



UNIVERSITY OF UYO
TEACHING HOSPITAL

**HOSPITAL POLICY ON
INFECTION PREVENTION
AND CONTROL**

Second edition

December 2020

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2 - FOREWORD


I present this Hospital Policy on Infection Prevention and Control on behalf of the Management, Staff and all those that use our facility, with great joy.

We take very seriously, the business of keeping our Hospital clean and from all indications, the staff of the University of Uyo Teaching Hospital are making efforts to keep to the standards required for the prevention and control of hospital acquired infections. This is because they understand that patients who come to the hospital should not only get well, they are not expected to contact any infection from the hospital. They also realize that they should be protected against any of such diseases.

Amidst these, however, some of our health workers are sometimes too busy, or otherwise, just too careless to remember to adhere to, or in the least, observe very simple preventive measure as removing their hand gloves or even washing of their hands after attending to a patient.

Let me say that as simple as these may seem, not observing them has led to morbidities, loss of man hours, and even mortalities. This policy, I believe will stimulate and encourage all to adhere to standard preventive measures for hospital acquired infection (nosocomial infections),

We on our part will provide, to the best of our ability, the logistics necessary to propel the prevention and control of nosocomial infections to greater heights; thereby making our environment safe for care givers, and visitors.

I wish to commend as well as encourage the efforts of the Infection Prevention and Control Committee for their commitment in carrying out their responsibility which has resulted in their commitment in putting together this policy document. This is a great achievement on their part in particular and the hospital in general. Best wishes.

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1- INTRODUCTION

Infection Prevention and Control refers to measures, practices, protocols and procedures aimed at prevention and control of transmission of infections in healthcare settings. Such infections may be pre-existing on admission or may be acquired in a health care facility (nosocomial).

Health care associated infections need to be properly managed in order to prevent transmission of organisms amongst patients, healthcare workers and visitors. Healthcare workers and visitors may be sources of infections that may result in facility-based outbreaks.

Infection prevention and control measures are a combination of interventions and activities, ranging from basic hand hygiene, aseptic technique, waste management, cleaning and use of chemical agents, pest and rodent control, food handling and management, the use of personal protective equipment (PPE), pre-employment screening, isolation, employees' immunization programs, post exposures prophylaxis (PEP) and personal hygiene.

Laxity in application of any of these dimensions can result in significant negative public health consequences.

All staff must therefore possess an appropriate awareness of their role in the prevention and control of infection in their area of work. Not only is this part of their professional duty of care to the patients with whom they are involved, but it is also their responsibility to themselves, other patients and the general public.

1.1.1 SCOPE

This policy will be applicable to University of Uyo Teaching Hospital

Staff, patients, visitors and all those that come into contact with this health facility.

1.1.2 PURPOSE OF THE POLICY

The purpose of this policy is to set minimum standards for the effective prevention and management of healthcare-associated infections, so that the hazards associated with biological agents are minimized for patients, visitors and healthcare personnel in our establishment.

1.1.3 OBJECTIVES

The objectives of the policy are as follows:

1. To institute, encourage and improve effective prevention and control of healthcare-associated infections at University of Uyo Teaching Hospital.
2. To prevent and minimize environmental hazards associated with microbes for all in-and out-patients, healthcare workers and visitors at the University of Uyo Teaching Hospital.
3. To control and minimize transmission of and colonization by infectious organisms at the University of Uyo Teaching Hospital.
4. To improve infection surveillance at the University of Uyo Teaching Hospital
5. To adopt protocols for handling outbreaks, suspected and confirmed cases of infections

REVIEW AND UPDATE

These policy guidelines shall be subject to review from time to time as safety standards improve and new innovations are discovered.


**2 - IPC GOVERNANCE, ORGANISATION,
AND MANAGEMENT**


The UUTH infection prevention and control programme shall be integrated with other relevant programmes such as Quality Assurance, Environmental and Occupational Health, the TB and HIV programmes, etc.

2.1 THE IPC COMMITTEE

The Chief Medical Director shall be responsible for IPC and shall establish the committee for IPC. The members of the IPC committee shall ensure the implementation of IPC policies and strategies in the facility.

The roles and responsibilities of the committee shall be to:

- a. Ensure the implementation of policies on IPC
- b. Advise on procurement of equipment and consumables for IPC
- c. Ensure the maintenance of IPC equipment
- d. Monitor, supervise, and evaluate IPC activities
- e. Coordinate IPC training programmes in the hospital
- f. Provide advice on IPC and related matters
- g. Disseminate information on IPC
- h. Play roles in advocacy and resource mobilisation for IPC activities
- i. Encourage the health care facility to budget for IPC in its annual plans
- j. Perform any other functions related to IPC like staff screening, etc.

