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Infection Control and Prevention is an integral component of overall education and practice protocols for students, residents, faculty and staff at the Morehouse School of Medicine (MSM). The handbook is designed to concisely provide important infection control standards and compliance guidelines as they relate to healthcare workers and patient safety. In addition, this handbook complies with mandatory federal, state, and local regulatory laws as well as MSM policy and procedures. The Infection Control Handbook should be viewed as a supplement to the Bloodborne Pathogen Policy (coding 01050

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II. INFECTION CONTROL: GENERAL PRINCIPLES AND GUIDELINES

Preventing the spread of germs and infections (occupational exposures) in the

One might have open cuts, nicks or abrasions on the skin such as dermatitis or acne. Healthcare workers transfer germs to patients and colleagues. Microorganisms on the skin that might be harmless to one individual might cause serious infections in patients and others.

keeps one from transferring germs to other areas of the body and environment or patients. If infectious material gets on the hands, the sooner they are washed, the less chance one has of becoming infected or passing along germs to others.

criteria include:

1. Lather hands with soap and water.
2. Vigorously rub together all surfaces of lathered hands for 20 seconds.
3. Rinse hands thoroughly under a stream of water.
4. Dry hands completely with clean, dry paper towel.
5. Avoid splashing or touching sink.
6. Use dry paper towel to turn off faucet.

In general, one should wash hands:

After eating, smoking, coughing, sneezing or using toilet

Before and after performing invasive procedures or touching a patient's face or mouth

After contact with wounds, body secretions, mucous membranes, blood or other body fluids

Before caring for high-risk patients and between direct contacts with different patients

When one touches, blood, body fluids or secretions while providing care for a patient, wash hands before proceeding to another care activity on the same patient

Before eating, drinking, smoking, applying make-up or handling contact lenses

Some areas have special hand washing procedures and/or special hand washing agents.

1. Understand what causes infections and how they are spread
2. Use Infection Control standards of practice each day – Universal Precautions. Prevent and control infections!

OSHA recommended needleless systems in high-risk areas. However, immediate and proper disposal of sharps into puncture resistant containers is imperative when th

Exposures determined potentially infectious shall be reported to the Student Employee Health Services/Infection Control Office and Human Resources according to MSM policy and procedure.

All research laboratories employees are required to participate in annual Bloodborne Pathogen Safety training in accordance with federal regulations. Training is provided by the MSM Institutional Safety Office for the Research Enterprise.

IV. ISOLATION PROTOCOLS:

Isolation procedures are used to define steps to prevent the spread of Infectious Disease agents from an infected or colonized person to another. Isolation precautions are designed to:

- Control or eliminate the agent (germ)
- Control or eliminate the reservoir
- Interrupt transmission
- Protect large numbers of susceptible persons in specified areas

The Centers for Disease Control and Prevention (CDC) recommends that hospitals and other medical arenas use specific isolation precautions. Isolation manuals are available in all Morehouse School of Medicine (MSM) clinical and research areas. In addition, each MSM clinical affiliate site provides like guidelines and protocols. Isolation systems use color coded cards displayed near patient areas to alert personnel and visitors that special precautions are necessary.

Isolation precautions and/or protocols are the main focus relative to prevention of Infectious Diseases. Private rooms, surgical and/or N-95 masks, gowns, and gloves are indicated to interrupt transmission of disease. Furthermore, isolation precautions are recommended to prevent the transmission of infectious agents and diseases which are likely to be found in United States hospitals, laboratories and other academic-medical and clinical arenas. Education is KEY.

V. UNIVERSAL PRECAUTIONS, STANDARD PRECAUTIONS and the “EXPANDED” BLOODBORNE PATHOGEN STANDARD:

The _____ issued the _____ (_____ Statements/Guidelines in 1987 with modifications in _____ The Occupational Safety and Health Administration (OSHA) issued the first Bloodborne Pathogen Standard in December, 1991.

To endorse the application of blood and body fluid precautions for _____ patients including those with an isolation precaution status and medical diagnosis.

Purpose for applying

VI. PURPOSE AND INTENT OF THE OSHA BLOODBORNE PATHOGEN STANDARD IN DECEMBER, 1991:

regulations, the Bloodborne Pathogen Standard is intended to protect employees from potential workplace hazards. In this case, it is to reduce occupational exposure to Hepatitis B virus (HBV), Human Immunodeficiency Virus (HIV) and other Bloodborne Pathogens.

1. Hepatitis B Virus (HBV) attacks the liver.
 - Active hepatitis B: a flu-like illness that can last for months
 - A chronic carrier state: persons may have no symptom, but pass HBV to others
 - Cirrhosis, liver cancer, and death
 - Specific vaccines are available to prevent HBV infection.

2. Human Immunodeficiency Virus (HIV) causes AIDS. HIV attacks the immune system, making the body less able to fight off infections. In most cases, these infections eventually prove fatal. To date, there is no HIV vaccine. and can be spread when infected fluids enter the body through:

Hepatitis B virus (HBV) is a pathogenic microorganism that can cause potentially life-threatening disease in humans. HBV infection is transmitted through exposure to blood and other potentially infectious materials (OPIM), as defined in the OSHA Bloodborne Pathogens standard, 29CFR 1910.1030.

Any workers who have reasonably anticipated contact with blood or OPIM during performance of their jobs are considered to have occupational exposure and to be at risk of being infected. Workers infected with HBV face a risk for liver ailments which can be fatal, including cirrhosis of the liver and primary liver cancer. A small percentage of adults who gets hepatitis B never fully recover and remain chronically infected. In addition, infected individuals can spread the virus to others through contact with their blood and other body fluids.

