

ASHLEY COUNTY MEDICAL CENTER EMPLOYEE HEALTH PROGRAM

The operational standards of the Employee Health Program have been reviewed and revised as indicated and approved.

Date _____

Chairman, Infection Control

Administration

Chief of Staff

Chairman, Board

Employee Health

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SECTION I

ADMINISTRATION OF EMPLOYEE HEALTH PROGRAM

OBJECTIVES

1. To hire employees who are physically able to work in the positions for which they are hired; employees who are free of infection.
2. To stress maintenance of sound habits in personal hygiene and individual responsibility infection control.
3. To provide care to personnel for work-related illness or exposures.
4. To identify infection risks related to employment and institute appropriate preventive measures.
5. To reduce incidences of illness among personnel and thereby reduce personnel absence and attrition.

ACTIVITIES

1. Pre-employment drug screen and TB testing.
2. Education about infection control and body mechanics.
3. Influenza immunization offered in accordance with current state health recommendations.
4. Management of job-related exposures to infectious diseases.
5. Guidelines for work restrictions because of infectious diseases.
6. Maintenance of health records by the Employee Health Nurse.
7. Encourage annual influenza immunization of personnel.
8. Provision of antiviral-specific immunization as needed.

ADMINISTRATION OF EMPLOYEE HEALTH PROGRAM

The employee health program is a mandatory condition of employment. All employees must complete their required drug screen, TB test or chest x-ray, and provide proof for two (2) MMR vaccinations or receive a MMR vaccination prior to employment and health screening annually thereafter.

Notices are sent to each employee, informing them of time and place for their annual tests or of prophylaxis exposure. If the employee fails to report, the supervisor should be notified so that the employee can be counseled and advised that continued employment depends upon compliance.

Hospital policy requires that annual health screenings are made available to employees during their shifts of work. Employees should be instructed to report to the Emergency Department or Employee Health Office for the following:

1. Examination and treatment of accidental injuries.
2. Evaluation of exposures and therapy for personnel involved in accidental exposures or outbreaks of disease among personnel.

The Emergency Department personnel must be knowledgeable about employee health policies and procedures.

Communication between the Emergency Department or Employee Relations Department and the Infection Control Practitioner must be very close. Copies of records of employees who visit the Emergency Room should be sent to Personnel (for injury) or to Infection Control (for exposure).

The Infection Control Practitioner should regularly visit the Emergency Department and Employee Relations to monitor infections among personnel.

The Emergency Department functions as the employee clinic only for employment-related incidents. Records are maintained in the Personnel or Employee Health files.

SECTION II

PERSONNEL RESTRICTIONS BECAUSE OF COMMUNICABILITY

Personnel with the following condition must not be permitted to administer patient care.

1. Acute diarrhea accompanied by fever, abdominal cramps, or bloody stools, or diarrhea that lasts longer than 24 hours. Employee may not return to patient care until the etiology is known or diarrhea stops.
2. Open draining wounds or lesions of any kind.
3. Herpes Simplex (fever blisters or cold sores) will be restricted from immunosuppressed patients, pregnant patients, burn patients, and infants only.
4. Active exanthems (chicken pox, measles, rubella).
5. Respiratory tract infections- employee will not be assigned to direct patient care of neonates, young infants, patients with chronic obstructive lung disease or immunocompromised patients.
6. Pregnancy - will not be assigned to care for patients with hepatitis, rubella, or cytomegalovirus infections.
7. Refer to attached table for additional restrictions.

Employees must report any type of infection to their Supervisor. The Supervisor is responsible for sending the employee home or making appropriate assignments.

Any employee who is absent with any infectious process for three or more days may be asked for a release from his physician or the Emergency Room Physician(no charge to employee). The Supervisor should forward this information on to the Employee Health Nurse.

Table 3. Summary of Suggested Work Restrictions for Health Care Personnel Exposed to or Infected with Infectious Diseases of Importance in Health Care Settings, in the Absence of State and Local Regulations (adapted from APIC recommendations, reference 7)

Disease/problem	Work restriction	Duration	Category
Conjunctivitis	Restrict from patient contact	Until discharge ceases	II
Cytomegalovirus infections	No restriction		II
Diarrheal diseases Acute stage (diarrhea with other symptoms)	Restrict from patient contact or food-handling	Until symptoms resolve	IB
Convalescent stage <i>Salmonella</i> spp.	Restrict from care of high-risk patients	Until symptoms resolve. Consult with local and state health authorities regarding the need for negative stool cultures.	IB
Diphtheria	Exclude from duty	Until antimicrobial therapy completed and 2 cultures obtained \geq 24 hours apart are negative.	IB
Enteroviral infections	Restrict from care of infants, newborns, and immunocompromised patients	Until symptoms resolve	II
Hepatitis A	Restrict from patient contact and food-handling	Until 7 days after onset of jaundice	IB
Hepatitis B Personnel with acute or chronic hepatitis B surface antigenemia who do not perform exposure-prone procedures	No restriction; Standard Precautions should always be observed		II
Personnel with acute or chronic hepatitis B "e" antigenemia who perform exposure-prone procedures	Do not perform exposure-prone invasive procedures until counsel from an expert review panel has been sought. The panel should review and recommend the procedures the worker can perform, taking into account the specific procedure as well as the skill and technique of the worker. [†]	Until HBeAg is negative	II

[†] Unless epidemiologically linked to transmission of infection

[‡] See Section D.1.a.

Table 3. Summary of Suggested Work Restrictions for Health Care Personnel Exposed to or Infected with Infectious Diseases of Importance in Health Care Settings, in the Absence of State and Local Regulations (adapted from ACIP recommendations, reference 7) (con't)

Disease/problem	Work restriction	Duration	Category
Hepatitis C	No recommendation		Unresolved issue
Herpes simplex Genital	No restriction		II
Hands (herpetic whitlow)	Restrict from patient contact.	Until lesions heal	IA
Orofacial	Restrict from care of high-risk patients.	Until lesions heal	II
Human immunodeficiency virus	Do not perform exposure-prone invasive procedures until counsel from an expert review panel has been sought. The panel should review and recommend the procedures the worker can perform, taking into account the specific procedure as well as the skill and technique of the worker. Standard Precautions should always be observed. [†]		II
Measles Active	Exclude from duty	Until 4 days after the rash appears	IA
Postexposure (Susceptible personnel)	Exclude from duty	From the 5th day after the first exposure through the 21st day after the last exposure and/or 4 days after the rash appears	IB
Mumps Active	Exclude from duty	Until 9 days after onset of parotitis	IB
Postexposure (Susceptible personnel)	Exclude from duty	From the 12th day after the first exposure through the 26th day after the last exposure or until 9 days after onset of parotitis	II

[†] See section D.1.a.

Table 3. Summary of Suggested Work Restrictions for Health Care Personnel Exposed to or Infected with Infectious Diseases of Importance in Health Care Settings, in the Absence of State and Local Regulations (adapted from ACIP recommendations, reference 7) (cont')

Disease/problem	Work restriction	Duration	Category
Pertussis Active Postexposure (Asymptomatic personnel) (Symptomatic personnel)	Exclude from duty	From the beginning of the catarrhal stage through the third week after onset of paroxysms or until 5 days after start of effective antimicrobial therapy	IB
	No restriction, prophylaxis recommended Exclude from duty	Until 5 days after start of effective antimicrobial therapy	II IB
Rubella Active Postexposure (Susceptible personnel)	Exclude from duty	Until 5 days after the rash appears	IA
	Exclude from duty	From the 7th day after the first exposure through the 21st day after the last exposure	IB
Scabies or pediculosis infestation	Restrict from patient contact	Until treated	IB
<i>Staphylococcus aureus</i> Active, draining skin lesions Carrier state	Restrict from contact with patients and patient materials or food-handling	Until lesions have resolved	IB
	No restriction, unless personnel are shown epidemiologically to be disseminating the organism.		IB
Streptococcal infection, Group A	Restrict from patient care or food handling	Until 24 hours after adequate treatment started	IB
Tuberculosis	Exclude from duty	Until proven non-infectious	IA

Table 3. Summary of Suggested Work Restrictions for Health Care Personnel Exposed to or Infected with Infectious Diseases of Importance in Health Care Settings, in the Absence of State and Local Regulations (adapted from ACIP recommendations, reference 7) (con't)

Disease/problem	Work restriction	Duration	Category
Varicella Active	Exclude from duty	Until all lesions dry and crust	IA
	Exclude from duty	From the 10th day after the first exposure through the 21st day (28th day if VZIG was given) after the last exposure	IA
Zoster Localized, in normal person	Cover lesions; restrict from care of high-risk patients*	Until all lesions dry and crust	II
	Restrict from patient contact	Until all lesions dry and crust	IB
Generalized; or localized in immunosuppressed person	Restrict from patient contact	From the 10th day after the first exposure through the 21st day (28th day if VZIG was given) after the last exposure or, if varicella occurs, until all lesions dry and crust.	IA
	Restrict from patient contact	From the 10th day after the first exposure through the 21st day (28th day if VZIG was given) after the last exposure or, if varicella occurs, until all lesions dry and crust.	IA
Viral respiratory infections, acute febrile	Consider excluding from the care of high risk patients† during community outbreak of RSV and influenza	Until acute symptoms resolve	IB

* Those susceptible to varicella and who are at increased risk of complications of varicella, such as neonates and immunocompromised persons of any age.