Membership of the committee shall include the following:

- a. Infection Prevention and Control Coordinator
- b. Health Service Administrator
- c. Representative of Nurses
- d. Representatives of key clinical departments

- e. Infection Prevention and Control Nurse
- f. Pharmacist
- g. Biomedical Engineer/Equipment Technologist
- h. Environmental Health Officer
- i. Other members that may be co-opted as necessary

2.2 INFECTION PREVENTION AND CONTROL TEAM

The Infection Prevention and Control Coordinator and the Infection Prevention and Control Nurse shall form a team to oversee the day-to-day activities of IPC.

The IPC coordinator shall be a microbiologist or medically qualified person, or a senior health professional with knowledge and interest in IPC, who can advise on all aspects of infection prevention and control.

A Nurse trained in IPC shall be nominated as the IPC Nurse (IPCN). The nurse shall work closely with the IPC coordinator. The IPC nurse shall be full-time or have dedicated time to carry out IPC activities. The World Health Organization (WHO) recommends that there should be a full-time IPC nurse to oversee every 250 beds in a health facility.

The roles and responsibilities of the team shall be to:

- a. Ensure the implementation of policies by educating health staff in the facility
 - b. Coordinate IPC activities among clinical and non-clinical staff in the facility
 - c. Advise on all aspects of IPC activities at the hospital
 - d. Provide suggestions on changes in practices and ward procedures on IPC and related matters
 - e. Collect and collate data on surveillance of infections for documentation
 - f. Play an advocacy role for IPC
 - g. Initiate research activities
- Perform any other IPC-related activity



3 - POLICIES AND GUIDELINES



STANDARD PRECAUTIONS AND TRANSMISSION-BASED PRECAUTIONS

3.1 STANDARD PRECAUTIONS

Standard precautions are infection prevention precautions applied whenever providing patient care, despite the patient's diagnosis. They prevent unprotected contact with body fluids including blood, respiratory and other secretions and excretions. They are used for all contact with body fluids regardless of the presumed infection status and minimizes or prevents spread of infection to health care workers, other patients and visitors. The components of Standard Precautions are:

- a. Hand hygiene
- b. Appropriate use and removal of personal protective equipment (PPE): gloves, gowns/plastic aprons, masks, goggles, face shields, eye protectors, etc.
- c. Proper patient placement, staff allocation, visitors, and transportation
- d. Processing of used equipment and other items such as rubber boots
- e. Environmental control, cleaning, and disinfection (housekeeping, handling food and drinks, dishes and utensils)
- f. Handling and disposal of sharps
- g. Health care waste management – solid and liquid
- h. Safe injection practices and aseptic techniques
- i. Occupational health and safety
- j. Handling textiles and laundry
- k. Collection, handling, and transporting of clinical specimens

1. Respiratory hygiene/cough etiquette

Details of the components of each of the Standard Precautions are presented in the respective sections

3.2 TRANSMISSION BASED PRECAUTIONS

Transmission-based precautions, also called expanded precautions, are additional measures to complement Standard Precautions and are designed to prevent transmission of microorganisms that are transmitted through airborne, droplet, and contact modes. These precautions apply mainly in hospitalized patients. In practicing additional precautions, isolation is mandatory. Additional precautions include:

- a. Contact precautions
- b. Droplet precautions
- c. Airborne precautions

Note: When additional precautions are indicated, appropriate education and counselling must be given to patients and relations to counteract possible adverse effects on patients (e.g., anxiety, depression, perception of stigma, reduced contact with clinical staff) in order to improve compliance by patients.

3.2.1 Contact Precautions

Contact precautions are intended to prevent transmission of infectious agents which are spread by direct or indirect contact with the patient or the patient's environment. Excessive wound drainage, faecal incontinence, and other discharges from the body all lead to extensive environmental contamination.

In addition to Standard Precautions:

- a. Nurse patients in a single room if available. If unavailable, share room with another patient who has an active infection with the same organism.

