAT, OIL GLANDS, WAX, TEARS), MUCOUS, FEVER
- ▼ MUCOUS MEMBRANES...TRAP INVADERS, CILIA, ENZYMES IN MUCOUS
- ▼ ENZYME & BLOOD CAUSES INVADERS TO BURST
- ▼ IMMUNE SYSTEM ...ANTIGEN/ANTIBODY RESPONSE, WHITE BLOOD CELLS, DESTROY
- ▼ INTERFERON... PRODUCES PROTECTIVE PROTEINS

THE INVADERS...BACTERIA

- ▼ BACTERIA...SEVERAL THOUSAND SPECIES, ABOUT 100 CAUSE US HARM... PRODUCE TOXINS
- ▼ STAPHYLOCOCCAL...ON OUR SKIN ALL THE TIME, PROBLEM IF EPIDERMIS BREAKS DOWN
- ▼ STREPTOCOCCAL...STREP THROAT, SCARLET & RHEUMATIC FEVER
- ▼ PNEUMONIA...
- ▼ LEGIONNAIRE'S...
- ▼ TUBERCULOSIS...
- ▼ PERIODONTAL DISEASES...

THE INVADERS...VIRUSES

- ▼ SMALLEST PATHOGEN...150 KNOWN
- ▼ ATTACH TO HOST CELL & INJECT THEIR OWN RNA & DNA
- ▼ INCUBATION PERIODS THAT MAY LAST FOR MONTHS OR YEARS
- ▼ THE COMMON COLD...100 DIFFERENT ONES, MOST CONTAGIOUS IN FIRST 24 HOURS
- ▼ INFLUENZA...3 MAJOR FORMS -A-B-C
- ▼ MONONUCLEOSIS... EPSTEIN-BARR-CONTACT
- ▼ HEPATITIS-INFLAMMATION OF LIVER ... A- INFECTIOUS, B-SERUM, NON A, NON B & D.

OTHER INVADERS

- ▼ FUNGI...MANY ARE USEFUL, SOME PRODUCE INFECTIONS - CANDIDIASIS (VAGINAL YEAST INFECTION), ATHLETE'S FOOT, RING WORM, ETC.
- ▼ PROTOZOA...TROPICAL DISEASES LIKE AFRICAN SLEEPING SICKNESS, MALARIA. IN U.S. - TRICHOMONIASIS, A STD
- ▼ PARASITIC WORMS...LARGEST PATHOGEN...PINWORMS TO TAPEWORMS

THE FIGHTING BODY

- ▼ IMMUNITY...
 - ANTIGENS PRODUCE IMMUNE RESPONSE (CAN BE A VIRUS, BACTERIA, FUNGUS, PARASITE, ETC.)
- ▼ WHEN ANTIGEN INVADES, BODY FORMS ANTIBODIES
- ▼ "CELL-MEDIATED IMMUNITY" ...
 - FORMS LYMPHOCYTES THAT CAN DESTROY VIRUS, FUNGI, PARASITES, SOME BACTERIA

SPECIALIZED WHITE BLOOD CELLS

- MACROPHAGES
- PHAGOCYTIC (CELL-EATING)
- LYMPHOCYTES (WHITE BLOOD CELLS)
 - 1. T-CELLS 2. B-CELLS
- IMMUNITY
 - HAVING DISEASE
 - VACCINE
- FEVER
- PAIN

SYMPTOMS OF STD'S

- | | |
|--|--|
| <ul style="list-style-type: none"> ▼ MEN SYMPTOMS BUMPS/BLISTERS BURNING URINATION SWELLING/REDNESS IN THROAT FEVER, CHILLS, ACHES SWELLING OF LYMPH NODES NEAR GENITALS FREQUENT URINATION PENIS DRIP/DISCHARGE | <ul style="list-style-type: none"> ▼ WOMEN'S SIGNS VAGINAL DISCHARGE/ODOR PAIN IN ABDOMEN/PELVIC AREA DURING SEX BURN/ITCH BLEEDING FROM VAGINA |
|--|--|

MODE OF TRANSMISSION

- ▼ INTIMATE SEXUAL CONTACT...INTERCOURSE, ORAL-GENITAL, HAND-GENITAL, ANNUALLY
- ▼ RARELY BY MOUTH-TO-MOUTH OR CONTACT WITH FLUIDS FROM SORES
- ▼ STD PATHOGENS LIKE DARK, MOIST PLACES...MUCOUS MEMBRANES IN REPRODUCTIVE ORGANS
- ▼ THESE PATHOGENS DO NOT LIKE LIGHT, EXCESS HEAT, COLD, DRYNESS

