

The Republic of Uganda

INFECTION CONTROL: POLICIES AND PROCEDURES

DEPARTMENT OF QUALITY ASSURANCE MINISTRY OF HEALTH (2005)

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MINISTRY OF HEALTH

INFECTION CONTROL:

POLICIES AND PROCEDURES

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- 1 Disinfectants currently available in Uganda .
- Participants in the workshop to develop Infection Control:

Policies and Procedures June 2003 - January 2005

FOREWORD

Ministry of Health is committed to making adequate provisions to protect both its health workers and patients or clients against any health facility acquired infections.

The outlined procedures in this document are for the benefit of all staff who at any stage during their employment handle patients and body fluids of any kind.

The procedures within this document for handling patients must be followed on all occasions as failure to do so may place the individual at risk of exposure to hazardous biological products.

It is the duty of every individual to ensure that they do not place others at risk by their carelessness in the carriage or disposal of any body products.

All staff have a duty of care under section 30 and 31 of the Health Service Commission Act, 2001. It is therefore the duty of all those employed within our health facilities to report to the Infection Control Committees and / or Head of the relevant unit, any incidences where proper procedures are not being implemented or practiced.

Staff should be informed that under The National Environment Statute 1995 they are responsible for the safe handling and disposal of waste as outlined in this document. Staff are therefore liable to be disciplined if found to be in contravention of the requirements of the Statute.

As the mandate of the Quality Assurance Department is to ensure that guidelines and standards are developed, disseminated and used, the production of the document is yet further evidence that they have risen to the occasion.

Finally, I wish to express my thanks and appreciation to all those who have worked so hard to produce this document not only in such short time but also at a very low cost.

F. G. Omaswa

DIRECTOR GENERAL OF HEALTH SERVICES

March, 2005

INTRODUCTION COMMENTERS YOURS CARENASON

The Ministry of Health in close collaboration with the Development Partners has been implementing a quality of care strategy (Yellow Star Program - YSP) over the past 4 years. The YSP is based on assessing Health Units using 35 standards that are used to evaluate the implementation of the Uganda Minimum Health Care Package. To date YSP has been introduced in 32 districts.

Analysis of the YSP results from these districts reveals that infection control indicators have the lowest scores in all the districts. Therefore, based on the YSP results there is an increasing realization of the importance of infection control at the health units as an important contribution to of the quality of health care countrywide.

It is vital that the control of infection within our health units is practiced effectively and that the organization, policies and procedures are well documented and accessible to all health care workers.

Hospital / Health facility acquired (nosocomial) infections add to functional disability and emotional stress, may in some cases lead to disabling conditions that reduce quality of life. They also increase costs of medical care through increased stay in health units and management of patients using expensive drugs to treat infections that are usually difficult to treat due to drug resistance.

The purpose of Infection Control: policies and procedures is to prevent the spread of infection in health care facilities, thereby assisting health care workers in the provision of high quality health care. Infection prevention and control: policies and procedures are required in the monitoring, supervision, surveillance and control of infection in all the health care facilities and settings in Uganda.

Continuous evaluation of patient care practices under the supervision of the infection control committee, will assure continued performance of correct practices.

This document is intended for use as a reference by all health care providers in Uganda.

GENERAL POLICY STATEMENTS

The following policy statements are general to the overall infection prevention and control practices.

- 1. The Ministry of Health policy is that comprehensive infection control practices shall be adhered to in each health care facility, whether government or private.
- 2. All clients must be managed as if they are a potential source of infection.
- 3. There shall be proper disposal and destruction of all clinical waste generated during health care delivery especially from sharps, laboratory, surgical and medical procedures.
- 4. To ensure adequate and continuous full time supply of infection control materials at all levels; adequate budgetary allocation shall be provided to the different levels.
- 5. Infection prevention and control standard precautions shall be followed when contact with blood, all body fluids, non-intact skin and mucus membranes are anticipated.
- 6. There shall be an active infection control committee at the national level and in each health care facility countrywide.
- 7. There shall be an effective system of supervising, monitoring and evaluating infection control practices and waste management in public and private health care facilities.
- 8. There shall be facility based in-service training programmes on infection control to assist all categories of health workers at all levels comply with these policies and procedures.
- 9. These infection control policies and procedures shall be integrated into the curricula for pre-service education/training of all health care workers.
 - 10. There shall be a program of civic education for the community to create awareness on infection control.

INFECTION CONTROL COMMITTEES

The Ministry of Health policy is that all health units should form Infection Control Committees whose composition shall be as follows:

A. NATIONAL INFECTION CONTROL COMMITTEE:

- Director Health Services Clinical and Community Health Chairman
- Director Mulago Hospital

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(8)

- Commissioner Health Services Quality Assurance Secretary
- Commissioner Health Services Community Health
- Commissioner Health Services Nursing
- Assistant Commissioner Health Services Epidemiological Surveillance
- Assistant Commissioner Health Services Reproductive Health
- Assistant Commissioner Health Services Human Resource
- Dean Makerere University Medical School
- Registrar Nurses and Midwifery Council
- Registrar Medical and Dental Practitioners Council
- NEMA Representative

Functions of the National Infection Control Committee:

The national Infection Control Committee shall ensure that the procedures for occupational health and safety of the health worker and patient are implemented. It will be responsible for the development and updating of policies and procedures, training, supervision of all cadres and procurement of infection control supplies.

B. REFERRAL HOSPITALS: Management

- Surgeon / Pathologist / Microbiologist Chairman
- Hospital Administrator
- Medical Officer I/C Infection Control Secretary
- Pharmacist
- Dental surgeon
- Principal Nursing Officer in charge
- Laboratory Technologist
- In charge Maternity ward

- Contractor of cleaning services
- In charge Theatre
- Representatives from wards

C. DISTRICT HOSPITALS:

- Medical Superintendent Chairman
- Dental surgeon
- Hospital Administrator
- Infection Control Nurse Secretary
- Senior Nursing officer in charge
- Laboratory Technician
- In charge Theatre
- In charge Maternity ward
- Contractor of cleaning services

D. Health Centre IV (HSD)

- Medical Officer In charge Chairman
- Nursing Officer
- Infection Control Nurse Secretary
- Clinical Officer
- Laboratory Assistant
- Health Assistant
- Theatre Assistant
- Member Health Management committee
- Public Health Dental Assistant
- Health Inspector

E. Health Centre III

- Health unit in-charge Chairman
- Midwife
- Member Health Management Committee

F. Health Centre II

- Health unit in-charge
- Nursing Assistant
- Member Health Management Committee

Functions of the Committees:

- a) Rapidly identify and investigate outbreak of infection or potentially hazardous procedures.
- b) Monitor infections and methods of their control.
- c) Provide advice on the isolation of patients' with known infectious diseases and preventive measures to stop the spread of disease.
- d) Advise on day-to-day decisions relating to day to day relating to Infection Control. Liaise with staff throughout the unit identifying potential risks of infection.
- e) Monitor, evaluate and implement policies for the prevention of nosocomial infection and its spread.
- f) Develop Information, Education and Communication system for the provision of information to all staff on measures of infection control and proper management of clinical waste.
- g) Approve all chemicals used for disinfection and all methods of sterilization.
- h) Recommend best practices on Infection Control to the National Committee for adoption.
- Conduct monthly meetings on Infection Control practices in the health unit.

Functions of the Infection Control Nurse:

- a) Monitoring Infection prevention and control practice in health facility
- b) Establish existence of outbreak of Infectious disease and take interim control measure.
- c) Notify Consultants / Medical Officer in charge of patient.
- d) Establish and enforce the appropriate measures of control of infection and for treatment of affected patient.
- e) Arrange the follow-up of patients and contacts.
- f) Communicate to Disease Surveillance for epidemiological and management of such outbreak.

UNIVERSAL PRINCIPLES OF INFECTION CONTROL

There are five basic universal principles of infection control:

- -Hand washing
- -Adequate protective ware
- -Proper sterilization
- -Proper sharp disposal
- -Safe waste management

1. PRINCIPLES OF HANDWASHING

Hands are notorious for spreading infection from one person to another and should be washed before and after contact with each patient. Hand washing has been described as the most effective way of preventing cross infection. Patients, family members and health workers shall be instructed in proper hand washing before eating, after toileting and when soiled. The purpose is to remove soil, organic material and transient microorganisms using soap, running water and friction.