- b. Ensure that patients are physically separated from each other. Distance of separation should be 1-2metres with droplets infections.
- c. Health care personnel caring for patients on contact precautions shall wear a gown, gloves, goggles (face shield), rubber aprons, footwear, and headgear for all interactions that may involve contact with the patient or the patient's contaminated environment.
- d. After completing procedures, remove gloves before leaving the patient's room and perform hand hygiene.
- e. Limit patient movement to that which is absolutely necessary. Take care during transport to minimize contact with other patients or environmental surfaces.
- f. When transport is necessary, ensure that infected or colonised areas of the patient's body are contained and covered.
- g. Wear clean PPE to handle the patient at the transport destination.
- h. Use non-critical patient care equipment (e.g., thermometers, rubber aprons, etc.) only for a single patient.
- I. If sharing of common equipment is absolutely necessary, adequately clean and disinfect the equipment before using it for another patient.

3.2.2 Droplet Precautions

Droplets are usually generated from coughing, sneezing, talking, as well as during procedures such as bronchoscopy or suctioning. Droplet precautions are intended to prevent transmission of pathogens spread through close respiratory or mucous membrane contact with respiratory secretions. Examples of organisms in this category include influenza and mumps viruses, *Mycoplasma*, *Streptococcus pneumoniae*, and *Bordetella pertussis*.

In addition to Standard Precautions, the following shall be observed:

- a. Patients shall be placed in a single room or, if not available, they may be cared for in isolation or in a corner of the ward.
- b. A sign indicating precautions to be taken shall be placed on the door of the patient's room and on the patient's chart.
- c. Face (surgical) mask shall be worn when working within 1-2 metres of the patient.
- d. Relatives shall wear appropriate PPEs.
- e. Patients shall be encouraged to use face masks at all times.
- f. Instruct patients to follow Respiratory hygiene/cough etiquette (see Section H).
- g. Patient movement shall be limited to that which is absolutely necessary.
- h. During patient transport, instruct patient to wear mask and follow respiratory hygiene.
- i. Staff involved in patient transport should use appropriate PPE.

3.2.3 Airborne Precautions

Airborne precautions are designed for infections that are transmitted by airborne droplets that can remain suspended in the air. Airborne precautions prevent transmission of infectious agents that remain infectious over long distances and periods when suspended in the air. Examples include tuberculosis, rubella (German measles), varicella(chickenpox), and possibly SARS I and II.

In addition to Standard Precautions, the following shall be observed in airborne precautions:

- a. Patients shall be isolated or in an airborne infection isolation room. An airborne infection isolation room is a single patient room that is equipped with special air handling and ventilation capacity (6 to 12 air exchanges per hour).
- b. Patients must practice respiratory hygiene/cough etiquette.

- c. In settings where airborne precautions cannot be implemented, masking the patient, placing the patient in a single room with the door closed, and providing N95 or FFP2 or higher-level respirators for health care personnel will reduce airborne transmission. Masks should only be used in such a situation if respirators are unavailable.
- d. A sign indicating precautions to be taken shall be placed on the door of the client's room and on the client's chart.
- e. All relatives must wear the appropriate protective clothing before entering the room.
- f. Patients' movement shall be limited to that which is absolutely necessary.
- g. Patients shall wear masks when being transported outside the room.
- h. Precautions for aerosol-generating procedures when airborne precaution is indicated:
 - a. The performance of procedures that can generate aerosols, such as bronchoscopy, endotracheal intubation, surgery with the use of high oscillating equipment e.g. drilling, and open suctioning of the respiratory tract has been associated with transmission of infections such as tuberculosis, SARS, and meningitis to health care personnel.
 - b. Protection of the eyes, nose, and mouth, in addition to gown and gloves, is recommended during performance of these procedures in accordance with Standard Precautions. A respirator is recommended during procedures likely to contain TB, SARS, Avian or Pandemic Influenza viruses.

3.3 HAND HYGIENE

Hand hygiene is a general term that applies to routine hand washing, antiseptic hand wash, antiseptic hand rub, or surgical hand antisepsis.

Washing/cleaning of hands before and after patient contact is one of the most important measures for preventing the spread of micro-organisms in health care settings.

General Indications (5-moments) for Hand Hygiene

Specific occasions for hand hygiene are:

1. Before touching a patient
2. After touching a patient
3. After touching a patient's surroundings
4. Before a clean/aseptic procedure
5. After risk of body fluid exposure

Other indications

6. Before donning gloves and wearing PPE
7. On entry into isolation room/area
8. After removal of PPE upon leaving the care area

Types of hand hygiene

1. Hand washing with antibacterial soap and water
2. Hand rub with alcohol bases hand sanitizer
3. Surgical hand wash/scrub

3.3.1 Procedure for hand hygiene

1. Hand washing with antibacterial soap and water – this is used when hands are visibly soiled
 - a. Wet hands under running tap
 - b. Collect 3-5mls of liquid soap
 - c. Scrub hands as shown in picture below for 30-40 seconds
 - d. Rinse hands under running water until all soap is off