† High-risk patients as defined by the ACIP for complications of influenza

SECTION III

ADMINISTRATIVE RESPONSIBILITIES

CDC RECOMMENDATIONS FOR THE REQUIRED ELEMENTS OF A UNIVERSAL PRECAUTION EDUCATION AND TRAINING PROGRAM

EDUCATION

All new employee, staff, and volunteers will receive orientation regarding personal hygiene, employee health, and infection control relative to their departments, including Handwashing and alcohol hand sanitizer, in the E-Learning orientation sessions.

The hospital believes that education is vital to the success of an infection control program. While Nursing Service accepts the primary responsibility for infection control, all other hospital employees, the members of the medical staff, family members, and visitors contribute to the success or lack of success of the program. "All personnel" must be "competent to participate in infection control monitoring, prevention, and control activities and are provided with any necessary orientation, on the job, and in-service training and continuing education" (I.4.1.1. - AH, 1990).

The following policies and procedures for the control of infection have been developed to help prevent nosocomial infections when possible, and to control their spread when they do occur.

The cooperation of the medical staff and hospital personnel is essential in order to provide better and safer hospital facilities for the hospital patients and personnel.

NOSOCOMIAL INFECTIONS

A nosocomial infection is one that develops during hospitalization and is not present or incubating at the time of admission to the hospital. Occasionally, in neonatal nosocomial infections, in maternal mastitis, and in postoperative surgical wound infections, the nosocomial infection may not be clinically symptomatic until after the discharge of the patient from the hospital.

PREVENTION OF NOSOCOMIAL INFECTION

Handwashing is considered the most important procedure in preventing nosocomial infections because many types of these infections may be caused by organisms transmitted on the hands of personnel. Personnel should wash their hands or use alcohol based hand gel before and after contact with every patient.

The risk of personnel acquiring transient hand carriage of organisms is greater after contact with excretions, secretions, or blood. The patients at greater risk are those undergoing surgery, those with catheters, those in CCU and ICU, and newborn infants.

Although Handwashing with an antiseptic agent between patient contact is desirable, handwashing with soap and water and mechanical friction are sufficient to remove most transiently acquired organisms. An antiseptic agent should be used prior to performing invasive procedures.

IN-SERVICE EDUCATION FOR INFECTION CONTROL AND PERSONAL HYGIENE

All hospitals should include in orientation programs, the importance of infection control, personal hygiene, and their responsibility in the infection control program. In-service education for all departments, services, volunteers, students, and allied health staff relative to infection prevention and control should be carried out and documented.

Changes in personnel practices and institutional policies may be accomplished through written regulations and memorandums, but these must be supplemented by an outreaching educational program which will convince personnel that the recommendations are important and are based on supporting evidence.

Effective infection control measures are practiced by hospital personnel only if they are convinced by their value and not because they have been legislated by a committee. This requires repeated contact with small numbers of personnel by a highly skilled and informed representative of the Infection Control Committee. Such a person must have the ability to establish good rapport with all types of hospital workers.

The Infection Control Practitioner should be the representative or be a consultant to this program. Continuing in-service training is essential because of turnover, for renewing interest and refreshing memories, and for transmitting new information.

PURPOSE:

The purpose of the employee education program as it pertains to infection control is to provide the information, skills, practice opportunity, and the motivation to ensure or promote a hospital-wide team to prevent and control the transmission of infection.

OBJECTIVES:

1. To give people information.
2. To teach people new skills.
3. To change current practice.
4. To generate ideas.
5. To motivate participation.

RESPONSIBILITY:

The Director of In-Service Education has primary responsibility for the overall employee education program and for the coordination and scheduling of the orientation to the infection control program for new employees.

The Infection Control Practitioner is responsible for instruction concerning aspects of the in-service program related to infection control, e.g., orientation to the infection control program, the Infection Control Manual, infection control concepts and techniques, correct use and cleaning of isolation equipment, and providing information about the employee health program.

All professional health care providers have responsibility for "on-the-spot" teaching, assisting, and being role models. Little is gained from classroom instructions when practice is not consistent with instruction.*

TEACHING OPPORTUNITIES:

Orientation to infection control programs is scheduled by the Infection Control Nurse during the initial orientation period. Because consideration must be given to the wide range of employees who participate in the program, grouping by job category is essential for all instruction except the general orientation presentation. The objectives remain the same for all groups. In general, the following outline applies:

1. General orientation to infection control for all employees.
2. Infection control principles specific to work areas for all employees in separate sessions at least annually.
3. Nursing infection control principles and procedures:
 - a. Sessions specific to job category.
 - b. Usually held on the unit.
 - c. Cover one aspect each session.
 - d. Continuous scheduling to reach all employees and all shifts.
4. Department-specific Infection Control Manuals are located in all patient care areas. Employee health policies are made available to all personnel.

METHOD:

The general orientation program may be a combination of videos and online training programs.

Programs are demonstrations, explanations, discussion, question and answer. Group participation is sought. When appropriate to the subject, a short test is given before and after the session to evaluate the effectiveness of the program.

TEACHING TOOLS:

Films, handouts, slides, employee health policy, and equipment displays.

EVALUATION:

- a. Content Effectiveness

Written tests are of limited value. Observation of technique as practiced by employees during work situations gives a much clearer picture of the employees needs for further assistance. On the R.N. level, competence and understanding of concepts of infection control are usually made apparent by the way situations are handled in the absence of specific instructions or assistance. Keeping in close touch with the professional staff provides the best feedback on teaching effectiveness and needs.

- b. Annual Review

The Infection Control Orientation Program is evaluated at least annually to determine that content is reflective of new concepts, regulatory changes, and incorporates the findings from routine monitoring of the quality and effectiveness of patient care.

INFECTION CONTROL EDUCATION PROGRAM

Department: _____

Location: _____

Date: _____ Time: _____

Leader: _____

Length of Program: _____

Subject: _____

Objectives: _____

1. _____

2. _____

3. _____

Materials/Equipment/Film/Handouts/Lecture Outline:

Evaluation: _____

Attending: (Please sign name, title, department)

SECTION IV
PRE-EMPLOYMENT HEALTH DATA BASE

PRE-EMPLOYMENT HEALTH DATA BASE

All employees are required to complete a health data base at the time of employment and before starting work. The data base includes the following:

1. TB skin test, PPD (unless employee gives history of recent testing or being a positive skin reactor). Proof of recent testing required. If a new employee does not have a documented Negative TB test within the last twelve months, a 2- step method of TB testing will be followed. The second test will be performed 1 to 2 weeks later.
2. Chest X-ray if skin test is positive or copy of recent X-ray.
3. Drug Screen
4. Proof of two (2) MMR Vaccinations. If unable to provide proof, 1 MMR vaccination is required unless contraindicated and documented by a physician.

The assessment should emphasize recognition of acute and chronic infections and conditions that predispose to infection. Communicable disease history should be taken.

YEARLY MEDICAL SCREENING

Each year near the anniversary of employment, the tuberculin skin test will be repeated. If a person is a positive reactor a questionnaire is answered. If symptoms exist, a chest x-ray will be done. Yearly chest x-ray is not routinely required.

Screening should be according to health department requirements and other professional standards.

SECTION V

HANDWASHING HEALTH SCREENS FOR EMPLOYEES

HANDWASHING PRACTICES FOR THE PREVENTION OF NOSOCOMIAL INFECTIONS

Many outbreaks have occurred because common nosocomial pathogens were spread by hand carriage of hospital personnel. Handwashing is generally recognized as the single most important procedure in preventing nosocomial infections, and the proper implementation of a handwashing policy is a major challenge to infection control personnel.

HANDWASHING RECOMMENDATIONS

1. Handwashing Indications

- a. In the absence of a true emergency, personnel should always wash their hands:
 1. Before performing invasive procedures.
 2. Before taking care of particularly susceptible patients, such as those who are severely immunocompromised and newborns.
 3. Before and after touching wounds, whether surgical, traumatic, or associated with an invasive device.
 4. After situations during which microbial contamination of hands is likely to occur, especially those involving contact with mucous membranes, blood or body fluids, secretions, or excretions.
 5. After touching inanimate sources that are likely to be contaminated with virulent or epidemiologically important microorganisms; these sources include urine-measuring devices or secretion-collection apparatuses.
 6. After taking care of an infected patient or one who is likely to be colonized with microorganisms of special clinical or epidemiologic significance, for example, multiply-resistant bacteria.
 7. Between contacts with different patients in high-risk units.
- b. Most routine, brief patient-care activities involving direct contact other than that discussed in 1.a. above, e.g., taking a blood pressure, do not require handwashing.
- c. Most routine hospital activities involving indirect patient contact, e.g., handing a patient medications, food, or other objects, do not require handwashing.
- d. Alcohol gel dispensers are located conveniently throughout the hospital for better adherence to hand hygiene. (Refer to attached CDC Fact Sheet On Hand Hygiene)

2. Handwashing Technique

For routine handwashing, a vigorous rubbing together of all surfaces of lathered hands for at least 10 seconds, followed by thorough rinsing under a stream of water, is recommended.