Procedure.

A. Routine hand washing:

A minimum of 10 seconds of vigorous rubbing together of all surfaces of the lathered hands using running water is recommended. If hands are visibly soiled, more time may be required. The removal of transient organisms can only be effective if all the surfaces of the hand are washed, regardless of the choice of cleanser.

B. Antiseptic Hand washing

Antiseptics such as 0.5% chlorhexidine and povidone iodine scrub are used when washing hands as above.

C. Alcohol hand rub

Apply 3 – 5 MIs of 70% Ethyl alcohol or Methylated spirit with glycerol and rub hands until dry.

D. Surgical hand scrub:

The procedure is for use prior to surgical or major invasive procedures. The aim is to remove the number of transient *organism* on skin of the firearms as a safeguard against dangers from unobserved punctures on the gloves and seepage through the material of the gown sleeves.

Preparation for scrub procedures

- Remove all jewellery eg. rings, watches, bracelets.
- Adjust headwear to ensure that hair is well covered and that the mask is comfortable.
- > Put on gaggles or face shield
- There should be no open cuts or infected lesions. Cover open cuts with occlusive waterproof dressing
- Sleeves must be short to allow washing to the elbows.
- Keep nails short, clean and without nail vanish.
- Always hold hands above the level of the elbow so that water drips from clean area to unclean ones.
- Once the procedure has commenced, taps and dispenser should only be manipulated using the elbows (foot or knee spray taps being the ideal choice).
- > The procedure should not take less than 5 minutes.
- Use disposable (single use) brush during scrubbing.

Note:

- Soap and soap dispenser should be clean.
- ➤ If plain soap is used, care of soap and soap dispenser is very important as they may act as a reservoir for bacteria if they are not cleaned properly between uses.
- ➤ The normal skins *resident* flora is hardly influenced by hand washing with plain soap and water but can only be inhibited by the use of antimicrobial agents.

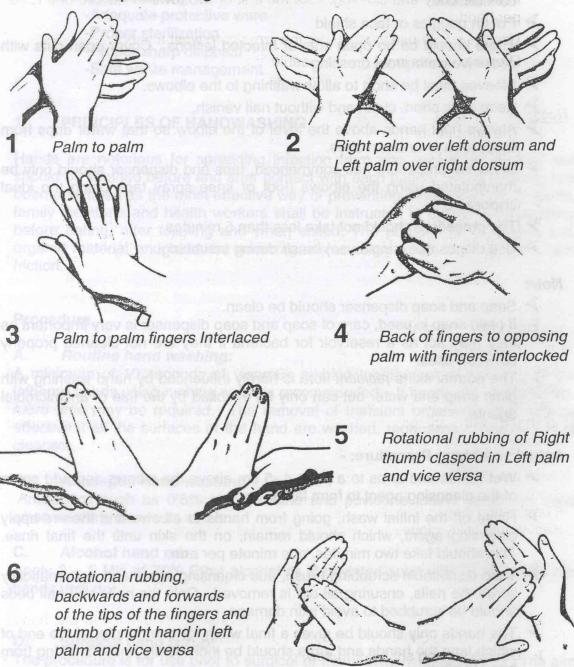
Actual scrubbing Procedure: -

- Wet hands and arms to a point 4 -5 cm above the elbows and add some of the cleansing agent to form lather.
- Rinse off the initial wash, going from hands to elbows and then re-apply cleansing agent, which should remain, on the skin until the final rinse. This should take two minutes, one minute per arm.
- Take disposable scrubbing brush, add cleansing agent and systematically scrub the nails, ensuring all dirt is removed. Only the nails and nail beds should be scrubbed to avoid skin damage.
- The hands only should be given a final wash for one minute, at the end of which time the hands and arms should be individually rinsed working from hand to elbow.

HAND WASHING TECHNIQUE

Wash hands using the following procedure.

Each step consisting of five strokes backwards and forwards.



Continue washing hands and wrists until one minute has elapsed. Repeat a second time for two minutes for pre-operative use. Rinse hands and dry thoroughly.

Drying of hands and arms:

- Dry your hands after every hand wash.
- Continuing keep the hands higher than the elbows, and hold them well out from the body and clothing, take the first of two towels and use one towel per hand.
- Use the single-use towel to dry the arms from wrist to elbow.
- > Drop the towels in waste disposable bin.

Note:

- The principle of hand drying is to remove the film of bacteria suspended in the water by the action of washing.
 - The communal towel has been recognized as a source of cross infection and should be eliminated from the clinical areas.
- Disposable paper or re-sterilized towels are recommended.
 - ➤ Hot air hand dryers can only be used by one person at a time and take twice as long to dry the hands than paper towels. Contamination of the nozzles of hot air hand dryers has been demonstrated to be linked with increased bacterial counts on hands.

2. PROTECTIVE WEAR.

1.0 Gloves:

Well fitting latex gloves should always be worn where contamination of blood/body fluids is anticipated including venepuncture, the giving of injections, cleaning wounds and the changing of dressings. Cover any cuts or abrasions of the hand with an occlusive waterproof dressing and renewed whenever necessary. Always apply a dressing even where gloves are in use.

There are three types of gloves:

- -Sterile surgical single use gloves for invasive procedures.
- -Examination disposable gloves
- -Heavy-duty utility gloves for decontamination and cleaning.

Methods of gloving: -

- Closed method is performed with the hands kept within the cuffs of the gown.
- > Open method is used when changing gloves if it is difficult to pull hands back into the cuff or when a sterile gown is not worn.
- Double gloving should be used.
- In case of changing a glove, a circulating nurse helps to put it on.

The closed method is safer and less likely to result in contamination of the surface of the glove.

Note: -Even if gloves are worn, handwashing is still required.

- -In case of torn gloves, repeat the above procedures.
 - -Always check gloves for damage before use.
- -Use correct size that fits the hand.
 - -Use gloves that are appropriate for the particular procedure.

1.1 Plastic Aprons:

Wear these for all procedures where there is a potential of contamination from the splashing of blood and body fluids including the handling of soiled dressings and used linen from <u>ALL</u> patients.

1.2 Gowns:

In operating theatres and other areas where a patient may bleed heavily, staff should wear water repellant gowns. Gowns shall be worn to protect uncovered skin and to prevent soiling of clothing during procedures that are likely to generate splashes or splays of blood, body fluids, secretions and excretions.

Procedure.

- ➤ Hold the inner surface of the gown at the neck and step back from the trolley, hold the gown from the body and let it unfold, taking care not to let it touch the floor.
- Slip the arms into the sleeves of the gown without bringing the hands through the cuffs.
- > The assistant should adjust the gown from behind.

1.3 Eye / Face Protection:

Should be worn during any procedure that is likely to lead to splashing of blood or other body fluids. Protective eyewear and facemasks should be made fully available and worn where applicable. Alternatively a full-face visor may be used. If the conjunctiva is accidentally contaminated, it should be irrigated thoroughly with readily available sterile water or a sterile saline solution. Any blood or other fluids on the face should be washed off immediately with soap and warm water, and dried thoroughly. Any accidental contamination of the mouth should be removed by rinsing; using copious amounts of water (gaggling) DO NOT SWALLOW.

1.4 Boots:

Wear boots in places where spillage or splash of blood, body fluids, secretions and excretions are anticipated.

Note. Clean boots with soap and water immediately after each use. In case of contamination with blood and body fluids, disinfect.

1.5 Surgical masks: exumped to advantage when a ment distances, in marity and a

Wear mask to protect the mucus membranes of the nose and mouth from splays and splashes of body fluids.

3. STERILIZATION AND DISINFECTION.

Disinfection is carried out to render instruments and surfaces free of most microorganisms for safe handling and use. Bacteria, fungi and viruses are abound as much in the hospital environment as anywhere. Most of these microorganisms are harmless, some are beneficial, but a few can cause disease. The collection together in health units of a number of sick people some with infection, others highly susceptible to infection, has obvious danger.