- e. Dry hands with clean disposable tissue or air dry
2. Hand rub with alcohol based hand sanitizer – this can be used when hands are not visibly soiled like after checking pulse or contact with patients' environment.
 - a. Dispense 3-5mls of alcohol hand rub into cupped palm
 - b. Rub to cover all surfaces of the hand and wrist.
 - c. Continue rubbing for 20-30 seconds until alcohol dries off
3. Surgical hand wash/scrub
 - a. Remove all jewelry on your hands and wrists.
 - b. Wet your hands and forearms thoroughly.
 - c. Holding your hands up above the level of your elbow, apply the antiseptic.
 - d. Apply the antiseptic. Clean under each fingernail with a nail brush. It is important for all surgical staff to **keep their fingernails short**. Using a circular motion, begin at the fingertips of one hand and lather and wash between the fingers, continuing from fingertip to elbow. Repeat this for the second hand and arm. Continue washing in this way for 3-5 minutes.
 - e. Rinse each arm separately, fingertips first, holding your hands above the level of your elbow.
 - f. Using a sterile towel, dry your arms – from fingertips to elbow – using a different side of the towel on each arm.
 - g. Keep your hands above the level of your waist and do not touch anything before putting on sterile surgical gown, then gloves.

Compliance

To ensure compliance, Heads of Clinical Departments, units, wards and clinics to ensure adequate wash stations and notices in all wards, clinics and service points.

A wash station comprises of

1. A sink
2. Tap with running water (or veronica bucket)
3. Liquid antibacterial soap
4. Tissue serviettes for drying hand
5. Waste bin for disposing used tissue
6. Poster displaying correct technique for hand hygiene

Each ward should have one wash station to every 5 beds. In clinics, there should be one wash station in every consulting room with no more than 3 consulting tables.

Note: Clinical staff should ensure that nails are kept short, avoid wearing false nails, remove all nail polish, remove jewelery (or wear plain wedding bands), bare below the elbows (wear short sleeves or roll up sleeves).

3.4 INJECTION/SHARPSSAFETY PRACTICES

Administration of injections and, or Veni puncture is one of the most common procedures in healthcare settings.

Safe injection is one that is given using appropriate equipment, does not harm the recipient does not expose the provider to any avoidable risks and does not result in waste that is dangerous to other people. Therefore, the following should be observed

- a. Unnecessary use of injections should be avoided.
- b. Prepare each injection in a clean designated area, where blood or body fluid contamination is unlikely.
- c. NEVER recap used needles and syringes.

- d. All patients undergoing an injection should be educated/counseled before the injection is given or blood is collected.
- e. Sterile syringes and needles of various types and sizes are available in the hospital in properly sealed packs including vanish points.
- f. Auto-disposable syringes are available for immunization injections.
- g. All wastes generated from injections should be segregated appropriately
- h. Users of injections/sharps are responsible for proper disposal into sharp containers/boxes. Do not drop sharps on the floor or in the office waste bin.
- i. Sharps disposal bins shall be provided at each patient bed and in each consulting room and dressing/injection room.

PROPER SHARPS DISPOSAL METHOD

- a. Place sharp containers near your work places.
- b. Seal and remove sharp containers when box is three-quarter(3/4) full.
- c. Filled sharp boxes should be transported to final waste disposal site for incineration.

The Hospital Management is making effort to ensure availability of needle destroyers to reduce waste from sharps/injection materials.

3.5 WASTE MANAGEMENT GUIDELINES

Wastes generated within the hospital should be properly segregated before disposal. Every Department/Unit should ensure they are provided with all the necessary waste bins, colour-coded with the appropriate binliners.

3.5.1 Table 1: COLOUR-CODING OF BIN LINERS FOR WASTE SEGREGATION

COLOUR OF BIN LINER	EXAMPLES OF WASTE	CATEGORY OF WASTE
BLACK	Papers, Bottles, Food,Plastics, Packaging materials	Non-Infectious
YELLOW	Gauze, Hand gloves, IVFLines	Infectious
RED	Anatomical wastes andPathological waste	Highly Infectious
BROWN	Formaldehyde, solvents,chemicals and photographic chemicals	Chemical
(with Radioactive sign)	Any solid, liquid orPathologically contaminated with radioactive isotopes ofany kind.	Pathological

3.5.2 SEGREGATION OF WASTE BY COLOUR-CODED WASTE BINS AND BINLINERS

Wastes so segregated should be properly transported to the final waste disposal sites for incineration or burning in a burning pit.