CHLAMYDIA

- MOST COMMON AMONG WHITE HETEROSEXUALS
- AFFECTS 5x AS MANY AS GONORRHEA
- OVER 10% OF COLLEGE STUDENTS
- MALES...PAIN/DIFFICULT URINATION, WATERY/PUSLIKE DISCHARGE
- FEMALES...YELLOWISH DISCHARGE, SPOTTING...AND MANY NO SYMPTOMS
- SECONDARY INFECTIONS: MALES REPRODUCTIVE, ARTHRITIS, HEART DISEASES.
- PID IN WOMEN; BLOCKS FALLOPIAN TUBES, STERILITY
- ANTIBIOTICS TO TREAT

PELVIC INFLAMMATORY DISEASE (PID)

- ▼ INFECTIONS OF UTERUS, FALLOPIAN TUBES, AND OVARIES
- ▼ RESULT OF UNTREATED STD'S OR
- ▼ EXCESSIVE DOUCHING, SMOKING, AND DRUGS
- SYMPTOMS:
 - ACUTE FLAMMATION
 - PAIN IN ABDOMEN
 - MENSTRUAL IRREGULARITIES
 - FEVER - NAUSEA,
 - PAINFUL INTERCOURSE
 - TUBAL PG'S
 - DEPRESSION (SEVERE)
- ▼ RISK FACTORS...AGE AT 1ST INTERCOURSE, MULTIPLE SEX PARTNERS, HI FREQUENCY OF SEX, CHANGE OF SEX PARTNERS

GONORRHEA

- ▼ BACTERIA INFECTS LININGS OF URETHRA, GENITAL TRACT, PHARYNX, RECTUM
- ▼ MALE: WHITE MILKY DISCHARGE, PAIN & BURNING (2-9 DAYS AFTER)
- ▼ FEMALE: OPPOSITE FROM MEN, ONLY 20% EXPERIENCE THE SYMPTOMS...MAYBE ONLY SLIGHT FEVER
- ▼ CONTROLLED BY ANTIBIOTICS, SOME BACTERIA MAY BE PENICILLIN-RESISTANT

SYPHILIS

- PRIMARY SYPHILIS...
 - MALE = CHANCER (3-4 WEEKS AFTER)
 - FEMALE IT MAY BE INTERNAL...
 - DISAPPEAR IN 3-6 WEEKS
- SECONDARY SYPHILIS...
 - RASH/WHITE PATCHES OF MOUTH, THROAT, GENITALS, OTHER (MAY DISAPPEAR)
- LATENT SYPHILIS...
 - RARE TRANSMITTED
- LATE SYPHILIS...
 - MAY BE YEARS LATER, HEART, CNS, BLIND, DEAF, PARALYSIS, SENILITY, INSANITY

PUBIC LICE

- SMALL PARASITES USUALLY DURING SEX CONTACT, ATTACH TO PUBIC HAIR
- TX: WASH CLOTHING, FURNITURE, LINENS
- 2-3 WEEKS TO KILL LARVAL FORMS
- OR CAN GET LICE ON INFECTED SHEETS

VENEREAL WARTS

- ▢ VIRUS...HUMAN PAPILLOMA VIRUSES (HPV)...
- PENETRATION OF SKIN OR MUCOUS LINING OF GENITAL/ANAL LININGS (6-8 WEEKS AFTER CONTACT)
- ▢ MANY HAVE NO SYMPTOMS
- PROTRUDING OR FLAT WARTS
- ▢ MAY DISAPPEAR ON OWN OR GROW HUGE TO INTERFERING WITH NORMAL FUNCTIONS.
- IF NOT TREATED = DYSPLASIA (PRECANCEROUS CONDITION)

CANDIDIASIS

- YEASTLIKE FUNGUS INHABITS VAGINAL TRACT OF MOST WOMEN...
- BIRTH CONTROL PILLS, DIFFERENT ANTIBIOTICS, MAKING VAGINA LESS ACIDIC.
- SIGNS:
- VAGINAL ITCHING, WHITE CHEESY DISCHARGE, IRRITATION, BURNING..."VAGINITIS"...IN MOUTH "THRUSH"
- TX: ANTIFUNGAL DRUGS...
- SOME HAVE CHRONIC RECURRENT INFECTIONS
- AGGRAVATED WITH SOAPS, CHLORINATED WATER, SPERMICIDES, TIGHT FITTING JEANS, PANTY HOSE

HERPES

- SORES OR ERUPTIONS ON THE SKIN.
- "HERPES SIMPLEX" CAUSED BY VIRUS
- 1 = COLD SORES & FEVER BLISTERS
- 2 = GENITAL SORES & BLISTERS
- MOST HAVE HERPES VIRUS BY 5 YRS.