The disinfection policy is a code of practice, which, if correctly followed, will ensure a clean and safe health unit, where the multiplication and spread of harmful microbes is kept under control.

To be effective it is vital that certain rules are carefully followed when using disinfectants and antiseptics.

- Always measure and never guess the amount of water and disinfectant to be mixed. Too high concentration is wasteful and hazardous, too low is ineffective and defeats the purpose of disinfection.
- Do not mix antiseptics or disinfectants together as this could reduce their effectiveness.
- Observe the minimum contact time for each disinfectant used. No disinfectant or antiseptic acts instantaneously.
- Disinfectants are not recommended for damp dusting unless there is spillage of blood or body secretions.
 - Many disinfectants deteriorate after dilution. Most solutions should be freshly prepared and used at once unless otherwise stated on the label
 - Organic material faeces, urine, pus, blood, milk, will inactivate many disinfectants. Clean before disinfecting where they may be present.
 - All disinfectants should be mixed in the pharmacy and supplied, labeled with concentration and expirely date.

Methods of disinfection.

Special Note: 11.21039-5001d sus 5 19/19 No of building body fluids, the ontario

- As much as possible, single use disposable items shall be used and discarded into appropriate waste receptacles.
- Reusable equipment that has been in contact with a patient shall be cleaned and processed according to guidelines below before use on

another patient. If the previous patient had been judged as highly

infectious, dispose the item.

All equipment soiled with blood or body fluids shall be decontaminated and cleaned to prevent transfer of microorganisms to patients and the environment.

Items that are routinely shared shall be disinfected between patients.

Procedures shall be established for assigning responsibility and accountability for routine disinfection of patient care equipment.

Any equipment sent for repair or service shall be decontaminated first.

Prolonged contact with disinfectants can cause skin irritation. WEAR RUBER GLOVES. Accidental spillage on to clothes or skin should be removed with plenty of water.

All items that can withstand heat should be boiled or autoclaved.

Recommended Methods of Disinfection:

ITEM	RECOMMENDED DISINFECTION METHOD					
Ampoules (glass of plastic also vial and infusion bottle closure)	Swab neck (or closure) immediately before use with a 70% isopropyl alcohol. Allow alcohol to evaporate before opening (15 - 30 seconds).					
Ampoules in theatre	 (a) Swab the whole ampoule with alcohol impregnated swab (ethyl or isopropyl alcohol 70%). (b) Do not store ampoules in disinfectant. (c) Some epidural injections are available double - wrapped from pharmacy. 					
2. Anaesthetic equipment – tubing airways, endotracheal tubes etc.	Use disposables where available otherwise boil those that can withstand heat for 30 minutes. Immerse in 1% hypochlorite for 20 minutes, wash thoroughly and dry.					
3. Baths and basins	Use the available scouring powder, eg. <i>vim</i> , cream, or pastes containing hypochlorite.					
4. Bathwater	Disinfectants need not normally be added to bath water except in outbreaks or cross-infections.					
5. Bedpans, urine bottles, urine collection jugs	-Wash thoroughly with soap and water after emptying, rinse and boil for 20 minutes. If contaminated with blood or other body fluids, first disinfect with 1% hypochlorite, then wash and boilUse a separate jug for each body fluid					
6. Bed Frames The best of lines and	 Use routine washing with soap, water and vim If there are blood spots, use hypochlorites If the patient is infectious, use a phenolic disinfectant (terminal cleaning) 					
7. Bowls no eau ejoled woled aei	Autoclave theatre and dressing bowls. Wash and dry personalized patients' bowls and store inverted					

offed. Them but authoring redom: 1 at other high-risk areas, use 1%	without stacking. Steel jugs should be decontaminated, rinsed and sent to the Central
15 minutes and spot clear after every clear into each time and faunder lately after use.	Sterilizing department. inverted without stacking. On discharge of the patient clean the bowl using a non-scouring disinfectant containing hypochlorite.
8. Catheters	(1) Urinary catheters - use disposables.(2) Cardiac catheter - a disposable catheter is mandatory
and water after use in solition in the solition of the solition water solition in the solition water solition in the solition	(3) Use disposable suction catheters and tubing.(4) Use disposable naso-gastric tubes.
9. Clinical thermometers a good file	- Use isopropanol or 70% ethyl alcohol swab after use and store in dry area.
32 Varinal epoculums State Varinal epoculums State St	- Check manufactures guidelines for electronic thermometers.
10. Crockery and cutlery	Use hot water or neutral detergent eg. <i>Omo, Nomi.</i> Rinse and dry with tea towel.
11. Cytoscopes Sigmoidoscopes, other endoscopes. Of not All 21. 2.0 fills etsnik Aboold fills belsnimsthooeb abiult vit evslootus bns aetunim of not All files and sinks viiliest vibrust on at ever	Wash thoroughly, then unless lens system would be damaged, autoclave. Alternatively, wash thoroughly, rinse and immerse vertically in 2% activated glutaraldehyde solution for a minimum of 20 minutes after cleaning. Between cases, clean with dilute detergent and immerse in glutaraldehyde for the same period. In case of TB, immerse for 3 hrs. Laryngoscope blades: Soak in JIK for 10 minutes Wash with water and soap. Immerse in glutaldehyde 2% for 20 minutes. NEVER pour disinfectant down drains or sinks in an attempt to disinfect. Regular cleaning and flushing is required. In case of blood, use phenolic solutions or
13. Floor cleaning and arood been no vilve	-Mop a little and leave to dry until whole area is
waterproof covers, which should ad with detergent solution, rinsed and covers and /or mattresses if there are ation.	 -Use a two-bucket system – one for soap and water, the other with clean water. -Designate the cleaning materials according to area
aving is not generally recommended. a disposable razor with an artiseptic m as a lubricant.	-In case of blood and body fluids, decontaminate with 5% <i>JIK</i> for 15 minutes then do spot cleaning with
nutes either with povidene iodine nor 5% Chlorhexidine in Isoprepyl or oil, dressing the Vyash siven - bowls and the inveited	Nets, Consening is not allowed in a health care cotting

el buorta apurlae	another is prohibited.					
14. Theatre Floor One was a wad and near the second or	In theatres and other high-risk areas, use 1% hypochlorite for 15 minutes and spot clean after every operation. Use a clean mop each time and launder the mops immediately after use.					
15. Theater Boots	Clean with soap and water after use. If soiled, decontaminate.					
16. Furniture fixtures	Dump dust with soap and water					
17. Walls and Ceilings Will Sens	Walls: cleaned with soap and water weekly or whenever necessary. In case of blood - clean with JIK 0.5 - 1%. Ceiling: In case of blood spillage - clean with JIK 0.5 - 1%.					
18. Incubators	Clean with detergent solution, rinse thoroughly and dry. Wipe with 70% alcohol. In case of water incubator change water daily. Use sterile water.					
19. Instruments (surgical)	- Decontaminate with 0.5 - 1% JIK for 10 minutes - Wash - Dry and					
20. Linen 10 miquies 11 miquies 12 And soap/liupe sitentiagenA 12 violation of sinks in an otam down drains or sinks in an otam down drains or sinks in an otam down draining is blood, use phenolic solutions or otam water – disinfectant notwitted. 12 The to dry until wirels area is bed. 13 The to dry until wirels area is bed.	a) If linen is contaminated with blood / body fluids, decontaminate with 0.5 – 1% JIK for 10 minutes and autoclave. b) If a laundry with hot water exists, wash in the laundry and iron. c) If there is no laundry facility, decontaminate, then wash manually, but put on heavy duty gloves, plastic apron and boots before doing this activity.					
21. Mattresses and Pillows	Cover with fixed waterproof covers, which should always be washed with detergent solution, rinsed and dried. Replace covers and /or mattresses if there are					
22. Razors alle eusent ment control de	Pre-operative shaving is not generally recommended. If essential, use a disposable razor with an antiseptic					
23. Operation sites 7. Leaguests yields beaming berebut of tinu end mort sishes and possible an	Wash for two minutes either with povidone iodine alcoholic solution or 5% Chlorhexidine in Isopropyl or 70% Ethyl alcohol.					