The University of Uyo Teaching Hospital Management has in place a functional modern incinerator for proper final wastes destruction after segregation

Avoid transporting wastes, particularly sharps in dangerous containers to avoid the risks of accidental needle pricks.

3.6 POST-EXPOSURE PROPHYLAXIS (PEP)

Following any occupational exposure such as accidental needle pricks, the following steps should be immediately taken:

- a. Wash injured areas with soap under running water (tap or stored water) and allow the wound to bleed freely (if it is bleeding).

Do not compress to stop bleeding.

- b. Use water to flush out nose, mouth or areas of the skin that have been splashed with blood.
- c. Irrigate eyes if exposed using saline or clean water.
- d. Report and document incident immediately through your supervising officer.

Exposed staff and the supervisor should consult any of the following immediately.

- a. Chairman, MAC
- b. HOD, Family Medicine
- c. Head, ARV Pharmacy

Every effort will be made to commence post-exposure prophylaxis even on weekends or public holidays. However, the principle of standard precaution should be strictly adhered to at all times by all staff.

3.7 USE OF PERSONAL PROTECTIVE EQUIPMENT (PPE)

These refer to items specifically used to protect the health care workers from exposure to body substances or from droplet or airborne organisms. Physical barriers between healthcare workers and their patients are necessary to protect both the workers and the patients if there is a risk of body fluid exposure. It includes the use of the following:

- a. Surgical, Disposable and heavy duty gloves
- b. Protective eye wear such as eye shields and goggles
- c. Face Mask-both Surgical, Disposable and Respiratory masks
- d. Protective shoes such as boots and
- e. Clinical and Laboratory coats, isolation gowns and plastic aprons

The Hospital Management to ensure continuous supply and availability of these items.

All staff concerned with the use of the above items should ensure they adhere strictly to their use while carrying out their duties.

3.8 COUGH HYGIENE/ETIQUETTE

Cough etiquette is a series of actions to take if you are coughing or sneezing, which are designed to reduce the spread of respiratory illness to others. Colds and flu have the ability to spread easily via the transmission of the germs through the air, carried on droplets. If dispersal of these droplets can be prevented, then infection transmission can be reduced. Cough etiquette can help to contain infectious respiratory droplets at the source.

1. Sneeze, blow your nose or cough into a disposable tissue, and discard the tissue immediately into a bin.
2. If tissues are not available cough/sneeze into your upper arm or sleeve; avoid using your hands.
3. Turn away from other people when coughing/sneezing.
4. Move away from other people who are coughing/sneezing.
5. Always wash your hands after coughing/sneezing/blowing your nose.
6. If there is no access to soap and water, an alcohol-based rub may be used.
7. Try to keep your hands away from your eyes, nose and mouth.
8. Patients and visitors who are coughing should be asked to wait in a separate area and to wear a mask, in order to protect others.
9. Disposable tissues are preferred over cloth handkerchiefs for covering your coughs and sneezes. This is because a cloth handkerchief can act as a breedingground for the germs that are causing the infection. Carrying a used handkerchief around when you are sick may spread your germs.

3.9 PRE-ENROLLMENT SCREENING GUIDELINES

Newly employed staff should carry out laboratory investigations to ascertain their health status before resuming duties as follows:

- a. Hb Genotype
- b. Blood Group
- c. Chest X-ray
- d. Hepatitis BSA
- e. Tuberculosis skin testing for staff attending to Tuberculosis patients.

The findings from these investigations should be privately documented for future references and for recommending suitable work environments.

3.10 STAFF IMMUNIZATION

Newly employed staff must always ensure they are immunized against Hepatitis-B virus. The Hospital Management would, in collaboration with Community Medicine Department, ensure continuous availability of the medicine.

Other staff yet to receive such a vaccine are encouraged to do so immediately. The Department of Community Medicine would be properly sensitized to ensure compliance with this policy.

3.11 ENVIRONMENTAL CONTROL

Environmental controls are practices that are performed to render the health care facility environment safe from infections or reduce infections to the barest minimum. It includes cleaning and disinfection of surfaces and other items in the health care facility, as well as the appropriate design of health facilities.

Environmental cleaning is the process that physically removes foreign materials that may contain germs from an object or surface.

3.11.1 General Cleaning Guidelines

Although certain areas of the facility require special cleaning, the following guidelines apply to all parts of a health care facility.