3. Handwashing with Plain Soap
 - a. Plain soap should be used for handwashing unless otherwise indicated.
 - b. If bar soap is used, it should be kept on racks that allow drainage of water.
 - c. If liquid soap is used, the dispenser should be replaced or cleaned and filled with fresh product when empty; liquids should not be added to a partially full dispenser.
4. Handwashing with Antimicrobial-Containing Products (Health-Care Personnel Handwashes)
 - a. Antimicrobial handwashing products should be used for handwashing before personnel care for newborns and when otherwise indicated during their care, between patients in high-risk units, and before personnel take care of severely immunocompromised patients.
 - b. Antimicrobial-containing products that do not require water for use, such as foams or rinses, can be used in areas where no sinks are available.
5. Handwashing Facilities
 - a. Handwashing facilities should be conveniently located throughout the hospital.
 - b. A sink should be located in or just outside every patient room. More than one sink per room may be necessary if a large room is used for several patients.
 - c. Handwashing facilities should be located in or adjacent to rooms where diagnostic or invasive procedures that require handwashing are performed (e.g., cardiac catheterization, bronchoscopy, sigmoidoscopy, etc.).

SECTION VI

REPORTING AND MANAGEMENT OF PARENTERAL
OR MUCOUS MEMBRANE EXPOSURE

POLICY:

1. Any employee sustaining a needle stick or significant exposure to blood and body fluids should report immediately to your department head or supervisor then to the Emergency Room.
2. The puncture site is cleansed thoroughly with soap and water. Splash to eyes are flushed with 1000 cc of normal saline using a morgan lens.
3. See attached guideline for management and exposure.

ACMC policy is that HIV retesting will be done at 6 weeks, 3 months, 6 months, and 12 months on all contaminated needle exposures. Follow-up will continue for one year even if the employee terminates employment. Cost is the responsibility of hospital but employee is responsible for getting blood test done.
4. A variance report is initiated and submitted to Risk Management. Workman's Compensation forms are filled out and turned into Human Resources.
5. A Hepatitis Profile IV, HIV, and RPR are requested on both patient and employee.
6. If any of the patient's Hepatitis Profile is positive for Hepatitis B and the employee's Hepatitis Profile is negative for Hepatitis B, administer:

HBIG .06 ml/kg immediately and start Hepatitis B Vaccination series within 7 days.
8. If the entire patient's Hepatitis Profile is negative for Hepatitis B, no other treatment is necessary, except to vaccinate the employee if they had not had the series.
9. If the patient's RPR is positive and the employee's RPR is negative, request an FTA on the patient. If the FTA is positive, give Rocephin 250 mg IM (if not allergic) or have the ER Physician individualize treatment.
10. A signed statement by the employee is obtained for consent/refusal of prophylactic therapy or testing.
11. The patient is not requested to give consent for testing so this needs to be ordered on patient's chart as "Needle Stick Protocol" and the patient is not charged for these tests.

When the Lab work returns, the employee will be notified so appropriate counseling, treatment and follow-up by Employee Health Nurse may be carried out.

MANAGEMENT OF EXPOSURES

If a healthcare worker has a parenteral (e.g., needlestick or cut) or mucous membrane (e.g., splash to the eye or mouth) exposure to blood or other body fluids or has a cutaneous exposure involving large amounts of blood or prolonged contact with blood - especially when the exposed skin is chapped, abraded, or afflicted with dermatitis - the source patient should be tested for serologic evidence of HIV and Hepatitis B.

If the source of patient has AIDS, is positive for HIV antibody, the healthcare worker should be counseled regarding the risk of infection and evaluated clinically and serologically for evidence of HIV infection as soon as possible after the exposure. The healthcare worker should be advised to report and seek medical evaluation for any acute febrile illness that occurs within twelve (12) weeks after the exposure. Such an illness - particularly one characterized by fever, rash, or lymphadenopathy - may be indicative of recent HIV infection. Seronegative healthcare workers should be retested six (6) weeks post-exposure and on a periodic basis thereafter (e.g., twelve (12) weeks and six (6) months and one (1) year after exposure) to determine whether transmission has occurred. During this follow-up period - especially the first 6-12 weeks after exposure, when most infected persons are expected to seroconvert - exposed healthcare workers should follow U.S. Public Health Service (PHS) recommendations for preventing transmission of HIV (36, 37).

No further follow-up of a healthcare worker exposed to infection as described above is necessary if the source patient is seronegative unless the source patient is at high risk of HIV infection. In the latter case, a subsequent specimen (e.g., 12 weeks following testing.) is tested. If the source patient cannot be identified, decisions regarding appropriate follow-up should be individualized. Serologic testing should be available to all healthcare workers who are concerned that they may have been infected with HIV.

If a patient has a parenteral or mucous membrane exposure to blood or other body fluid of a healthcare worker, the patient should be informed of the incident and the same procedure outlined above for management of exposures should be followed for both the source healthcare worker and the exposed patient.

NEEDLE STICK AND/OR EXPOSURE CHECKLIST

Employee Name: _____

Date: _____

- _____ Site cleaned and/or flushed
- _____ Variance Report
- _____ Workman's Comp forms filled out
- _____ HIV, RPR drawn on employee (Hepatitis Profile IV)
- _____ HIV, RPR drawn on patient (Hepatitis Profile IV)
- _____ Refusal for Treatment by employee
- _____ Refusal of HIV testing by employee
- _____ Refusal/consent for Hepatitis vaccine, if indicated
- _____ Employee informed of results and counseled accordingly

Please return this form to Infection Control Nurse.

POST-EXPOSURE AND FOLLOW-UP CHECKLIST

The following steps must be taken, and information transmitted, in the case of an employee's exposure to Bloodborne Pathogens:

ACTIVITY	COMPLETION DATE
1. Employee furnished with documentation regarding exposure incident.	_____
2. Source individual identified. (Medical record number)	_____
3. Source individual's blood test and results given to exposed employee. Consent has not been obtained.	_____
4. Exposed employee's blood collected and tested.	_____
5. Appointment arranged for employee with healthcare professional.	_____

Documentation forwarded to Healthcare Professional.

- _____ Bloodborne Pathogens Standard.
- _____ Description of exposed employee's duties.
- _____ Description of exposure incident, including route of exposure.
- _____ Result of source individual's blood testing.
- _____ Employee's medical records.

EXPOSURE INCIDENT INVESTIGATION FORM

Date of Incident: _____

Time of Incident: _____

Location: _____

Potentially Infectious Materials Involved:

Type: _____

Source: _____

Circumstances (work being performed, etc.):

How incident was caused (accident, equipment malfunction, etc.):

Personal protective equipment being used:

Action Taken (decontamination, clean-up, reporting, etc.):

Recommendation for avoiding repetition:

Addendum to Management of Parenteral or Mucous Membrane Exposure
RE:Hepatitis C

If the patients Hepatitis Profile is positive for Hepatitis C:

1. Confirmation of test should be done with recombinant immunoblot assay (RIBA).
2. No post exposure prophylaxis is recommended.
3. Follow-up testing of the employee will be done at six (6) weeks for Hepatitis C PCR. Hepatitis C AB will be done at 6 months.
4. Counseling recommendations to prevent transmission of HCV to others are:
 - a. Persons who are anti-HCV positive should refrain from donating blood, organs tissues or semen.
 - b. Household contacts should not share toothbrushes or razors.
 - c. There are no recommendations against pregnancy or breastfeeding nor recommendations for changes in sexual practices among HCV-infected persons with a steady partner.
 - d. Infected persons should be informed of the potential risk for sexual transmission to assist in decision-making about precautions.
 - e. Persons with multiple sex partners should adopt safer sex practices, including reducing the number of sex partners and using barriers(e.g. latex condoms) to prevent contact with body fluids.

If the source is unknown, the employee should be tested in six (6) months for anti-HCV.

SECTION VII
HEPATITIS B IMMUNIZATION

VIRAL HEPATITIS:

"Exposure" is contact with a person's blood, secretions, or excreta (direct mucous contact from splash), accidental skin puncture with a contaminated instrument or needle.

Prevention: Applying blood precautions, proper handwashing, minimal contact with blood or blood-contaminated excretions, and handling the blood of all patients as potentially infective material.

1. Hepatitis Type A:

- a. Nosocomial hepatitis A occurs infrequently and is associated with two unusual circumstances:
 1. The source of the infection is a patient hospitalized for other reasons whose hepatitis is not apparent.
 2. The patient is fecally incontinent.
- b. Confirm the diagnosis.
- c. Compile list of employees with close contact.
- d. Administer immune serum globulin as soon after exposure as possible.

2. Hepatitis Type B:

- a. Modes of transmission:
 1. Overt parenteral transmission, i.e., needlestick.
 2. Inapparent parenteral transmission such as:
 - a. Percutaneous inoculation.
 - b. Contamination of mucosal surfaces with infective serum or plasma.
 - c. Contamination of mucosal surfaces with infective secretions other than serum or plasma.
- b. Increased risk groups: (C.D.C. definition: One or more exposures to blood per month equals significant exposure.)
- c. Confirm the diagnosis of the source case. If the source is not known, the employee is tested.
- d. Examples of protocols are attached.

Personnel found to be infected with HBsAg need not necessarily be removed from work. However, personnel found to HBsAg positive should be reported to the employee health service and counseled in techniques to prevent exposure to others, which may include reassignment.

HEPATITIS B VACCINE OPTION FOR AT RISK STAFF

All employees should receive educational information about Hepatitis B and vaccine availability. After receiving educational information about Hepatitis B and about the vaccine:

1. All current employees will be asked to sign a statement of intent form to receive or not receive the vaccine.
2. Prospective employees will be asked at the time of employment if they wish to receive or not receive the vaccine.