24. Lumbar puncture and minor surgery	Wash skin for two minutes with 5% Chlorhexidine in 70% Ethyl or isopropyl alcohol.
25. Causality wounds nivia ent equel to entioning to no ni ability bod entioning the first terms.	Wash well with 0.05% Chlorhexidine solution or use Povidone lodine antiseptic solution. If wound is necrotic, use hydrogen peroxide. For burns, clean with saline and apply sofratulle.
26. Wound dressings	Use a new set of sterile instruments for each patient.
27. Maternity perineal toilet	Swab area with 1% Chlorhexidine or Cetrimide
28. Urethral catheterization is beneathed as a few forms	Wash the urethral meatus with Chlohexidine / Cetrimide 1%
29. Trolley (dressing)	Use disposable wipe swabs and clean with 1% Chlorhexidine in 150% propyl or 70% ethyl alcohol.
31. Urine bottles	See Bedpans agrada to palibase d
32. Vaginal speculums yd betalugirism eziwnerito'rô' lebet bna sale elle van elle elle elle elle elle elle elle el	 i) Use disposable speculum or decontaminate immediately after the procedure with 5% chlorohexidine for 10 minutes. ii) Wash in detergent and water and steam sterilize in clinic. iii) Wash in detergent and water and return to Central Sterilizing Department
33. Water closet suites	Use Vim or other hypochlorite products to clean water closet pans. Clean seats with detergent and hot water. Always flush after cleaning.
34. Pit latrines and the man and a second se	 All latrines should have concrete slabs Use vim or soap with scrubbing brush wash with plenty of water. Use protective closes when cleaning Cover the hole with clean cover
35. Terminal Cleansing and care and car	 Fumigate with 4% formaldehyde. Close facility for three days. Allow aeration for 12hrs. Clean thoroughly with water and soap and re-occupy.

14 nie 4. xe SHARP DISPOSAL of mile desW

eau a. Definition: Dixerbold & 20.0 dfw liew A sharp is defined as anything, which can puncture or pierce the skin allowing the hazard to contaminate the recipient with the body fluids in or elute on the sharp in question.

2. Sharps would include needles, stitch, cutters, glass slides, intravenous guidelines or any other item, which has been used for an invasive Furn procedure on another individual. This would also include any injury sustained from broken or sharp edged equipment, which has contained body fluids such as glass bottles, drain bottles, and tubing.

b.

Needles MUST NOT be re-sheathed, purposely bent or broken by Handling of sharps elanimating hand, removed from disposable syringes or otherwise manipulated by

All sharps should be disposed of in a safe manner. Needles and Increased with basic and after the processor and after the processor and a second a meets by syringes should be disposed as a single unit into the provided "burn bins". Where the item is large or bulky a large "burn bin" should be of muter b used. All clinical areas where such items are used should have an extra size "burn bin" as standard stock.

All giving sets should be disposed of in the "burn bin".

When carrying sharps such as needles and syringes, they should be carried in a suitable dish. They should NEVER be carried by hand OR passed from hand to hand.

5. At no time should needles or other sharps be carried in pockets. Use vim or soap with scrubbing brush wash with

Handling of burn bins The bins should NEVER be more than $\frac{3}{4}$ full when ready for disposal. 1.

All bins should be clearly labeled with the date, time of sealing and the area they are from. The person sealing the bin is responsible for 2. ensuring those details are on the bin and that it is placed in the appropriate place for collection.

The ordering of "burn bins" and the numbers ordered should ensure that the work area concerned in never without. Sufficient numbers 3.

should be ordered to meet the need of area.

When carried all "burn bins" should be held away from the body to 4. prevent potential sharps injuries.

Disposal of sharps must always be by incineration.

d. Sharps Disposal De Manglupe evidetorg landared vira id eau sexism

Sharps should be handled with extreme caution to avoid injuries during use, disposal or reprocessing. Where possible, all sharps should be disposable.

- 3.1 Needles should not be re-sheathed.
- 3.2 Following use, the needle and syringe remain attached, and are disposed of into sharps container.
- 3.3 If it is necessary to detach the needle eg. Following venepuncture, great care must be taken and the needle placed directly into a sharps container.
 - 3.4 The user must dispose of sharps, needles and syringes promptly after use into the designated puncture resistant container, which are suitable for incineration.
 - 3.5 Dispose of sharps containers when ¾ full, to avoid any risk of injury by inoculation, when disposing of further needles, sharps and syringes. Once sealed, label the place of origin ready for transport to the incinerator.
 - 3.6 Used central venous pressure lines, cannulae etc. must also be placed immediately in a rigid sharps container. Sharp ends must <u>NEVER</u> be removed or the lines cut into pieces. Gloves must be worn when taking down these lines.
 - 3.7 Where available the huddle should be destroyed by zapping (melting).
 - 3.8 Final disposal of sharps must always be by incineration. Where there is no incinerator, sharps should be burnt and the residue buried in a deep pit.

5. HEALTH CARE WASTE DISPOSAL

a) **Definition of clinical waste:** Health Care waste is defined as waste arising from medical, nursing, dental, pharmaceutical, or similar practice, investigation, treatment care, teaching or research which by nature of its toxic, infectious or dangerous content may prove a hazard or give offence unless previously rendered safe and inoffensive.

Such waste includes human, or animal tissue or excretions, blood or other body fluids, drugs and medicinal products, swabs and dressings, instruments or similar substances and materials.

b) Duties and Responsibilities of every health care worker:

It is essential that every Health Care Worker without exception, who handles and disposes of waste to: -

- 1.1 Understands the nature of waste and risks connected with the handling of disposal of such waste.
- 1.2 Understands the colour coded system for bins used for specific types of waste and adheres to it.

- 1.3 Makes use of any personal protective equipment / clothing provided as required.
- 1.4 Is fully conversant with any emergency procedures (including spillages) related to waste handling and disposal in their workplace.
- 1.5 Reports to Infection Control Committee any unsafe or undesirable occurrences with respect to waste disposal.

Responsibilities of Infection Control committee:

- a. They must ensure that there is a heath waste care management plan.
- b. They receive training on waste handling and disposal.
- c. Safe handling and disposal practices are observed and practiced by staff.
- d. All members of their staff receive initial training and written information on waste handling and disposal.
- e. Staff are therefore liable to be disciplined if they are found to be contravening the policy

Segregation of waste:

All waste must be segregated at the point of source in a correct manner by following the colour coded system for bins used for specific type of wastes as follows:

4	V II	D.		ning an grandar
1./00	Yellow	RIU:	in h	for sharps

- Surgical blades and according to leave the land as a
- Needles and blunda amena motivament on
- Broken glass etc.

2 Red bin - for infectious

- used swabs
- eleswas benille- and used dressing materials and in the morning of
 - endocrona ne noused gloves etc. Astrobaphierun Asabem mont priens

3 Blue bin mail - ever for non - infectious in the appropriate and appropriate

- ensuring 4 co d Paper are on existing the first berebuen yellowerd
- left over food
- Such waste includes fullman, offenimel tissue e arower since includes fullman, offenimel tissue e arower.
- islimia to enorminta- ... son P.O.P etc. le dawa expubora isnoibem bins and breaking

Waste storage and transportation:

Develop a waste transportation system. A functional transport system must be in place and suitable for the activity. Containers of waste should be collected for disposal immediately. The bins should be transported when ¾ full, should be well covered. Do not transfer waste from one container to another. Waste should be disposed off immediately. If not possible seal the lids of the containers and store in a designated area.

SAFE HANDLING OF WASTE

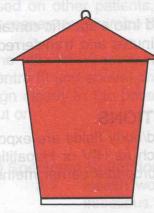
All waste is potentially harmful.

Separate waste at source of generation and put them in their designated colour-coded and labelled bins.



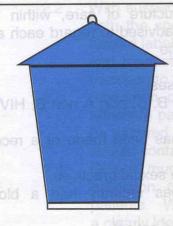
SHARPS

surgical blades needles broken glass etc



INFECTIOUS

used swabs used dressing material used gloves



NON-INFECTIOUS

paper left over food flowers P.O.P etc.