GENITAL HERPES

1. MUST GAIN ENTRANCE TO BODY
2. BURNING SENSATION AT SITE OF ENTRY
3. BLISTER APPEARS CONTAINING VIRUS (CAN AUTOINOCULATE)
4. BLISTER DISAPPEARS AND VIRUS TRAVELS TO BASE OF AN AFFECTED NERVE AND LIE DORMANT
5. STRESS, INADEQUATE DIET, IMMUNE SYSTEM OVERWORKED, EXCESSIVE EXPOSURE TO SUNLIGHT = BLISTERS!

GENITAL HERPES

- CESAREAN DELIVERIES
- CERVICAL CANCERS RISK
- NO CURE PRESENTLY EXISTS
- NOT TRANSFERABLE ALL THE TIME
- SOME DRUGS RELIEVE SYMPTOMS (BUT MOST EFFECTIVE WITHIN FEW HOURS AFTER CONTACT)

ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS)

- ▼ OVER 1 MILLION INFECTED IN US.
- ▼ "HUMAN IMMUNODEFICIENCY VIRUS" (HIV)
- ▼ MULTIPLE PARDONERS, UNPROTECTED SEX AND SHARING OF IV NEEDLES
- ▼ REPORTING HIV
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 - 18 DO NOT REQ. ANY REPORTING



TRANSMISSION OF HIV

- ▼ AIDS TRANSMITTED BY BODY FLUIDS
- ▼ BLOOD TRANSFUSION - SHARING NEEDLE
- ▼ BEST ENTRY IS MUCOUS MEMBRANES OF GENITAL ORGANS AND THE ANUS
- ▼ A BREAK IN THE MUCOUS MEMBRANES, VIRUS BEGINS TO GROW
- ▼ VIRUS INVADES BLOOD & SPINAL FLUID
 - KILLS HELPER T-LYMPHOCYTES
 - DECREASES IMMUNITY
- ▼ NUMBER OF EXPOSURES
- ▼ MOTHER TO CHILD - UTERUS OR BIRTH CANAL
- ▼ AIDS IS NOT HIGHLY CONTAGIOUS

AIDS SYMPTOMS

- ▼ MAY BE SYMPTOM-FREE FOR MONTHS OR YEARS
- ▼ IN ADULTS...8-10 YEARS BEFORE BEFORE IMMUNE SYSTEM DEGENERATES
- ▼ PRE-AID SIGNS: COLDS, SORE THROATS, FEVER, TIREDNESS, NAUSEA, NIGHT SWEATS

HIV TESTS

- ▼ ELISA...A TEST FOR PRESENCE OF ANTIBODIES
- ▼ WESTERN BLOT...(MORE EXPENSIVE) TO CONFIRM POSITIVE ELISA
- ▼ FALSE POSITIVES & FALSE NEGATIVES ARE POSSIBLE FOR BOTH TESTS!
- ▼ TX: DIFFERENT DRUGS ARE USED TO PROLONG LIFE...BUT NO CURE...EXCEPT ABSTINENCE...OR SAFE MONOGAMY...CONDOMS CAN FAIL TOO

NONINFECTIOUS CONDITIONS

- ▼ ALLERGY-INDUCED PROBLEMS
 - BODY ATTEMPTS TO DEFEND ITSELF SPECIFIC ANTIGEN/ALLERGENS BY PRODUCING ANTIBODIES
 - EXCESSIVE ANTIBODIES PRODUCED WHICH TRIGGER THE RELEASE OF HISTAMINES (CHEMICALS THAT DILATE BLOOD VESSELS, INCREASE MUCOUS SECRETIONS, TISSUES SWELL...
 - ALLERGIES MAY WORSEN WITH AGE

RESPIRATORY PROBLEMS

- ▼ HAY FEVER (SEASONAL USUALLY) RAGWEED AND FLOWERS BLOOMING
 - INHERITED. OVERZEALOUS IMMUNE SYSTEM
 - ANTIHISTAMINES OR INJECTIONS
- ▼ ASTHMA (SOMETIMES WITH HAY FEVER)
 - SHORT ATTACKS OF WHEEZING
 - IN, BREATHING DIFFICULTIES.
 - CAN CAUSE DEATH
 - SOME OUTGROW THE CONDITION.
 - VARIOUS TRIGGER ATTACK, OR EXERCISE
 - BETTER INHALERS AVAILABLE
- ▼ ALLERGIC RHINITIS-YEAR AROUND