An employer must develop an exposure control plan and implement use of universal precautions and control measures, such as engineering controls, work practice controls, and personal protective equipment to protect all workers with occupational exposure. In addition, employers must make hepatitis B vaccination available to these workers. Hepatitis B vaccination is recognized as an effective defense against HBV infection.

The standard requires employers to offer the vaccination series to all workers who have occupational exposure. Examples of workers who may have occupational exposure include, but are not limited to, healthcare workers, emergency responders, morticians, first-aid personnel, correctional officers, and laundry workers in hospitals and commercial laundries that service healthcare or public safety institutions. The vaccine and vaccination must be offered at no cost to the worker and at a reasonable time and place.

The hepatitis B vaccination is non-infectious, vaccine prepared from recombinant yeast cultures, rather than human blood or plasma. There is no risk of contamination from other Bloodborne pathogens nor is there any chance of developing HBV from the vaccine.

The vaccine must be administered according to the recommendation of the U.S. Public Health Service (USPHS) current at the time the procedure takes place. To ensure immunity, it is important for individuals to complete the entire course of vaccination contained in the USPHS recommendation.

The great majority of those vaccinated will develop immunity to the hepatitis B virus. The vaccine causes no harm to those who already immune or to those who may be HBV carriers. Although workers may desire to have their blood tested for antibodies to see if vaccination is needed, employers cannot make such screening a condition of receiving vaccination and employers are not required to provide prescreening.

Employers must ensure that all occupationally exposed workers are trained about the vaccine and vaccination, including efficacy, safety, method of administration, and the benefits of vaccination. They also must be informed that the vaccine and vaccination must be offered at no cost to the worker. The vaccination must be offered after the worker is trained and within 10 days of initial assignment to a job where there is occupational exposure, unless the worker has previously received the vaccine series, antibody testing has revealed that the worker is immune. Or the vaccine is contraindicated for medical reasons. The employer must obtain a written opinion

The level of protection must fit the potential exposure. For example, gloves would be sufficient for a laboratory technician while drawing blood, whereas a pathologist conducting an autopsy would need considerably more protective clothing.

IX. OSHA, Mycobacterium Tuberculosis (TB) Facts for Health Care Workers

Worldwide, tuberculosis (TB) is by far the second leading cause of death due to infectious disease. It is estimated that 1.7 billion people, or 1/3 of the global population, are infected with mycobacterium tuberculosis (MTB). MTB is the causative organism of tuberculosis in infection and disease, and this disease causes more than any other infectious diseases according to other experts. Georgia is known to have one of the highest prevalence rates in the United States of America.

TB is a serious disease that is spread from person to person through the air by a germ called MYCOBACTERIUM TUBERCULOSIS. Tuberculosis (TB) usually affects the lungs, but it can affect other parts of the body. The germs are transmitted into the air by persons with TB coughing, sneezing, laughing and singing. TB is easily transmitted in close air space; therefore, it is not uncommon to find several people within the same household with TB. TB transmission can be controlled in healthcare settings.

Are healthcare workers at risk for

There is a significant difference between TB INFECTION and TB DISEASE. Those with TB DISEASE are sick from germs that are active in the body. They usually have one or more symptom of TB. These people are often capable of giving the infection to others. Medications which can treat TB are prescribed for these persons.

Those with TB infection (WITHOUT DISEASE) carry the TB germ. Infection is shown via PPD skin testing positivity. Most people do not look or feel sick and they cannot spread the germ to others. However, development of TB Disease known as Latent TB can occur in the future, especially among high risk populations such as:

- Low income
- Homeless
- Non-US-Borne
- Nursing home residents
- Prisoners
- Alcoholics and intravenous drug users
- People with medical conditions such as diabetes, certain types of cancer and being underweight
- Especially people with HIV INFECTION (the virus that causes AIDS)

X. EXPOSURES RELATED TO INFECTION CONTROL

Contact with potentially infectious agents.

Contact with contaminated milk, water, certain turtles, eggs, ice cream, and meringue pies

1. Bloodborne exposure

Wash the area first.

Report incident per healthcare arena protocol to immediate supervisor

Complete and sign the Employee Occurrence Report.

Report to Emergency Department or Occupational Health.

Immediate blood testing for HIV and Hepatitis B & C should follow (baseline). Signed consent for HIV is required.

Six week and 6 months post exposure testing, sometimes one year.

On site Anti viral drug therapy for 3-5 days if desired, then up to 30 days.

Note: See Infection Control Manual of respective clinical practice site for more details.

2. Pulmonary TB: When TB exposure has occurred, follow facilities protocol per Infection Control Manual.

3. Neisseria meningitis (meningococcal): Rifampin or Cipro per CDC protocol.

XI. ADULT IMMUNIZATION INFORMATION

Adults, specifically those who work in the healthcare arena (medical students, residents, faculty and staff) need protection against certain infectious diseases which are vaccine preventable. The immunized employee promotes a safer environment for co-workers as well as patients. Below is a list of adult immunizations recommended by the Advisory Committee on Immunization Practice (ACIP) and the Student and Employee Wellness Center at MSM. Also consult with your Personal Health Care Provider for specific immunization needs.

MMR : For those persons born after 1957, a second MMR is needed. A blood test is available to determine a person's immunity to these viruses. Also females should verify non-pregnancy before getting MMR.

10 years. The Tdap component needs to be updated every

: Each year, the drug manufacturer specifically makes the vaccine for the "flu" bug(s) expected to be the most common for that flu season. The vaccine is available annually through

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