Health care facilities shall provide a clean environment by following

these procedures and using approved agents for cleaning:

- a. Cleaning can be manual or mechanical.
- b. Clean and disinfect surfaces that are likely to be contaminated with pathogens: those that are touched frequently such as bed rails, bed tables, door knobs, light switches.
- c. All housekeeping staff shall have a structured in-service training once a year.
- d. Ward/Unit Supervisors and Housekeeping supervisors shall draw up cleaning schedules for the different areas of the ward/unit. These schedules shall be posted at vantage points where all staff responsible for housekeeping can see and closely follow them.
- e. Housekeeping staff shall wear gloves (heavy-duty/domestic utility gloves), plastic aprons, masks (where applicable), and protective shoes when cleaning.
- f. Use of a damp or wet mop or cloth for walls, floors, and surfaces, instead of dry dusting or sweeping, will reduce the spread of dust and germs.
- g. Scrubbing should be applied in areas such as bathrooms, toilets, floors, and gutters. Scrubbing is the most effective way to remove dirt and germs.
- h. Wash surfaces from top to bottom, so that debris falls to the floor and is cleaned up last. Clean the highest fixtures first and work downwards. For example, clean ceiling lamps, then shelves, then tables, and then the floor.
- i. Change disinfectant cleaning solutions whenever they appear dirty. A solution is less likely to kill infectious germs if it is heavily contaminated.
- j. Use separate cleaning items (brushes, mops, and duster) for high risk areas, which are likely to be contaminated: for example, toilets.

Note: Thorough cleaning and drying will remove most organisms from a surface. Cleaning is normally accomplished by the use of water, mechanical action, and detergent. It may be manual or mechanical (e.g., a vacuum cleaner).

3.11.2 Cleaning Patient Care Areas

Patient care areas include operating theatres, procedure rooms, laboratories, wards, and Outpatients Department(OPD) areas such as injection rooms, emergency rooms, toilets, and sluice rooms. In these areas, there is a greater potential for clients, staff, and visitors to become contaminated with infectious materials. Such areas must be cleaned with special care, using a disinfectant cleaning solution.

In addition to the general cleaning guidelines, above, the following should be applied:

- a. Wear appropriate protective clothing if spraying is to be done or if splattering is likely to occur.
- b. Sweep all patient care areas with a sweeping brush.
- c. Mop floors thoroughly and clean with disinfectant solution daily and as required.
- d. Damp-wipe counter tops, tables, drip-stands, beds, and trolleys with water and detergent at the beginning of each work day, to remove dust that has accumulated.
- e. In-between clients, clean operating and procedure rooms, examination tables, trolleys, counter tops, and any other potentially contaminated surface using a cloth dampened with a disinfectant cleaning solution.
- f. Clean spills of blood or other body fluids immediately.
- g. Toilets and sluice rooms: These areas are usually heavily contaminated and should be cleaned as often as possible with a disinfectant cleaning solution and in accordance with a cleaning

schedule. Use a separate set of cleaning items to clean these areas.

3.11.3 Cleaning Spills of Blood and Body Fluids on Surfaces

- a. Clean up spills of potentially infectious materials immediately. Besides preventing the spread of infections, prompt removal also prevents accidents.
- b. Staff who are cleaning up spills must wear appropriate protective clothing.
- c. Standard cleaning equipment, including a mop and cleaning bucket plus cleaning agents, should be readily available for spills and should be stored and sign-posted in an area known to all staff.
- d. Procedure for spill management will depend on the following:
 - i. Nature of the spill, e.g. blood, urine, and faeces
 - ii. Possible pathogens that may be involved
 - iii. Size of the spill, e.g., spot, splash, puddle, large spill
 - iv. Type of surface involved, e.g., linoleum, carpet, wood, laminated, etc.
- v. Area involved, e.g., preparatory laboratory, teaching areas, common access areas, etc.
- vi. Likelihood of bare skin contact with the soiled area
- e. For a small spill, disinfect using a disinfectant cleaning solution and clean.
- f. First remove the visible organic matter with absorbent material, e.g., disposable towel or paper, and discard into an appropriate leak-proof bin. Disinfect with 1%-5% sodium hypochlorite disinfectant. Mop and clean the area and allow to air-dry.
- g. If the spill is a large spill of cultures or concentrated infectious materials, flood with (0.5% chlorine) solution or available stock strength of chlorine, clean, and then disinfect it again with fresh disinfectant, clean, and allow to airdry.

A suggested technique when flooding the spill with germicide is to lay absorbent material down on the spill and apply sufficient germicide to thoroughly wet both the spill and the absorbent material.

Do not place a rag over the spill for cleaning up later, someone could easily slip and fall on it.