Methods of disposal:

TYPE	METHOD OF DISPOSAL
Non-infectious waste eg. Paper, food remains, unsoiled Plaster of Paris (POP)	Municipal Council Skip / Dumpster or any other gazetted area
2. Infectious / Clinical Waste eg. Soiled dressings and any other waste which has come in contact with body fluids	Incinerate.Burnt ashes to be buried in a deep pit.

Sharps should be incinerated. In the absence of an incinerator the boxes should be burned in a shallow pit and the residual cake buried in a deep pit. Special waste eg. Placenta, Laboratory specimens and blood clots, should be autoclaved before disposal by incineration or liming. Incinerators and disposal sites should be securely fenced off.

Disposal of Laboratory Waste:

Infected or potentially infected material must be packed into a specific container, autoclaved at a minimum of 121 degrees C for 15 minutes and transferred for incineration.

CONTROL OF BLOOD BORNE VIRAL INFECTIONS

Health Care workers who come into contact with blood/body fluids are exposed to occupational risk of blood borne viral infections such as HIV or Hepatitis B. Therefore healthcare workers should routinely use appropriate barrier methods, which will prevent contamination by blood/body fluids.

The aim of these guidelines is to provide a structure of care, within the parameters of infection control. Health workers are advised to regard each and every patient as highly infectious until proved otherwise

Special precautions are necessary in the following cases:

- Patients known to be positive for Hepatitis B, C, non A non B, HIV or 1. Haemorrhagic fevers (Ebola).
- Where diagnosis of acute viral hepatitis has been made or a recent 2. history suggestive of viral hepatitis.
- Known risk activities eg. IV drug use unsafe sexual practices. 3.
- Jaundice occurring in a patient who has recently had a blood transfusion or receiving a blood product.
- Jaundice occurring in an immunosuppressed patient.
- Air borne infections.

Despite the fact that screening tests for hepatitis B prove to be negative, if the diagnosis is consistent with acute viral hepatitis it is recommended that precautions in the collection of specimens, disposal of excreta or any other material should continue to be taken.

Precautions in the management of patients:

In most circumstances the above mentioned patients may be nursed safely on the open ward. However, Hepatitis B surface antigen positive (HBeAg), or HIV patients who have uncontrolled bleeding or any other associated infectious disease must be isolated in a separate room.

a) Isolation

Isolation is the creation of a barrier - mechanical or spacial - to prevent transmission of an infectious disease (spread by contact or air bone) from one patient to another or health workers or visitors.

When it is necessary to isolate a patient or take precautions different from those used on other patients, it should be made clear to him/her that such action is necessary to minimize the risk of infection to others.

The Infection Control Nurse should be informed. All Health units (from health centre III and above) should have isolation rooms or sections. Display a "STOP" sign clearly in the patient's isolation area. Appropriate barrier wear should be put on.

b) Specimen Collection

- 2.1 Health workers are reminded to take each and every patient as infectious.
- 2.2 With suspected or confirmed cases of viral blood borne infections, both the specimen and request card should carry a recognizable hazard label, eg. "DANGER OF INFECTION". The specimen bottle and request card should be placed in separate compartments for transport to the laboratory.
- 2.3 Specimen containers should be labeled, prior to use, with self-adhesive patient identification labels. All caps on containers must be secured and checked for fitting. No Blood or other specimens should contaminate either the specimen bottle or request card.
- 2.4 Gloves must be worn at all times by ALL staff involved in the collection of specimens. Gloves should be changed between patients. While awaiting collection, specimens should be placed in a clearly identifiable designated area.
- 2.5 The specimen should then be placed upright, if possible, in the transport box. Staff should be instructed about the potential danger and know how to deal with any blood spillage or broken tube.

2.6 Inform the Pathology Laboratory of any specimens from suspected or confirmed infectious patients before these are sent.

e) Spillages

- 4.1 If blood or body fluid is spilt either from a container or as a result of an operative procedure, the spillage should be dealt with immediately.
- 4.2 The worker who deals with the spillage should wear appropriate protective clothing.
- 4.3 The spilled blood or body fluid should be completely covered with 1% sodium hypochlorite solution or other chlorine-releasing agent in a towel for 10 minutes before cleaning.
- 4.4 The area should then be thoroughly washed with detergent and water and finally dried.
- 4.5 Dispose the used towel as clinical waste.

*HYPOCHLORITE SOLUTION - used in decontamination

Clean with 0.5% solution of sodium hypochlorite. Body fluids:

(1,000 ppm available chlorine)

Clean with 1.0% solution of sodium hypochlorite. (10,000 ppm available chlorine) Blood visible:

Disposal of clinical waste

- Materials contaminated with blood or other body fluids should be f) immediately discarded into labeled containers and incinerated. 5.1
- Soiled sanitary towels are a potential source of infection; they must always be disposed of correctly. Where possible, patients should dispose of these towels themselves in labeled containers for incineration.
- Patients should be instructed to wash their hands thoroughly and soiled 5.3 skin cleaned carefully.
- Where incineration is not available, the waste should be burned and buried in a deep pit.

g)

- Disposable equipment should be used. This equipment should NEVER be 6.1
- Re-usable equipment following use should be placed in the autoclave drum with bio-hazard tape, labeled "For Disinfection" and returned to 6.2 Central Sterilising Department (CSD). CSD must always be notified of any equipment that is of potential infection risk.
- Any equipment returned to stores for service must always be cleaned, disinfected and accompanied by the appropriate documentation rendering 6.3 it safe to handle. The personnel and bluone has 2 and hoge and know how to deal with any blood spillage or broken tube.

6.4 Equipment, which cannot be autoclaved, eg. Fibreoptic instruments should be cleaned in warm water and detergent rinsed well and then soaked in 2% glutaraldehyde solution for 20 minutes with a final rinse in sterile water prior to use.

Cleaning and disinfection should be performed in a well-ventilated room. Protective clothing must be worn

Prior washing in detergent ensures protein is removed and is not "fixed" to equipment.

Immerse washed equipment in freshly activated 2% glutaraldehyde in a designated closely covered container.

Length of immersion is dependant on the particular piece of equipment being disinfected. Current guidelines are as follows:

Endoscopes	20 minute
Bronchoscopes	20 minutes (1 hour T.B)
Laparoscopes, arthroscopes	3 hours (Sterilized)

Following soaking in glutaraldehyde, remove equipment form solution using an aseptic technique.

Rinse thoroughly in sterile water.

Always follow manufactures' guidelines when using glutaraldehyde solution.

4. Laundry as supplied in horizontal design points. Chemistration of works Vir

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Any linen heavily contaminated with blood/body fluids must be laundered as infected.

(a) Collection and handling

- 1. Soiled linen shall be sluiced. Sold by by the breathought
- 2. Soiled linen with blood, body fluids, secretions, or excretions shall be handled in a manner that prevents skin or mucous membrane exposure, contamination of clothing, and transfer of micro-organisms to other patients and the environment.
- 3. Soiled linen is considered to be contaminated and shall be bagged at the point of origin and placed in the soiled linen container.
- 4. Linen from persons with a diagnosis of viral haemorrhagic fevers (eg. Lassa, Ebola, Marburg) requires special handling.

5. Tender procedures shall indicate special requirements for hospital laundry including the need to provide immunization against Hepatitis B (paid for by the employer).

(b) Bagging and containment:

1. Soiled wet linen shall be placed in strong impervious plastic bags to prevent leakage.

2. Bags shall be tied securely when three-quarters full and transported to the

laundry area.

3. Separate carts shall be used for dirty and clean linens. Carts used to transport soiled linens shall be cleaned with the recommended cleaning product used in the health care facility after each use.

(c) Washing and drying

1. If low temperature water is used for laundry cycles, chemicals suitable for low temperature washing at the appropriate concentration shall be used.

2. High temperature washes (71.1 C) are necessary if cold water detergents are not used.

(d) Sterile Linen:

Surgical gowns and linens used in sterile procedures shall be sterilized by steam after the normal washing and drying cycle to destroy any residual spores. Disposable items for use in sterile procedures may be more cost-effective in some situations. The need for sterilizing linens for nurseries and other areas has not been substantiated.