The vaccine will be offered at no cost and is encouraged.

It is the responsibility of the employee to ensure that the vaccine is administered. The vaccine is administered by authorized personnel.

Hepatitis B AB titer will be drawn on employees 2-3 months after completing series. If the AB level is less than immunized state, the series of three vaccines will be repeated.

New employees to APMC who have been vaccinated but never had their antibody level checked will be tested at the start of employment.

Any employee receiving dialysis will have AB testing repeated at 10 year intervals.

POLICY:

- A. All employees subject to exposure of bloodborne pathogens will be offered Hepatitis B Vaccination at no cost.
 - 1. Risk categories will be based on recommendations from OSHA, CDC and US Department of Labor and US Department of Health and Human Services in relationship to their exposure to blood or blood products - the specific job classification is listed in the Exposure Control Plan.
- B. Employees designated to be at risk of exposure who do not wish to receive the vaccine, will be asked to sign a waiver on the consent form acknowledging the vaccine availability to them and their refusal to receive it.
- C. It will be the responsibility of the employee along with the Infection Control/Employee Health Nurse to complete the scheduled 3 doses. Employees who do not return for their subsequent doses within the required time but still wish to continue the vaccination will be required to purchase any dose in excess of the initial 3 necessary to complete the series. Employees who terminate before finishing the series, may purchase the remaining doses from pharmacy at cost.
- D. A consent form will be signed by the employee before receiving the vaccine.
- E. Records of the vaccination will be kept in the Employee Health File.
- F. Vaccinations will be administered by the Infection Control/Employee Health Nurse.
- G. Employee Health Nurse will counsel employee on risks, benefits and outcome of Hepatitis vaccine.

PROCEDURE:

- A. Employees determined to be at risk will receive 3 IM injections given in the deltoid muscle. The first injection is given and then followed by reinforcing doses at one month and 6 months.
- B. If the series is interrupted after the 1st dose, the 2nd dose should be administered as soon as possible, the 2nd and 3rd doses should be separated by at least 2 months.
- C. A Hepatitis B AB titer will be drawn 2-3 months after completing the series. If the AB level is not at immune status the series of 3 vaccinations may be repeated one time following the initial schedule.
- D. The Infection Control/Employee Health Nurse will be responsible for record keeping and notifying employees of subsequent vaccination, titer due, and results of testing.

HEPATITIS A VACCINE-MAY 1995

1. Hepatitis A Vaccine is now available for use in protection from Hepatitis A.
2. Havrix will be made available to all employees with documented exposure to Hepatitis A.
3. An initial injection given IM will be administered and then repeated in 6 months.
4. The Employee Health Nurse will be responsible for notifying employees of the need for Hepatitis A Vaccine and the time for the second dose.
5. Records will be kept in the Employee Health File.

SECTION VIII

MANAGEMENT OF OTHER COMMUNICABLE DISEASES

VARICELLA ZOSTER

If the employee is exposed to an individual with active varicella or disseminate herpes zoster, a varicella titer should be drawn unless there is a history of varicella. Varicella zoster immune globulin may be given depending on the length of time since employee's exposure.

MUMPS

If an unprotected exposure to mumps occurs, the susceptible individual should be offered measles-mumps-rubella vaccine.

PEDICULOSIS

Spread by intimate, direct contact with an infection person. Immediate treatment destroys both the eggs and active forms of the mites, and may be repeated in seven days.

MENINGOCOCCAL DISEASE

Patients suspected of having meningococcal disease should be placed in respiratory isolation immediately.

An individual who had intimate respiratory contact with the disease, e.g., mouth-to-mouth resuscitation, intubation, or deep endotracheal suctioning of a patient, may be a candidate for prophylaxis. (There is no completely satisfactory prophylactic antibiotic regimen.) The current recommendation for meningococcal prophylaxis in adults is Rocephin 250 mg IM x1 or Cipro 500mg po in one single dose.

Exposed personnel should report for medical evaluation at the earliest sign of fever or illness during the next five days. Casual contacts should not receive prophylaxis, which may only encourage emergence of resistive strains.

TUBERCULOSIS EXPOSURE

(Inadvertent exposure of personnel to a patient with active tuberculosis.) Upon discovery of a confirmed case of active tuberculosis, a list of all personnel and roommates who were inadvertently exposed should be developed. The following action should be taken:

1. Tuberculin skin test performed on all previously negative reactors at three months and six months after exposure. Previously positive reactors should be x-rayed 6-12 weeks following exposure and again in six months.
2. New converts should be referred to the family physician for treatment with INH (the medication usually supplied by the Public Health Department.)

TETANUS

Tetanus and Tdap vaccines are available at no cost to all personnel who have not had a Tetanus shot within 10 years. This is strictly a voluntary immunization. A consent must be signed and records will be kept in Employee Health Files.

SECTION IX
PROTECTION OF THE PATIENT

PROTECTION OF THE PATIENT

The Infection Control Committee should establish guidelines to limit or prohibit personnel contact with patients when certain conditions exist:

1. Personnel with the following conditions must not be permitted to administer patient care:
 - a. Skin infections (open, draining wounds or draining lesions of any kind).
 - b. Respiratory tract infections (including Group A Strep., any pneumonia, active pulmonary TB, active influenza, mumps undiagnosed symptoms or fever with sore throat, and/or rhinitis.)
 - c. Active exanthems (chicken pox, Herpes Zoster in exposed areas or of disseminated type, measles, rubella).
 - d. Enteric infections (hepatitis, Salmonellosis, Shigellosis, amebiasis, giardiasis, vomiting and diarrhea of unknown etiology until etiology is determined or diarrhea abates).
2. Personnel with Herpes Simplex (fever blisters or cold sores) must not care for immunosuppressed patients, pregnant patients, or infants.
3. Personnel with poison ivy or poison oak may be allowed to care for patients providing he/she first scrubs skin thoroughly to remove all plant oils. Should the dermatitis become bacterially infected, the employee should be screened as having skin lesions.
4. Refer to Section II of this manual for further work restrictions.

SECTION X

PROTECTION OF THE EMPLOYEE (PREGNANT EMPLOYEES)

PROTECTION OF THE EMPLOYEE

Guidelines should be developed to protect employees from patients with certain conditions:

1. Pregnant personnel:
 - a. Should not be assigned to care for patient with known infectious disease if possible. CDC category of precautions and universal precautions will provide adequate protection.
 - b. Pregnant personnel are not known to be at greater risk of acquiring HIV infection or other associated opportunistic infections from caring for a patient with HIV infection than personnel who are not pregnant (CDC, August 21, 1987).

However, if a health care worker develops HIV infection during pregnancy, the infant is at risk of infection from perinatal transmission. Therefore, like other healthcare workers, pregnant healthcare workers should be especially familiar with, and strictly adhere to, recommended universal precautions.
 - c. Other considerations for pregnant staff dealing with ethylene oxide (EtO), chemotherapy, radiation, etc., are outlined in the facility's safety policies.
2. Personnel with known immunity, active or passive, to infectious diseases such as measles, mumps, chicken pox, small pox, or influenza, should be assigned to care for patients with those diseases.

ILLNESS DURING WORKING HOURS

Employees who become ill during work hours should report off to their immediate supervisor and make arrangements to be seen by a physician.

SECTION XI

EMPLOYEE INFECTION REPORTING

REPORTING OF SUSPECTED EMPLOYEE INFECTIONS

1. Employee infections are included in the Infection Control Committee report.
2. Communicable diseases should be reported to the Health Department by the Infection Control Practitioner.
3. Sample of Illness Report
4. Sample of Employee Infection Report

ASHLEY COUNTY MEDICAL CENTER

ABSENCE/SICK LEAVE REPORT

NAME _____ DEPT. _____

FIRST DATE ABSENT _____ # OF DAYS ABSENT _____

PERSON REPORTING ABSENCE _____ PHONE # _____

DATE REPORTED _____ TIME REPORTED _____

PERSON RECEIVING REPORT _____

REASON FOR ABSENCE:

_____ Illness - Self (Specify type of illness below)

_____ Accident/Illness on Job

_____ Sickness in Family (Explain Below)

_____ Employee hospitalized from / / to / /

_____ Physician's Certificate of Treatment attached

_____ Death in Family (relationship - explain below)

Other (explain below)

REASON FOR ABSENCE EXPLAINED (as required)

DATE _____

SIGNATURE OF DEPT. MANAGER OR SUPERVISOR _____

Send to supervisor then on to Infection Control Nurse.

EMPLOYEE INFECTION REPORT

(To be completed by the immediate supervisor.)

Name _____ Date _____

Title _____ Place Seen _____

Area of Employment _____

Site and description of suspected infection:

Treatment: _____

Culture taken Yes _____ No _____ Results _____

Sent off duty Yes _____ No _____

Signature of person completing report

Signature if employee

(To be completed by the physician)

Diagnosis _____

Treatment _____

Recommendations:

Return to work date _____

Restrictions _____

Signature _____

Route to Employee Health Nurse

XII

INFECTION CONTROL DEVICES AND SUPPLIES

DEVICES AND SUPPLIES AVAILABILITY

Gloves

Dispense box in every patient room, treatment rooms, procedure rooms, exam areas, Housekeeping carts, soiled utility rooms, isolation carts, Decontamination Room, and Pathology.

Masks With and Without Eye Shield

Isolation carts, O.R., CSR, ICU, E.R., Admissions Office, Radiology, procedure rooms, isolation rooms, janitor's closet, and Pathology.