Items used for cleaning must be cleaned. Items such as mops, buckets, and dusters should be decontaminated with a disinfectant (0.5% chlorine) solution, cleaned with detergent and water, rinsed in clean water, and dried before reuse.

Hands shall be thoroughly washed and dried after gloves are removed.

3.11.4 Cleaning Surgical Settings

Surgical settings include operating theatres, ambulatory surgical units, physicians' offices where invasive procedures are done, intravascular catheterization laboratories, endoscopy rooms, and all other areas where invasive procedures may be performed.

- a. Cleaning procedures shall be completed on a scheduled basis, usually daily.
- b. Areas outside the sterile field contaminated by organic debris shall be cleaned as spills or splashes occur.
- c. Surgical lights and horizontal surfaces, equipment, furniture, and patient transport vehicles shall be cleaned between patients/clients with a clean duster and a low-level disinfectant.
- d. Floors shall be cleaned with a low-level disinfectant/detergent between patients/clients or, depending on type of procedures carried out, at the end of the day.
- e. Counter tops and surfaces that have been contaminated with blood or body fluids capable of transmitting infection shall be cleaned with disposable towels, using an appropriate cleaning

agent and water as necessary (e.g., after each procedure, end of the day, etc.). The surfaces shall then be disinfected with a low-level chemical disinfectant or sodium hypochlorite. Loose or cracked work surfaces should be replaced.

- f. All other areas and equipment in the surgical practice setting (e.g., air conditioning grills and/or filters, cabinets, shelves, walls, ceilings, lounges, and locker rooms) shall be cleaned according to an established routine.
- g. Before any piece of portable equipment enters or leaves the operating theatre, it shall be wiped with the approved disinfectant.

3.11.5 Disinfecting Patient Clothing and Bedding

To disinfect patient clothing and bedding, follow these guidelines:

- a. Any solid excrement, e.g., faeces or vomitus on soiled sheets, should be removed using a flat firm object and flushed down a toilet or in the sluice. Soiled linen should then be placed immediately into plastic bags.
- b. Used linen should be handled carefully to prevent contamination of surrounding surfaces or infecting people.
- c. Soak soiled clothing on 0.05% chlorine for at least 30 minutes on the ward.
- d. Remove and place in a leak-proof bag and send to laundry for immediate washing.
- e. If safe cleaning and disinfection of heavily soiled linen is not possible or reliable, burn the linen to avoid unnecessary risk to staff.

3.11.6 Cleaning Non-Patient Care Areas

In areas of the facility where clinical services are not provided and processing of instruments and other items does not occur – such as

the kitchen and administrative spaces – the risk of infections is generally minimal. Routine domestic cleaning is usually satisfactory. These areas shall be cleaned with a duster or mop dampened with detergent and water daily, or when visibly dirty. Avoid the use of carpets in these areas. Routine users of these areas should adhere to strict guidelines to prevent contamination of these areas. Should contamination occur, appropriate cleaning practices shall be done as for patient/client care areas.

3.11.7n Terminal Cleaning/Cleaning After Discharge

3.11.8 Terminal cleaning

- a. Upon discharge of a patient, the room, cubicle, or bed-space, bed, bedside equipment, and environmental surfaces shall be thoroughly cleaned before another patient is admitted.
- b. Terminal cleaning shall primarily be directed toward those items that have been in direct contact with the patient or in contact with the patient's excretions, secretions, blood, or body fluids.
- c. Housekeeping personnel shall use the same precautions to protect themselves during terminal cleaning that they would use for routine cleaning. Masks are not needed unless the room was occupied by a patient for whom there were airborne precautions and insufficient time has elapsed to allow clearing the air of potential airborne organisms.
- d. All disposable items shall be discarded immediately in the appropriate receptacle (see Section 9 on Patient care equipment).
- e. Reusable items that have been in direct contact with the patient or with the patient's excretions, secretions, blood, or body fluids shall be reprocessed as appropriate to the item (see Section 9).
- f. Bedside tables, bed rails, commodes, mattress covers, and all

horizontal surfaces in the room shall be cleaned (see Appendix 5).

- g. Routine washing of walls, blinds, and curtains is not indicated. These shall be cleaned if visibly soiled (see Appendix 5).
- h. Cubicle/wards curtains should be changed when visibly dirty or when there is contamination.
- i. If VHD is suspected, disinfect and burn all materials used in patient care.
- j. In general, no special cleaning techniques are required for rooms that have housed patients for whom additional precautions were in place. However:
- k. Special terminal cleaning procedures may be indicated for certain organisms, e.g., *Clostridium difficile* diarrhoeal outbreaks. In such cases, thorough cleaning and disinfection should be performed with a disinfectant known to be effective against the microorganism in question. Attention should be paid to surfaces such as doorknobs, call bell pulls, taps, and wall surfaces, which have been frequently touched by the patient.