(e) Colour Coding System:

Red for linen for patients with infectious conditions. Linen shall be disinfected first before placed in bags. Linen shall be placed in a strong impervious plastic bag to avoid leakage on the linen bag.

Yellow for soiled linen. Sluice first before placing in plastic bag then in the

linen bag

White for used dirty linen from wards and departments and for clean linen from the laundry.

Green for linen from special departments such as operating theatre,

labour and delivery ward, to be transported to the laundry.

(f) Protection of laundry workers

1. Workers shall protect themselves from potential cross-infection from soiled linen by wearing appropriate personal protective equipment, such as gloves and gowns or aprons, when handling soiled linens. Reusable gloves shall be washed after use, allowed to air dry, and discarded if punctured or torn.

2. Personnel shall wash their hands whenever gloves are changed or

removed.

3. All care givers and laundry workers shall be trained in procedures for handling of soiled linen.

4. Laundry workers, as other health care workers, shall be offered immunization against Hepatitis B.

i) Last offices

- o The dead body should be recognized as a potential source of infection for the medical and support staff, other patients, and relatives and / or any other persons handling the body.
- Precautions taken when the patient was alive should be continued during the laying out of the body.
- Special precautions must be taken and notification given for persons suspected to have died of highly infectious diseases such as viral hemorrhagic fever, and in case of epidemics.
- o In deaths associated with hemorrhage or heavy blood contamination, a water repellant apron must be worn by all the nurses in addition to other protective wear such as gowns, boots and heavy-duty gloves. Water repellant disposable gowns are advised where possible.
- The body should be moved to a side-room or the bed screened off as the last offices' are being taken care of.
- Minimal cleaning of the body should be performed on the ward.
- Soiled clothing, bed and bedding, floor and walls must be handled as above
- Any open wounds including IV sites should be dressed with waterproof occlusive dressings.
- o Bodies must be labeled by a mortuary tag.
- Death must be certified and mortuary staff be informed immediately and the body must be transferred to the mortuary accompanied by the case file.
- A request for an autopsy must be made for medico-legal cases or may be made for medical reasons. These should be done immediately.

k. The Mortuary:

- All hospitals and HC IVs must have a functional mortuary unit. It must receive bodies at all times.
- The mortuary must have trained staff.
- Mortuaries must also have facilities such as protective gear, running water, adequate ventilation, adequate lighting, cold storage rooms, relevant equipment and logistical support.
- Procedures of disinfection, decontamination and waste-disposal where applicable, sterilisation should be observed in the mortuary as in any other part of the hospital.
- Body parts removed for histology must immediately be fixed in 10% formal saline solution.

In case a person dies of highly infectious diseases, the body and coffin should be sealed by trained persons and supervised burial conducted immediately.

Hospital Care for Patients with infectious diseases:

- a. should be nursed in isolation where necessary
- b. Nursing using protective wear these should be readily available and disposed of immediately after use.
- Counseling should be offered for this patient.
 - d. Patients with chronic infections should never donate blood.
 - e. For patients who need dental care, tooth extraction and other surgical procedures should only be done when infection is cleared.
- f. Patients should avoid unprotected sex.
- Observe regular hand washing and appropriate waste disposal.
- h. Encourage contacting and informing sexual partners where appropriate.
 - Take their medication regularly as prescribed by the doctor.
 - i Abstain from alcohol.
 - k Avoid sharing of sharps like razors, toothbrushes, needles and syringes

Exposure management

Where Healthcare personnel are involved in an incident, eg. Needle stick injury, splashing blood or infected body fluids, biting or scratching, that person is potentially at risk from hepatitis B/HIV, whether or not the patient is known to be infected – since many cases will not have been diagnosed. Certain procedures must then be followed to help the health worker avoid contracting hepatitis B. / HIV

First Aid - Bleed it, wash it, and report it

- Express blood from wound to bleed it.
- Wash exposed area thoroughly with soap and water or antiseptic solutions such as chlorohexidine if available.
- Rinse eye or mouth if contaminated with plenty of water.
 - Report the injury to a senior member of staff or the supervisor or the PEP designated officer of the unit.
- Take antiretroviral drugs recommended for post-exposure prophylaxis immediately these should be started within I hour if possible and at the latest within 72 hours of the exposure (persons presenting after 72 hours of the exposure should also be considered for PEP).
 - Ascertain the HIV status of the patient and the injured health worker after providing appropriate counseling - the standard rapid HIV

antibody tests that are currently used in the VCT program should be used and the results of the tests obtained as quickly as possible.

Depending on the results of the HIV tests the following actions should be taken:

If the source patient is HIV negative no further PEP is necessary for

the exposed health worker.

If the exposed health worker is HIV positive no further PEP is necessary, but the health worker should be referred for further

counseling and management on a long-term basis.

If the health worker is HIV negative and the source patient is HIV positive then continue antiretrovirals for a period of four weeks; repeat health workers' HIV test at 3 and 6 months after the initial test. Should the health worker seroconvert during this period then provide appropriate care and counseling and refer for expert opinion and long term management.

If it is not possible to determine the HIV status of the source patient then assume that the source is positive and proceed according to

guidelines in the previous bullet.

If these facilities are not available refer higher level.

Following discharge of patients

After the patient has been discharged the cubicle and content must be thoroughly cleaned to ensure no risk of cross-infection to the next patient.

i) Collect all cleaning equipment required

ii) Put on plastic apron and gloves

iii) Put all disposable items into safe container for incineration

iv) Fixed mattress and plastic pillow covers - should be cleaned with 1% concentration of hypochlorite solution.

v) Clean bed, cot frame and furniture with 1% concentration of

hypochlorite solution.

Walls and ceilings need only be cleaned if blood is visible, or if recommended by the Infection Control Committee. Floors and surfaces:

- Clean with soap water and JIK 1% solution.

- Chronic infection should be cleaned with phenolic solution.
- vi) Remove apron and gloves, and discard into bag for incineration. Seal bag, remove from cubicle, wash hands in soap and warm water (or hand washing antiseptic), rinse and dry thoroughly.

Shoes must be removed and cleaned thoroughly in 1% hypochlorite solution.

THEATRE PROCEDURE WHEN DEALING WITH INFECTIOUS PATIENT

It is recommended that all health workers especially theatre staff be vaccinated against hepatitis B. Despite vaccination it is still essential that a safe precise practice be carried out at all times to avoid injury from accidental inoculation with blood or blood contaminated instruments, equipment and laboratory specimens.

When a patient with confirmed or suspected blood borne infection and other highly infectious disease is scheduled for surgery, the following procedures must apply.

- i) Disposable gowns and headwear, which are water repellant, should be used.
- ii) Avoid use of equipment which cannot be covered or is not easily decontaminated.
- iii) Wherever possible use disposable linen, drapes and equipment.
- iv) Schedule the patient's surgery at the end of an operating list, allowing plenty of time to ensure that procedures can be followed easily.
- v) Fumigate the theatre after operation.

Preparation of Operating Theatre to receive an infectious patient

- i) Only essential staff should be present
- ii) Remove all unnecessary equipment from the operating theatre.
- iii) Make available extra supplies of sterile gloves for clinical staff and scrub nurse, in the event of puncture or suspected puncture.
- iv) Wear equipment which can be decontaminated easily use polythene sheeting as protection. Encourage use of disposable equipment and attachments.
- v) "Sharps" containers and "sharps' pads should be available for prompt and correct disposal of needles, blades and ampoules
- vi) Use suction bottles with disposable liners. Where not available, pour 100 ml of 1% hypochlorite solution into all suction bottles to be used.
- vii) If a ventilator is to be used, it should have disposable circuit and filters.
- viii) Prepare adequate supplies of 1% sodium hypochlorite solution (10,000 ppm, available chlorine).

1. Procedures During Surgery:

- i) Keep movement into and out of the theatres to a minimum
- ii) A runner should be available in the theatre corridor to avoid the necessity of anyone leaving the theatre.
 - iii) Accidental spillage of blood on the theatre floor should be cleaned and disinfected with 1% solution of hypochlorite. Use granules if available.

iv) All contaminated swaps should be handled with forceps. Once counted dispose of as clinical waste. Gloves must be worn when handling all swabs.

v) Following surgery, all disposable gowns, drapes, equipment and headwear place into the appropriate bag for incineration, which

should be sealed and labeled "Danger of Infection"

vi) Place any specimens in appropriate containers and labeled with "Danger of Infection", which should also be put on the request card.