Needle Disposal Units

In every patient room, soiled utility rooms, every medicine cart, lab phlebotomy trays, medicine rooms, Pharmacy, and Pathology.

Cover Gowns

Isolation carts and anterooms, or, CSR, E.R., janitor's closet, and Pathology.

Ambu's

Every crash cart and Respiratory Therapy Department and each CCU room.

Red Bags

Housekeeping, isolation anterooms, O.R., and L&D.

Protective Eyewear

Distributed to O.R., E.R., L&D, ICU, Radiology, Endoscopy, Laboratory, Pathology, Nursing, RT, and PT.

Germicide

Maid's carts, Housekeeping, isolation rooms, soiled utility rooms, procedures and treatment rooms, and Pathology.

Safety Products

Safety needles, Interlink IV system, and various safety devices are available in all clinical areas.

SECTION XIII

RECOMMENDED PROPHYLAXES FOR POSSIBLE MENINGOCOCCAL MENINGITIS

ASHLEY COUNTY MEDICAL CENTER
RECOMMENDED PROPHYLAXIS FOR POSSIBLE
MENINGOCOCCAL MENINGITIS

BY ARKANSAS HEALTH DEPARTMENT

Adults - Rifampin 600 mg Bid x 2 days

Children under 12 years of age - 10mg/kg body weight Bid x 2 days

OR

Adults - Rocephin 250 mg IM x 1

Children under 15 years of age - Rocephin 125 mg x 1

OR

Adults - Cipro 500 mg po in one single dose

Spread by droplet, is not airborne - no need to worry about filters. Sneeze droplets usually do not spread further than three (3) feet.

Prophylaxis is recommended for INTIMATE CONTACT ONLY. This would include household contacts, close social contacts, hospital personnel performing close contact such as mouth to mouth resuscitation, suctioning, cough induction or prolonged contact with patient.

Prophylaxis is also recommended for all day care connections.

Dosages and recommended drugs taken from "Control of Communicable Diseases in Man", 15th Edition (1990).

SECTION XIV
RECOMMENDED PROPHYLAXIS FOR HIV EXPOSURE

ASHLEY COUNTY MEDICAL CENTER

RECOMMENDED PROPHYLAXIS FOR HIV EXPOSURE

POLICY:

Chemoprophylaxis after an exposure to HIV will be readily available for hospital employees.

PROCEDURE:

- 1.) Following the table by type of exposure and source material provided by the Public Health Service, the employee will be counseled about the recommended dosages of medication.
- 2.) Medication Kits will be available in the Pharmacy. The Nursing Supervisor will obtain the medication after Pharmacy hours. Each kit contains medicine for a 24 hour period until the remainder of therapy can be obtained by prescription from the individuals pharmacy.
Medication in the Kit includes:
 Combivir (Zidovudine 300mg/Lamivudine 150mg) capsules #2-1 cap bid
 Viracept(nelfinavir) 250mg tablets #9 - 3 tabs tid
- 3.) If the employee opts to decline the chemoprophylaxis, a refusal form must be signed.

Provisional Public Health Service recommendations for chemoprophylaxis after occupational exposure to HIV, by type of exposure and source material- 1996

Type of exposure	Source	PEP	Regimen
Percutaneous	Blood		
	Highest risk	Recommend	ZDV, 3TC, IDV
	Increased risk	Recommend	same
	No increased risk	Offer	ZDV, 3TC
	Fluid containing visible blood, other potentially infectious fluid or tissue	Offer	ZDV, 3TC
	Other body fluid(urine)	Not offer	
Mucous Membrane	Blood	Offer	ZDV, 3TC±IDV
	Fluid containing visible blood, other potentially infectious fluid or tissue	Offer	ZDV±3TC
	Other body fluid (urine)	Not Offer	
Skin			
	Increased risk		
	Blood	Offer	ZDV,3TC±IDV
	Fluid containing visible blood, other potentially infectious fluid or tissue	Offer	ZDV±3TC
	Other Body fluid (urine)	Not Offer	

1. Any exposure to concentrated HIV (e.g. in a research laboratory or production facility) is treated as percutaneous exposure to blood with highest risk.
2. *Recommend-* Post exposure prophylaxis should be recommend to the exposed worker with counseling. *Offer-* PEP should be offered to the exposed worker with counseling. *Not offer-* PEP should not be offered because these are not occupational exposures to HIV.
3. *Regimens:* Zidovudine (ZDV) 200mg three times a day; lamivudine (3TC) 150mg two times a day; indinavir (IDV) 800 mg three times a day. (If IDV is not available, saquinavir may be used, 600mg three times a day) > Prophylaxis is given for 4 weeks.
4. *Highest Risk-* BOTH larger volume of blood (e.g., deep injury with large diameter hollow needle previously in source patient's vein or artery, especially involving an injection of source patient's blood) AND blood containing a high titer of HIV (e.g., source with acute retroviral illness or end stage AIDS; viral load measurement may be considered but its use in relation to PEP has not been evaluated). *Increased risk-* EITHER exposure to larger volume of blood OR blood with a high titer of HIV. *No increased risk-* NEITHER exposure to larger volume of blood NOR blood with a high titer of HIV (e.g., solid suture needle injury from source patient with asymptomatic HIV infection).
5. Possible toxicity of additional drug may not be warranted
6. Includes semen; vaginal secretions; cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic fluids

EMPLOYEE REFUSAL OF HIV CHEMOPROPHYLAXIS

Because of your exposure to possible HIV virus through an AIDS or suspected AIDS patient (by needle stick, splash from mucous membranes to the eyes or mouth, or exposure to blood or other body fluids), you should know certain facts of this disease as they concern you.

1. A study called HTLV-III should be done immediately on you, the employee. This test is studied to tell whether your body has the AIDS virus in it not whether you have the disease.
2. The HTLV-III should be repeated a six (6) weeks, three (3), six (6), and twelve (12) months. If all of these are negative, one should have little to fear.
3. Until the twelve month study is returned negative, you should avoid pregnancy, since it is known that the AIDS virus can pass to the unborn baby.
4. You are cautioned to avoid exchanging body fluids during sexual activity, deep "French kissing," and oral-genital contact.
5. You must know that the vast majority of employees exposed to AIDS patients never develop the disease.
6. You must know that there is often a long incubation period (time between exposure and development of the disease), possibly as long as three years.
7. For all practical purposes, if your test is negative after the twelfth month of testing, it is highly unlikely that you will come down with the disease.
8. Chemoprophylaxis is available at Ashley County Medical Center according to Public Health Service recommendations.

I have read the above information, had it explained to me , and had the opportunity to ask questions.

I, _____ an employee of Ashley County Medical Center do hereby refuse in writing chemoprophylaxis for the HIV virus, after having the above explained to my understanding.

Signed _____

Date _____

Witness _____

Date _____

Witness _____

Date _____

**SECTION XV
SARS/SMALLPOX POLICIES**

**ASHLEY COUNTY MEDICAL CENTER
INFECTION CONTROL POLICIES AND PROCEDURE MANUAL**

TITLE/ DESCRIPTION:

Care of the patient with suspected or confirmed SARS(Severe Adult Respiratory Syndrome)

EFFECTIVE DATE:

APPLIES TO:

APPROVED BY

Hospital wide

ICC

POLICY:

ACMC employees will follow CDC recommendations for protecting healthcare workers from exposure to SARS.

PURPOSE:

Healthcare providers will learn to recognize and manage SARS patients and provide care for those requiring hospitalization. This includes patients presenting to the Emergency Department.

CASE DEFINITION:

See updated SARS case definition as presented by the CDC. (attached)

PROCEDURE:

1. Screening questions to identify patients should concern fever, respiratory symptoms and recent travel outside of the state. The most recent case definition of SARS will be used as a basis of these screening questions.
2. Triage personnel will be trained for SARS screening.
3. A surgical mask will be placed on patients in whom SARS is suspected and personnel will immediately place N-95 respirators on for their protection.
4. Patients will be placed in one of the back rooms of the ED and CONTACT (gloves, gown, and eye protection) and AIRBORNE precautions(N-95 Respirator) will be instigated.
5. Patients ill enough to be admitted to the hospital with suspected or confirmed SARS will be placed in the 206 (negative Air-flow) or ICU/CCU depending on the census in that area. Subsequent cases of SARS will be placed in ICU. At this point ICU will be designated for SARS cases only.
6. If a suspect SARS patient is admitted to the hospital, infection control personnel should be notified immediately. Infection control measures for inpatients should include:
 - a. Standard precautions (e.g., hand hygiene); in addition to routine standard precautions, health care personnel should wear eye protection for all patient contact.
 - b. Contact precautions (e.g., use of gown and gloves for contact with the patient or their environment)
7. Airborne precautions (e.g., an isolation room with negative pressure relative to the surrounding area and use of an N-95 filtering disposable respirator for persons entering the room) If airborne precautions cannot be fully implemented, patients should be placed in a private room with the door kept shut and all persons entering the room should wear an N-95 Respirator.
 - a. Isolation precautions will be fully explained to the patient and the family and visitors will be limited.