3.11.9 Terminal disinfection

- a. Walls: Clean with disinfectant cleaning solution.
- b. Beds, lockers and tables and other items in the room: Disinfect using low-level disinfectant.
- c. Utensils: Clean and wash in soapy water, rinse and dry.
- d. Linen: Change all linen, place in appropriate bag. If soiled, rinse to remove soiled material and place in appropriate linen bag.
- e. Plastic covering of pillows and mattresses: Disinfect and air-dry for at least an hour before the next admission.
- f. Equipment:
 - I. Sterilise contaminated, reusable critical items or patient care equipment.
 - ii. Semi-critical patient care equipment shall be sterilised or

- disinfected after use to reduce the risk of transmission of microorganisms to other patients. The article and its intended use, the manufacturer's recommendations, the health care facility policy, and any applicable guidelines and regulations will determine the type of disinfection.
- iii. Non-critical equipment contaminated with blood, body fluids, secretions or excretions shall be decontaminated, cleaned and disinfected after using a low-level disinfectant.
 - iv. Contaminated disposable (single-use) patient care equipment shall be handled and transported in a manner that reduces the risk of transmission of microorganisms and environmental contamination in the health care facility.
 - v. The equipment shall be disposed of according to the institutions' policy and applicable regulations.

3.11.10 Types of Cleaning Solutions

Three kinds of cleaning solutions are normally used during housekeeping in health care facilities. It is essential that housekeeping staff know and understand the different types of solutions and how each should be used.

a. Detergent or plain soap and water

This is used for low-risk areas (non-patient care areas) and general cleaning tasks. Detergent removes dirt and organic material and dissolves or suspends grease, oils, and other matter so it can easily be removed by scrubbing.

b. Disinfectant solution (0.5% hypochlorite solution)

Disinfectants rapidly kill or inactivate infectious germs during the cleaning process. Disinfectants are also used to decontaminate an area (flooding) so that it is safer to clean with a disinfectant cleaning solution. In most settings, a 0.5% hypochlorite solution made from locally available bleach is the

cheapest disinfectant, but alternatives include commercial disinfectants containing 5% carbolic acid (e.g., Phenol or Lysol) or quaternary ammonium compounds.

c. Disinfectant cleaning solution

This solution contains a disinfectant, detergent, and water. It is used for cleaning areas that may be contaminated with infectious materials such as operating theatres, procedure rooms, bathrooms, toilets, and sluice rooms. The disinfectant rapidly kills or inactivates infectious germs during the cleaning process; the detergent removes dirt and organic materials, which cannot be done by water or disinfectant alone. Instructions on how to make a disinfectant cleaning solution are provided below.

3.12 OUTBREAK MANAGEMENT

When the monthly rate for a particular infection exceeds the 95% confidence interval based on the previous years' rates for that month, the possibility of an outbreak exists and an investigation is warranted. At other times, an astute observation of a potential cluster of infections by physicians, nurses, or the microbiology laboratory technologists should prompt at least an initial investigation.

In the event of an outbreak of a communicable disease, the IPC team and the Hospital Management should be immediately alerted and measures put in place to prevent spread to other patients and staff. Epidemiological analysis should be carried out to determine the cause and source of the outbreak.

Suspected case(s) should be immediately reported to the IPC team.

Standard/universal precaution, isolation and barrier Nursing should be strictly adhered to until proven otherwise.

3.13 SURVEILLANCE AND MONITORING

Monitoring and Surveillance process shall be undertaken to ensure compliance by employees, patients and visitors with the Infection Prevention and Control Policies and Guidelines in University of Uyo Teaching Hospital.

Regular collaborative research shall be undertaken to monitor nosocomial infections and antibiotic sensitivities at randomized sites.

Procedures shall be put in place to reward outstanding wards, clinics etc. Perform satisfactorily within the laid down rules and regulations on Infection Prevention and Control Policies.

3.14 NON-COMPLIANCE WITH POLICY

Failure to comply with the Infection Prevention and Control Policies and Guidelines may result in the following:

- a. Disciplinary action by Professional Health Councils or Hospital Management as the case may be against individual staff where his/her proven negligence caused harm to patients.
- b. Criminal or Civil prosecution of individual employees whose negligent actions caused the infection and subsequent death of a provider.
- c. Loss of public confidence in the particular healthcare provider.