Place both specimen and request card in separate sections of a double pocket specimen bag for transfer to laboratory.

2. Cleaning and Disposal Procedures, Following Surgery:

Use a disposable suction jar .

Where not available, use re-usable suction jar.

- Fill the jars with adequate amount of 1% hypochlorite depending on size of jar.

At the end of the suction, empty carefully the contents of the jars into the sluice (never be emptied into the scrub sink.)

Disinfect the sluice with 1% sodium hypochlorite, solution.

Dispose of the disposable jar into incineration bay

- Rinse the re-usable jar with hypochlorite then <u>wash with warm</u> water rinse and dry.

(1,000 ppm) and then nased thoroughly with detergent and writer and 60% to

3. Care of Equipment / Instruments used during infections procedure

All Disposable Equipment should be put in bags before being transported for incineration with a "Danger of Infection" red label attached.

Non-Disposable Equipment should be returned to Central Sterilizing Department in an autoclave drum.

Rinse off excess blood, open, jawed instruments.

i) When autoclave is unsuitable, freshly activated glutaraldehye 2% solution, should be used.

ii) Wash instruments in detergent and warm water to remove any protein and then soaked in glutaraldehyde 2% for 20 minutes. Ensure jawed instruments remain open.

Note - if equipment is metal, avoid using sodium hypochlorite as it has a corrosive effect. Instead use glutarldehyde 2% or autoclaving.

iii) Take great care to ensure that equipment is placed in an appropriate bag and sealed prior to transfer to CSD.

iv) Wash all theatres fixtures and fittings thoroughly with a solution of 0.1% sodium hypochlorite (1,000 ppm avcl) - unless blood is visible, in which case, use 1% solution

- vsia broads 1800 (10,000 ppm). Leave for 10 minutes, before being rinsed with water and dried.
- v) Anaesthetic machine and equipment: use disposable equipment. Where available, elephant tubing must be disposable. Autoclave masks and tubes, which are non-disposable.
- vi) All sluices and drainage outlets should be disinfected with a 1% sodium hypochlorite solution, which should be left for 20 minutes before flushing.
 - vii) All personnel should change their theatre clothing at the end of the operation.

Note: *the patient should be allowed to recover on the theatre table and thereafter moved to the isolation unit.

4. Post Operative care of the Patient

Wear disposable latex gloves and plastic apron when accompanying the patient back to the ward. The trolley used to transfer the patient must have disposable plastic sheeting.

After use, wipe down the patient trolley with 0.1% solution of sodium hypochlorite (1,000 ppm) and then rinsed thoroughly with detergent and water, and dried. If blood is visible use a 1% solution (10,000 ppm).

5. Labour Ward - (see also theatre procedure above)

Delivery of patients confirmed of suspected of a blood borne viral infection.

- I. It is advisable that the working team be kept to essential staff who are aware of the hazards.
 - II. Carry out delivery with standard midwifery practice.
 - III. Protective clothing to be worn
 - Disposable sterile water repellant gown.
 - Double gloves must be worn during delivery and whilst handling blood stained material. Elbow length gloves are recommended.
- Mask
 - Eye protection / visor protects against splashing.
- iv) Ideally cotton tapes, ligatures which can be sterilized before use
 Gauze / cotton to be used during the process of delivery should be
 sterilized before use single use
- v) Bulk suckers should be cleaned with soap and water and boiled for 5 minutes then kept dry for next use.
- vi) Clean specialized equipment like vacuum extractors / Manual Vacuum extraction kits according to specified instruments which should be hung on the walls to avoid accidents caused by mishandling.

vii) Women in labour ward should be admitted and when in labour should stay on one bed until discharged.

viii) For special conditions like obstructed labour and ruptured membranes, give appropriate pre-operative treatment according to guidelines. Labour wards should have a separate theatre and laundry so as to minimize infection to clean cases and reduce delay.

ix) Accidental inoculation or injury should be bled by gentle squeezing. Do

not suck, Follow accident procedures sharps / needle stick.

x) During the puerperium, nurses should wear a plastic apron and gloves when attending the mother or infant. After any procedure, gloves should be removed and the hands washed and dried thoroughly.

xi) Instruct the patient to dispose of any soiled sanitary material into an

appropriate container and to wash and dry hands thoroughly.

xii) Make arrangements for strict disinfection of lavatory seats using 1% hypochlorite solution immediately after use where contamination with blood occurs.

xiii) Terminal cleaning - see Procedure for following discharged.

xiv) If surgical intervention is required, refer to specific theatre procedures.

6. POST PARTUM CARE AND INFECTION CONTROL FOR BOTH MOTHER AND BABY

a. NEONATAL CARE:

i) Apply Tetracycline eye ointment – 1% immediately on delivery.

ii) Clean the cord with soap and saline water and mothers should be discouraged from applying powder or any other chemicals on the cord.

iii) Specific intervention depending on the status of the

mother.

b. MATERNAL CARE:

i) Keep the mother on a clean mattress covered with a mackintosh plastic sheeting, which can be easily decontaminated and cleaned.

ii) The health worker should advise the mother to wash her personal belongings, on adequate personal body hygiene and to avoid inserting objects in the vagina.

iii) Provide Family Planning methods with dual protection for both family

planning and preventive of HIV infection.

c. SUCTION MACHINE:

Clean suction machine with 1% sodium hypochloride or Alcohol after every use.

Clean suction bottle as mentioned earlier

- Suction tubbings - Idealy use disposable tubes. If re-useable tubes are used, decontaminate in 2% sodium hypochloride and autoclaved after every use.

Suction catheters must be disposable and single use.

Controlling of gastrointestinal infections

Regard all cases of gastroenteritis or enteritis as infectious until a microbiological cause has been excluded. Barrier - nurse patients admitted to hospital with gastroenteritis, or who subsequently develop symptoms.

PRECAUTIONS:

Isolate the patient first.

- 1. Hand washing: thorough hand washing and drying is the most important factor in preventing the spread of gastro-intestinal infections. This must be carried out by attendants and health workers (doctors, nurses, relatives etc.) after handling patients, their bleeding, clothing equipment and again before preparing or serving food. Patients and attendant must always wash their hands after visiting the toilet, and before meals. Hand towels must not be shared.
- 2. Soiled clothing and bed-linen: should be decontaminated and sent to the laundry in a special container clearly labeled.
- 3. Disinfection: Clean toilet seats, flush handles, wash-hand taps, and toilet doors handles daily or more frequently depending on how often they are used. After use, wipe toilet seats with 0.1% hypochlorite.
- 4. Education: Ensure everyone is educated on personal hygiene and food handling hygiene.

Routine monitoring of the environment Internal:

Unless there is an outbreak of infection routine bacteriological sampling of floors, walls, surfaces and air is rarely indicated. Use the slit sampling technique

Random swabbing of areas of unspecified size will give results, which are not comparable with each other or with previous results and are difficult to interpret.

Air sampling and inspection of ducts are suggested before opening new specializing areas such as operating theatre, areas intensive care, oncology, burns, units etc. or after repairs or maintenance.

External: ement in combinate and process wheelth is end due and an alleged

External health environment can act as a source of disease. It is therefore necessary to ensure that the environment is kept clean and free from pasts and vermin. The following should be done:

- 1. Gazette health unit compound
- 2. Separate the facility from the community by fencing it off.

the Clean studion bottle as many polices as with Intect with Intect virus shall

- 3. Minimize areas of bare soil planting grass and paving walk ways / tarmac roads in order to minimize dust.
- 4. To avoid breeding of vectors:
- keep grass short and plants neat.
- Drain stagnant water and ensure proper drainage.
- 5. Ensure possible sources of vermin are cleared.
- 6. Educate patients on keeping the environment clean through correct waste disposal

Dental clinics

Dental patients and health care workers are more prone to exposure to a variety of microorganisms in the dental clinic and dental laboratory.