GUIDANCE FOR THE MANAGEMENT OF EXPOSURES TO SARS

1. Exclusion from duty is recommended for a healthcare worker if fever or respiratory symptoms develop during the 10 days following an unprotected exposure to a SARS patient. Exclusion from duty should be continued for 10 days after the resolution of fever and respiratory symptoms. During this period, infected workers should avoid contact with persons both in the facility and in the community.
2. Exclusion from duty is not recommended for an exposed healthcare worker if they do not have either fever or respiratory symptoms; however, the worker should report any unprotected exposure to SARS patients, to Infection Control immediately.
3. Active surveillance for fever and respiratory symptoms (e.g., daily screening) will be conducted on healthcare workers with unprotected exposure, and the worker should be vigilant for onset of illness. Workers with unprotected exposure developing such symptoms should not report for duty, but stay home and report symptoms to the Infection Control Nurse.

ADDENDUM

This policy will be updated as more information is learned about SARS.

**ASHLEY COUNTY MEDICAL CENTER
INFECTION CONTROL POLICIES AND PROCEDURES MANUAL**

TITLE/DESCRIPTION:
Care of Patients with Suspected
or Confirmed Smallpox

FILING NUMBER:
7009

EFFECTIVE DATE:
Reviewed 11/2009

APPLIES TO:
Nursing

APPROVED BY:
ICC

POLICY:

To provide health care personnel with information on smallpox so they will be able to provide the appropriate health care to suspected and confirmed smallpox patients.

PURPOSE:

Health Care Providers will learn to recognize and manage smallpox patients and provide in-room care for the smallpox patients requiring hospital admission. This includes the evaluation and management of patients who present to the Emergency Department with suspected smallpox.

CHARACTERISTICS OF SMALLPOX:

Smallpox is a viral disease unique to humans. The virus is spread by inhalation of air droplets or aerosols. There are three clinical forms of smallpox.

- Twelve to fourteen after infection, the patient will become febrile and has severe aching pains and prostration.
- 2-3 days later, a popular rash develops over the face and spreads to the extremities.
- The patient will have oropharyngeal lesions for about a week. Infectious virus particles are released by sloughing of these lesions. Patients are most infective during this time.
- The rash will become vesicular and later, pustular. The patient remains febrile throughout the evolution of the rash and also pain.
- Gradually, scabs form, which eventually separate, leaving pitted scars.
- Death usually occurs during the second week.

The disease is most commonly confused with chickenpox and during the first 2-3 days of rash, it may be impossible to distinguish between the two. But remember-

- All smallpox lesions develop at the same pace and on any part of the body, and appear identical. (Chickenpox lesions are more superficial and appear in crops, and the rash is more dense on the trunk.)
- Smallpox lesions will present on the palms or soles where chickenpox does not.

TRANSMISSION:

Transmission of the virus normally occurs by inhalation of virus-containing large airborne droplets of saliva from an infected person with subsequent infection of the oropharyngeal region. Transmission occurs as the fever spikes and coincides with the onset of the skin rash. Transmissibility of the virus via large airborne droplets decreases during the later stages of the disease as sloughing of the oropharyngeal lesions slow. Transmission via contact with material from the smallpox pustules or crusted scabs can also occur, however scabs are much less infectious than respiratory secretions. Death results from profound toxemia, leading to respiratory and/or heart failure.

SURVEILLANCE:

Triage Nurses and Employees are encouraged to enhance pre-event surveillance for generalized febrile vesicular - pustular rash illnesses.

Once a suspected patient is identified in the triage area:

- An N-95 mask will be placed on the patient.
- The patient will be taken to the ED room located in the back hall next to the O/P Clinic. (Exam room 2)
- The patient will immediately be placed on contact and droplet isolation.
- The Infection Control Nurse will be immediately notified. She will then notify public health officials and other appropriate authorities.
- An IV site using an 18-gauge needle will be accessed.
- Specimens will only be collected from the smallpox team personnel.
- Family visiting with patient at this time will also be escorted to the Exam room. They will be asked to stay until ADH or other public health official gives permission for release or guidance on treatment and/or quarantine.
- The IC Nurse or other smallpox team member will be deployed to call public health as required and if needed- to identify contacts and ask all necessary information. (A list of all people who the patient has had face-to-face contact with since onset of fever. This includes any work-related people, social activities, family members etc. This information should be placed on a form. Attempts will be made to get names, addresses, phone numbers etc. This information will be reported to the required public health officials.)
- Public Health Officials will be contacted for assistance with laboratory diagnosis and any further treatment.

TREATMENT:

There are no proven treatments for clinical smallpox, medical care is supportive.

- Vaccination can be given to prevent or lessen the severity of the disease if given within 2-3 days of the initial exposure and decreases symptoms if given within the first week of exposure;
- Monitor and maintain fluid and electrolyte balance. Usually dehydration and electrolyte abnormalities can occur during the vesicular and pustular rash stages.
- Skin care. Bacterial super infections may occur and should be treated with appropriate antibiotic therapy;
- Monitoring for and treatment of complications;
- Some studies have shown that Cidofovir has shown some effectiveness in animal studies. The CDC should be consulted for more information and recommendations for treatment with ant-virals.

PLACEMENT OF PATIENT IN HOSPITAL:

The suspected patient and family will be taken to the Generations Unit.

- Patient will remain on contact and droplet isolation. (Gowns, N95 masks, gloves and protective eyewear will be used.)
- Public Health Officials will give guidance on appropriate treatment for the family and others who are being quarantined at this time.
- Monitoring equipment will be located and placed in patient's room.
- No visitation from friends or family will take place. Unless the family or friends have been vaccinated against smallpox. Patient will be isolated.
- Only smallpox team members may enter the area and only with minimal visitation.

- Dietary will deliver food and place trays outside the entrance area but before the double doors. All food will be on disposable trays.
- An isolation cart (with necessary isolation equipment, IV supplies, N95 masks, medication etc.) will be placed in the unit. Any replacement equipment will be ordered by the nurse and will be placed in the hall directly outside of the double doors leading into the unit.
- The smallpox policy and notebook with information will be placed on the isolation cart.
- All laundry and bed sheets will be placed in double blue bag and sent to the contract laundry. (Housekeeping will notify the contract laundry before laundry is sent.)
- Nurses will change into scrubs provided by the hospital and will shower prior to leaving the area.
- All infectious waste should be placed in red biohazard bags. (Public health officials will be consulted prior to waste disposal for proper and specific waste disposal and decontamination guidelines.)
- Employees handling waste or laundering scrubs etc, should have been vaccinated and a member of the smallpox team.

SKIN CARE:

The skin should be kept clean and efforts made to avoid rupturing vesicles or pustules. No salves or ointments should be applied. Scab lesions will be allowed to heal and separate on their own.

MONITORING AND TREATMENT OF COMPLICATIONS:

Several complications may occur during the course of a smallpox infection. These include:

- Hemorrhagic
- Secondary bacterial infection
- Corneal ulceration and/or keratitis
- Arthritis or “osteomyelitis variolosa”
- Respiratory
- Encephalitis
- Gastrointestinal
- Genitourinary

Hemorrhagic- Minor hemorrhagic manifestations such as subconjunctival hemorrhage occur commonly in smallpox patients. Usually no specific therapy is needed for this. However, if more extensive hemorrhage is present, the patient should be evaluated for DIC and treated appropriately. These patients are highly contagious and prognosis is poor.

Secondary bacterial infections- These include abscesses of skin lesions, pneumonia, osteomyelitis, joint infections, and septicemia. Cultures will help guide antibiotic therapy.

Corneal ulceration and/or keratitis- These can appear around the second week of illness and begin at the corneal margins. Ulcers heal rapidly and may cause severe corneal scarring. A minor opacity may also be present. Topical idoxuridine has been used but its efficiency is undocumented. The CDC or other public health officials should be consulted for appropriate treatment.

Arthritis or “Osteoyelitis variolosa”- This usually occurs after the 15th day and is accompanied by a brief recurrence of fever during the scabbing stage.

Respiratory- Viral bronchitis and pneumonitis can be common complications of sever smallpox

and are considered part of the normal disease syndrome. Treatment is symptomatic with measures to treat hypoxemia and supplemental oxygen and/or intubation as indicated. Secondary bacterial pneumonia can occur and should be treated with appropriate antibiotics as guided by laboratory diagnostics. Pulmonary edema can also occur.

Encephalitis- This usually appears around the 6th-10th day of illness when the rash was still in the papular or vesicular stage.

Gastrointestinal- Nausea and vomiting can occur in the earlier stages of smallpox. Then diarrhea may occasionally occur in the second week of illness. In some cases, extensive viral infection of the intestinal mucosa may occur with sloughing of the mucosal membrane. Genitourinary-Orchitis may occur. Hematuria may also occur in hemorrhagic smallpox.

DEATH OF A PATIENT:

In the event of a death,

- Public health officials will be notified for directions on the proper preparation and disposal of the body;
- The funeral home will be notified. The FH will provide ACMC with two body bags. The smallpox team staff will place the body in the first bag using gloves, N95 masks, gowns, etc., maintaining strict contact precautions. The isolation equipment and apparel will be changed. Then the body in the first bag will be placed in the second bag. A nametag with the patient's information that is required by the FH will be secured to the bag. The body will then be taken from the area.
- The smallpox team that includes housekeeping will clean and disinfect the area. Public Health Officials will be contacted for guidance in the appropriate and proper decontamination procedure of the area.
- All smallpox team members will shower and change before leaving the area.
- No other patients will be placed in this area unless they are suspected or confirmed patients with smallpox.

**ASHLEY COUNTY MEDICAL CENTER
INFECTION CONTROL POLICIES AND PROCEDURES MANUAL**

TITLE/DESCRIPTION:

ACMC Administration of Smallpox
Vaccine to Employees

FILING NUMBER:

7010

EFFECTIVE DATE:

Reviewed 11/2010

APPLIES TO:

Hospital Wide

APPROVED BY:

ICC

POLICY:

Preparing for the consequences of a smallpox outbreak will require significant numbers of personnel associated with each component of the response. Therefore, ACMC will establish a Smallpox Health Care Team and establish policies for the administration of the Smallpox vaccination. The smallpox vaccine is the best protection one can get if ever exposed to the smallpox virus.

PURPOSE:

The ACIP (Advisory Committee on Immunization Practices) recommends that each acute care hospital who will be administering the vaccination establish a group of health care workers who would be vaccinated and trained to provide vaccinations to other health care providers and to provide in-room medical care for the first few smallpox patients requiring hospital admission. This training would also include the evaluation and management of patients who present to the Emergency Department with suspected smallpox. (See policy on Care of Suspected and Confirmed Smallpox Patients)

PROCEDURE:

There must be a voluntary willingness to be vaccinated against smallpox. Vaccination is required for all healthcare team members.

There is a preference for those who have been previously vaccinated to be vaccinated first.

The composition of the Health Care Response Team would include but not limited to:

- Emergency room staff, including physicians, and nurses
- Intensive Care Unit Staff, including physicians, nurses and nurses who are trained in pediatrics to provide care for infants and children.
- General Medical Unit staff; selected RNs, MDs, OB, Family Physicians, pediatricians, internists and hospitalists.
- Medical House staff; selected medical, pediatric, OB, FP (when essential).
- Specialists; infectious disease, surgery, anesthesia teams, medical consultants etc.
- Infection Control Professionals
- Respiratory Therapists
- Radiology Technicians
- Security Personnel
- Housekeeping Staff (those required to maintain environment and decrease risk of fomite transmission).
- It is not recommended at this time to vaccinate Clinical lab workers; viral load in clinical specimens are low; they should practice strict adherence to standard precautions.

Approximately 20-30% of all identified employees for the health care team will be vaccinated first. Previously vaccinated employees will be included in the first phase if feasible. This group will also be staggered within an area.

Then in 3 weeks, another 20-30% will be vaccinated, followed 3 weeks later by another group etc. However, the number of employees being vaccinated may change for succeeding phases depending on the number of employees on the previous group(s) who may be out due to

complications or side effects of the vaccine. These usually occur between eight and ten days after vaccination.

CONTRAINDICATIONS TO VACCINATION

The risk of developing smallpox from face-to-face contacts outweighs the risk of developing complications for those contacts with contraindications to the vaccine. In this case, the person exposed would need to be vaccinated regardless of the contraindication.

Persons with certain medical conditions are known to have higher risk of developing complications following vaccination with vaccinia vaccine (smallpox vaccine). These include:

1. Persons with diseases or conditions which cause immunodeficiency, such as HIV, AIDS, leukemia, lymphoma, generalized malignancy, agammaglobulinemia, or therapy with alkylating agents, antimetabolites, radiation, or immunosuppressive doses of corticosteroids.
(A household member with an immunodeficiency disease or who is undergoing one of the therapies listed who is exposed to a recently vaccinated household member is at risk of developing a post vaccine complication because of potential accidental inoculation with virus from the vaccination site of a vaccinated person.)
2. Persons who have been diagnosed with eczema, even if the condition is mild or not presently active.
(A household member who had eczema or a history of eczema who is exposed to a recently vaccinated household member is also at higher risk for developing a post-vaccine complication due to potential accidental inoculation with virus from the vaccination site of the vaccinated person.)
3. Women who are pregnant or who are planning to become pregnant within a month following vaccination.
4. Persons with other acute or chronic skin conditions such as atopic dermatitis, burns, impetigo, or varicella zoster (shingles) should not be vaccinated until the condition resolves.
5. Persons with serious, life-threatening allergies to the antibiotics polymyxin B, streptomycin, tetracycline, or neomycin.

VACCINATION IN-HOUSE:

Appropriate Smallpox Team members will perform vaccinations in the Outpatient Clinic area. These employees will be trained to administer smallpox vaccinations prior to vaccinating employees. (See list of "Trained Smallpox Team Members").

All employees receiving vaccinations will receive a copy of the following:

- Screening and Consent Signature Forms- needs to be completed and signed before vaccination.
- Record of immunization- A copy of this will be given to the employee receiving the vaccination and a copy will be sent to the health unit after vaccination.
- Information on the Smallpox vaccine- "What you need to know if you have immune system problems"
- "What you need to know if you are pregnant"- if appropriate.
- "What you need to know if your child is less than 1 year old"- if appropriate.
- "What you need to know if you have skin conditions".
- A copy of this policy.

ADMINISTRATIVE LEAVE:

The ACIP & ACMC does not advocate leave for health care providers who receive the vaccine. Only unless they are physically unable to work due to systemic signs and symptoms of illness,

extensive skin lesions that cannot be adequately covered, or if they do not adhere to the recommended infection control precautions. Close contact required for transmission of vaccine to household contacts is unlikely to occur in the healthcare setting. APMC may choose to re-assign or place on leave employees after receiving the vaccination based on the above.

SMALLPOX VACCINATION SITE CARE:

APMC mandates that all employees who receive the vaccination will keep their vaccination sites covered. Sites will be covered immediately after vaccination. Sites will be changed when exudates begins to accumulate on the dressing. (Approximately every 3-5 days.) This dressing will be maintained for approximately 21 days or until the scab has separated.

The site will be covered with a folded gauze or similar absorbent material overlaid with a single semi-permeable dressing. The dressing can be a combination all in one. The employee will further cover the site with clothing while in healthcare setting. Members of the Smallpox Team will do dressing changes. Sites will be inspected daily by a member of the smallpox team.

No salves or ointments should be applied to the site. The scab lesions should be allowed to heal and separate on their own.

When showering:

Cover site with plastic wrap,

Dry site last, keep towels separate, wash used towels with hot water (>71° C, 160° F) and soap.

Change gloves between removing old dressing and applying new dressing.

Discard contaminated dressing materials as regulated medical waste in hospital or sealed bag at home.

Hands will be washed before dressing change and immediately after.

SUCCESSFUL VACCINE TAKE:

Successful vaccination is normally associated with tenderness, redness, swelling and a lesion at the vaccination site. Primary vaccination may also be associated with fever for a few days and enlarged, tender lymph nodes in the axilla of the vaccinated arm. These symptoms are more common in persons receiving their first dose of vaccine (15-20%) than in persons being revaccinated (0-10%).

The clinical manifestations of vaccination with vaccinia virus are dependent upon the immune status of the vaccine recipient. Local reactions to vaccination may be classified as a major (primary) reaction or an equivocal reaction.

1. Primary (major) reaction- This reaction would be expected for persons receiving their first or primary smallpox vaccination or in persons who received a primary vaccination many years previously. The inoculation site becomes reddened and pruritic 3-4 days after vaccination. A vesicle surrounded by a red areola then forms which becomes umbilicated and then pustular by the 7th to 11th day after vaccination. The red areola has enlarged tremendously by this time. The pustule begins to dry, the redness subsides, and the lesion becomes crusted between the 2nd and 3rd week. By the end of the 3rd week, the scab falls off leaving a permanent scar that at first is pink in color but eventually becomes flesh-colored. At the end of the first week between the vesicular and pustular phases, there may be a variable amount of fever, malaise, and regional lymphadenitis. These symptoms usually subside within 1- 2 days and are more likely to occur in older children and adults than in infants.
2. Equivocal- All responses other than a major (primary) reaction are defined as equivocal reactions. These blunted reactions could be a result of a high level of immunity (person who has received multiple previous smallpox vaccinations) or vaccination failure caused by improper vaccine administration technique or less potent vaccine. If an equivocal reaction is observed, the vaccination

procedures should be checked and vaccination repeated with vaccine from another vial or vaccine lot as it would be difficult to determine if the blunted reaction was caused by immunity or vaccine-take failure.

CONFIRMATION OF SUCCESSFUL VACCINATION:

Successful take of vaccination should be contingent upon the presence of a pustular lesion in a previously unvaccinated person and a pustular lesion or an area of definite induration or congestion surrounding a central lesion, 7 days following revaccination in a previously vaccinated person. Vaccinees who do not exhibit the type of “major” reaction at the vaccination site on day 7 should be revaccinated.

REVACCINATION:

Employees exhibiting equivocal and the below reaction will be revaccinated. A delayed type of skin sensitivity consisting of erythema only within 24-48 hours may occur following killed as well as live vaccine. This represents a response to inert protein in a previously sensitized person. This type of reaction can occur in a highly immunized person or in individuals with little or no immunity and is indistinguishable from the immediate or immune reaction. Therefore, persons exhibiting this type of reaction should be revaccinated.

After 2 unsuccessful takes on one person, the person will not be able to participate on the Smallpox Healthcare Team. No other vaccination tries are recommended at this time, unless the employee comes in direct contact with a smallpox patient.

RECOGNIZING ADVERSE REACTIONS:

Historically, 1000 people for every 1 million people vaccinated experienced reactions that, while not life-threatening, were serious. Complications occur more frequently in persons receiving their first dose of vaccine and among young children < 5 years of age. Based on past experience, according to the CDC, 1 - 2 people out of every 1 million people vaccinated will die as a result of a life-threatening reaction to the vaccine, or 1 out of every 3 million people who have been previously vaccinated. People most likely to have side effects are people in the contraindication category.