Routes of transmission include:

- -Direct contact with blood, oral fluids and secretions.
- -Indirect contact with instruments, equipment and environmental surfaces.
- -Air-bone in droplets and aerosols.

The situation is further worsened by use of high velocity air to drive turbines and hand pieces and the positioning of the patient on the dental chair in very close proximity to the health care worker.

Standard precautions should therefore be observed in dental clinics and laboratories. Hand washing, personal protective wear, handling of sharps waste disposal shall be according to procedures laid down in these guidelines. Environmental surfaces, which are difficult to decontaminate, shall be covered with a disposable fluid impervious sleeve/drape.

Cleaning, decontamination and sterilization of instruments and equipment:

- (i) Critical surgical instruments (forceps, scalers, probes, burs etc.) that penetrate tissue or bone shall be autoclaved routinely between patients
- (ii) Semi-critical instruments (mouth mirrors, amalgam condensers, hand pieces attachments etc.) shall be sterilized after each use according to manufacturer's instructions.

(iii) Non-critical instruments that only come in contact with intact skin shall be decontaminated according to guidelines laid down in this policy.

Dental Laboratory

- 1. Pumice used in the polishing unit should be mixed with water and a detergent added. Change the pumice after the polishing of an old denture.
- 2. Use an appropriate facemask while trimming acrylic denture to avoid inhaling acrylic dust.
- 3. Wash away mucus, saliva and blood from impressions under a running tap. Deep the impression in betamine or other disinfectant to reduce the transmission levels.
- 4. Re-usable impression trays shall be decontaminated cleaned and heat sterilized between patients.
- 5. Prostheses entering the dental laboratory shall be immersed in a solution of o.5% hypochlorite or a high level disinfectant for the recommended time, rinsed and dried before completing the required work.

REVIEW OF POLICY

This Policy shall be reviewed and updated when circumstances dictate or at intervals of not greater than two years.

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Annex 1: DISINFECTANTS CURRENTLY AVAILABLE IN UGANDA

MANUFACTURER	COSMOS LTD	COSMOS LTD	COSMOS LTD	ADAMS HEALTHCARE LTD	KAMPALA PHARMACEUITICAL	INDUSTRIES (1996) LTD	ANICARE P'CALS PRT LTD	WOCKARDT LIMITED, WALUJ	WOCKHARDT LIMITED,	BE-TABS P'CALS (PTY) LTD		
PACK SIZES	1LT, 2.5LT & SLTS	500ML, ILT & 5LTS	ILT, 5LTS	2FT	250 ML	Lisel 1H3) H og SO to HI HI Heldo Hold Lisel	100ML HDPE BOTTLE	100ML & 500ML	200ML GLASS BOTTLE	Si sh	45kg	
DOSAGE	EXTERNAL	EXTERNAL	EXTERNAL	TOPICAL	SOLUTION	EXTERNAL USE	SOLUTION	EXTERNAL	SOLUTION	SOLUTION	SOLUTION	SOLUTION
STRENGTH	5% W/V	20%W/V	li LIOH Spelul oloidu	ospits list Uf eon N thesi	N/N%9	MOH Nsan VIDS Jultan	N/M %9	10% W/V	7.5% W/V	IGM / 100 ML	%02	70%
GENERIC NAME	CHLORHEXIDINE GLUCONATE	CHLORHEXIDINE GLUCONATE	CHLORHEXIDINE /CETERIMIDE	CHLORHEXIDINE /CETERIMIDE	HYDROGENPEROXIDE	Kawo olo ho PI - WO WOH S Coll MOH (N) -	HYDROGENPEROXIDE BP	POVIDONE IODINE	POVIDONE IODINE	POVIDONE IODINE	SODIUM CALCIUM HYPOCLORITE	GLUTARALDEHYDE ETHYL ALCOHOL
DRUG NAME	HEXIDINE 5% CONCENTRATE	CHLORHEXIDINE GLUCONATE SOLUTION	STERILE HOSPITAL CONCENTRATE	HYDREX SURGICAL SCRUB	KAMPEROX	- Pi chs Nu - Chs MOH OOH	HYDROGYEN PEROXIDE	WOKADINE SOLUTION 10% W/V	WOKADINE SURGICAL SCRUB 7.5%	SEPTADINE		

Annex 2

Participants (Name):

- 1. Prof. E. M. Kaijuka 2. Dr. H. G Mwebesa
- 3. Dr. E. Gashishiri
- 4. Dr. J. Amandua
- 5. Dr. Najuka
- 6. Dr. Mijumbi Cephas
- 7. F. Oketcho 8. Mr. Agel
- 9. Mrs. Mary Bwanika
- 10. Ms. Teddy Rukundo
- 11. Dr. A. Mbonye
- 12. Sarah Gudoi
- 13. Dr. E. Agaba
- Dr. Masembe N.V 14. Dr. Mukwenda 15.
- 16. Eng. P. Nakiboneka
- 17. Dr. Dr. Ebaru
- Mr. Sebuliba G.W 18.
- 19. Mr. Anguma A.
- 20. Dr. Godfrey Bwire
- 21. Dr. E. Ekochu 22. Dr. H. Megere
- 23. Dr. Abeja Apunyo
- 24.
- Mrs. G. Were 25. Dr. J. Nabyonga
- Dr. J. Bataringaya 26.
- 27. Dr. Sentumbwe Mugisa
- 28. Dr. E Aceng
- 29. Dr. E Madraa
- 30. Sarah Nakazzi 31. Mrs. Lucy Shillingi
- 32. Dr. Ezati
- 33. Dr. Okello Margret
- 34. Mrs. Nabuloli 35. Dr. Zziwa
- 36. Achieng F. 37. Dr. R Seruyange
- 38. Mrs. C. Mubiru
- 39. Dr. P. Mugyenyi
- 40. Mr. Odongo
- 41. Sr. Winnie Obongo
- 42. Sr. Christine Arula 43. Ms. C. Kageni
- 44. Mrs. M. Chota
- 45. Marcia Roch
- 46. Evelyn Isaac 47.
- Eva Kabwongera 48. Dr. Andrew Namonyo
- 49. Cheptori Florence
- 50. Katende
- 51. Naome Kyobutungi
- 52. Ms. Sarah Kibuuka 53. Dr. N. Bakyaita
- 54. Dr. C. Ssali

Station/Designation.

- -CHS (QAD) - MOH
- -ACHS (QAD) MOH
- -PMO (QAD) MOH -CHS (CS) - MOH
- -Microbiologist Makerere Medical school
- -Consultant Anesthesiologist Mulago Hospital
- -Infection Control Unit Mulago Hospital
- -Consultant Gynecologist Jinja Hospital -Main Theatre - Mulago Hospital
- -Infection Control Unit ACP MOH -ACHS (RH) - MOH
- -Principal Jinja School of Nurses/Midwives
- -PMO (EHD) MOH
- -Mulago Hospital Dept. of Medicine
- -Senior Dental Surgeon Jinja Hospital
- Health Infrastructure Division MOH
- Microbiology Makerere medical School
- -Seni. Mortuary Asst. Mulago Hospital
- -Principal Techno, Mulago Hos. -SMO (Child Health) MOH
- -QA specialist UPHOLD
- -Clinical & Adolescent specialist UPHOLD
- -RH specialist UPHOLD
- -RH (MOH)
- -WHO
- -WHO
- -WHO
- -WHO
- -ACP (MOH) -N/O Nsambya Hospital
- -HIV/AIDS specialist UPHOLD
- Consultant Surgeon Mulago hospital
- Consultant Anaethesiobiology Mulago Hospital - Nurse/Tutor - Jinja school of Nurses and Midwives
- M/S Kawolo hospital
- Kawolo hospital
- UNEPI MOH
- Policy Analysis Unit MOH
- -EPI MOH
- -EHD MOH
- -PNO Mulago Hospital
- -Tutors College Kyambogo
- -HRD MOH
- -CHS (N) MOH
- -JSI
- -WHO / AFRO
- -UNICEF
- -DDHS Pallisa
- -SNO Kapchorwa Hospital
- Mulago Nurses Training School
- -Ag. ACHS (HRD) MOH
- -ECSA CH Arusha
- -MCP MOH
- -CH MOH