1. **Inadvertent inoculation at other sites-** This is the most frequent complication of vaccinia vaccination and accounts for about 50% of all complications following primary and revaccination. This complication usually results from autoinoculation when the virus is transferred by hand from the site of vaccination to other areas. The most common sites involved are the face, eyelid, nose, mouth, genitalia, and rectum. Most lesions will heal without specific therapy, but VIG (Vaccine Immune Globulin) may be useful for some cases of inadvertent ocular inoculation. Inadvertent inoculation can be prevented by hand washing after touching the vaccination site.
2. **Generalized vaccinia-** This complication is characterized by a vesicular rash of varying extent resulting from blood-borne dissemination of vaccinia virus. It is most frequently seen following primary vaccination. Lesions occur between 6-9 days following vaccination and can be few or generalized. The rash is generally self-limiting in persons with no underlying illnesses (immune deficiencies) and usually requires no treatment with VIG except in patients who appear toxic or who have serious underlying conditions.
3. **Eczema vaccinatum-** This complication is seen in vaccine recipients who have active or healed eczema or other chronic skin conditions. It can also occur in persons with these conditions who come into contact with a recently vaccinated individual. Vaccinial skin lesions can progress to cover all or most of the areas that are or were affected by the eczema or chronic skin condition. Fever and generalized lymphadenopathy may also occur. The illness is usually mild and self-limited, but can be severe and occasionally fatal. The most serious cases appear to occur in primary vaccines and close contact with eczema of vaccines, and are independent of the activity of underlying eczema.
4. **Progressive vaccinia (vaccinia necrosum or gangrenosa)-** This severe and potentially fatal complication occurs in persons with underlying immune deficiencies and can occur

following primary or revaccination. It is characterized by failure of the vaccine site lesion to heal, with progressive necrosis of the vaccination site and surrounding areas. Secondary lesions may appear at other sites of the body and also exhibit progressive necrosis. VIG has been used to treat this complication with varying success.

5. **Post-vaccination encephalitis-** Encephalitis, characterized by fever, headache, vomiting, drowsiness, and occasional spastic paralysis, meningeal signs, convulsions or coma can occur. This usually occurs between 8-15 days post-vaccination. The incidence of post-vaccination encephalitis in primary vaccines also increase with increasing age. There are no other know predisposing factors for this complication. There is currently no known treatment for post-vaccination encephalitis and VIG is not effective for this complication.

REPORTING OF COMPLICATION ETC.:

All complications and side effects will be reported to the infection control practitioner. The infection control practitioner will then report to the ADH and all other entities. The infection control practitioner will report all reportable information as mandated by local, state and federal law.

SECTION XVI
MANDATORY USAGE POLICY

**ASHLEY COUNTY MEDICAL CENTER
INFECTION CONTROL POLICIES AND PROCEDURES MANUAL**

TITLED/DESCRIPTION:
Mandatory usage Policy

FILING NUMBER:

EFFECTIVE DATE:
October /2002

APPLIES TO:
All Clinical Areas

APPROVED BY:
ICC

POLICY:

- Safety products are available for use at APMC for prevention of needle sticks leading to exposure to Bloodborne Pathogens (HIV, Hepatitis B, Hepatitis C, and Syphilis). THESE INCLUDE VARIOUS SAFETY NEEDLES AND GLOVES.
- Use of these products is **MANDATORY** when there is a possibility of exposure to a patient's blood or body fluids.
- If the employees are found not using the safety products that are available at APMC, disciplinary action will be taken. (This is not just if a needle stick occurs; this is everyday usage.)
- Disciplinary action will follow the policy of Discipline Action as written in the APMC Personnel Policies. This includes the following steps: 1. Verbal warning. 2. Written warning. 3. Probation. 4. Suspension without pay. 5. Discharge.
- Department Managers and Infection Control Nurse will be responsible for monitoring employees for use of these products.
- All employees should encourage the use of safety products.

CDC RECOMMENDATIONS FOR THE REQUIRED ELEMENTS OF A UNIVERSAL PRECATION EDUCATION AND TRAINING PROGRAM

EDUCATION

All new employees, staff, and volunteers will receive orientation regarding personal hygiene, employee health and infection control relative to their departments, including Handwashing, at the hospital - wide sessions.

The hospital believes that education is vital to the success of an infection control program. While Nursing Service accepts the primary responsibility for infection control, all other hospital employees, the members of medical staff, family members and visitors contribute to the success or lack of success of the program. "All personnel" must be "competent to participate in infection control monitoring, prevention and control activities and are provided with any necessary orientation, on the job and in-service training and continuing education". (1.4.1.1AH, 1990).

The following policies and procedures for the control of infection have been developed to help prevent HAI (Hospital Acquired Infections) when possible, and to control their speed when they do occur.

The cooperation of the medical staff and hospital personnel is essential in order to provide better and safer hospital facilities for the hospital patients and personnel.

HOSPITAL ACQUIRED INFECTIONS

A HAI is one that develops during hospitalization and is not present or incubation at the time of admission to the hospital. Occasionally, in neonatal HAI, in maternal mastitis and in postoperative surgical wound infections, the HAI may not be clinically symptomatic until after the discharge of the patient from the hospital.

PREVENTION OF HAI

Handwashing is considered the most important procedure in preventing HAI because many types of these infections may be caused by organisms transmitted on the hands of personnel. Personnel should wash their hands before and after contact with every patient.

The risk of personnel acquiring transient hand carriage of organisms is greater after contact with excretions, secretions, or blood. The patients at greater risk are those undergoing surgery, those with catheters, those in ICU and CCU, and newborn infants.

Although handwashing with an antiseptic agent between patient contacts is desirable, handwashing with soap and water and mechanical friction are sufficient to remove most transiently acquired organisms. An antiseptic agent should be used prior to performing invasive procedures.

IN-SERVICE EDUCATION FOR INFECTION CONTROL AND PERSONAL HYGIENE

All hospitals should include orientation programs, the importance of infection control, personal hygiene, and their responsibility in the infection control program. In-service education for all departments, services, volunteers, students, and allied health staff relative to infection prevention and control should be carried out and documented.

Changes in personnel practices and institutional policies may be accomplished through written regulations and memorandums, but these must be supplemented by an outreaching educational program which will convince personnel that the recommendations are important and are based on

supporting evidence.

Effective infection control measures are practiced by hospital personnel only if they are convinced by their value and not because they have been legislated by a committee. This requires repeated contact with small numbers of personnel by a highly skilled and informed representative of the Infection Control Committee. Such a person must have the ability to establish good rapport with all types of hospital workers.

The Infection Control Practitioner should be the representative or be a consultant to this program. Continuing in-service training is essential because of turnover, for renewing interest and refreshing memories and for transmitting new information.

PURPOSE

The purpose of the employee education program as it pertains to infection control is to provide the information, skills, practice opportunity, and the motivation to ensure or promote a hospital-wide team to prevent and control the transmission of infection.

OBJECTIVES

1. To give people information.
2. To teach people new skills.
3. To change current practice.
4. To generate ideas.
5. To promote participation.

RESPONSIBILITY

The Director of In-Service Education has primary responsibility for the overall employee education program and for the coordination and scheduling of the orientation to the infection control program for new employees.

The Infection Control Practitioner is responsible for instruction concerning aspects of the in-service program related to infection control, e.g., orientation to the infection control program, the Infection Control Manual, infection control concepts and techniques, correct use and cleaning of isolation equipment, and providing information about the employee health program.

All professional health care providers have responsibility for “on-the-spot” teaching, assisting and being role models. Little is gained from classroom instructions when practice is not consistent with instruction.

TEACHING OPPORTUNITIES

Orientation to infection control programs is scheduled by the Infection Control Nurse during the initial orientation period. Because consideration must be given to a wide range of employees who participate in the program, grouping by job category is essential for all instruction except the general orientation presentation. The objectives remain the same for all groups. In general, the following outline applies:

1. General orientation to infection control for all employees.
2. Infection control principles specific to work areas for all employees in separate sessions at least annually.
3. Nursing infection control principles and procedures.

- a. Sessions specific to job category.
 - b. Usually held on the unit.
 - c. Cover one aspect each session.
 - d. Continuous scheduling to reach all employees and all shifts.
4. Department -specific Infection Control Manuals are located in all care areas and on the intranet. Employee health policies are made available to all personnel.

METHOD:

The general orientation program may be a combination of videos, lectures and online programs.

Programs are demonstrations, explanations, discussion, question and answer. Group participation is sought. When appropriate to the subject, a short test is given before and after the session to evaluate the effectiveness of the program.

TEACHING TOOLS:

Films, online programs, handouts, slides, employee health policy and equipment displays.

EVALUATION:

A. Content Effectiveness

Written tests are of limited use. Observation of technique as practiced by employees during work situations gives a much clearer picture of the employees needs for further assistance. On the R.R. level, competence and understanding of concepts of infection control are usually made apparent by the way situations are handled in the absence of specific instructions or assistance. Keeping in close touch with the professional staff provides the best feedback on teaching effectiveness and needs.

B. Annual Review

The Infection Control Orientation Program is evaluated at least annually to determine that content is reflective of new concepts, regulatory changes and incorporates the findings from routine monitoring of the quality and effectiveness of patient care.