



THE AUSTRALASIAN COLLEGE  
OF DERMATOLOGISTS

# **Guidelines for Infection Control in the Practice of Dermatology**

## Table of Contents

Introduction.....	3
1. Standard and additional precautions.....	4
2. Hand washing .....	4
3. Gloves and other barrier protection.....	5
4. Skin preparation.....	6
5. Surgical techniques.....	6
6. Instrument cleaning and sterilisation.....	8
7. Cleaning of work areas and equipment.....	9
8. Disposal of sharps and waste .....	11
9. Spills protocol.....	12
10. Management of clinical waste .....	13
11. Needlestick injury and blood/body substance exposure management.....	14
Appendix 1.....	17
Appendix 2.....	18

## DISCLAIMER

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## Introduction

These guidelines have been formulated to enable dermatologists to minimise the risk of workplace infection being acquired by themselves, their staff or their patients.

For further information Fellows are referred to the NHRMC 'Australian Guidelines for the Prevention and Control of Infection in Healthcare' and RACGP 'Infection Prevention and Control Standards'.

Fellows should take care to comply with state medical practice law as it relates to infection control standards.

It is recommended that each practice develop a manual of protocols to be carried out during all procedures.

## 1. Standard and additional precautions

**Standard precautions are work practices required for basic level of infection control.**

They include the use of protective barriers (gloves, gowns, plastic aprons, masks and eye protection), hand washing before and after significant patient contact, appropriate handling and disposal of sharps and other clinical waste and appropriate reprocessing of reusable instruments and equipment.

**Standard precautions** are recommended for the treatment and care of all patients regardless of their perceived infectious status and in the handling of

- blood
- all other body fluids, secretions and excretions (excluding sweat), regardless of whether they contain visible blood
- non-intact skin and mucous membranes

Standard precautions also apply to dried blood and other body substances, including saliva.

**Additional precautions** are used for patients known to be or suspected of being infected or colonised with epidemiologically important or highly transmissible pathogens which can cause infection:

- by airborne transmission (e.g. M. tuberculosis, measles virus, chickenpox virus); or
- by droplet transmission (e.g. mumps, rubella, pertussis, influenza); or
- by direct or indirect contact with dry skin (e.g. colonisation with MRSA), or with contaminated surfaces; or
- by any combination of these routes.

Additional precautions are designed to interrupt transmission of infection by these routes and should be used in addition to standard precautions when transmission of infection might not be contained by using standard precautions alone.

## 2. Hand washing

- Hand washing is generally considered to be most important measure in preventing the spread of infection. Hands should be washed before significant contact with any patient and after activities likely to cause contamination.
- Gloves should be used as an adjunct to hand washing when contamination of hands with blood or body fluids is anticipated.
- A neutral pH soap should be used for routine hand washing. Liquid soap dispensers with a disposable cartridge including a disposable dispensing nozzle are recommended. If liquid soap is dispensed from reusable containers, these must be cleaned when emptied and dried prior to refilling with fresh soap.
- A surgical hand wash with 4% w/v Chlorhexidine or detergent-based povidone-iodine (0.75% available iodine) or an aqueous povidone-iodine solution (1% available iodine) is

required before any procedure which involves penetration of normally sterile tissues. The manufacturers' instructions should be followed.

- Waterless hand decontamination with an alcohol-based hand rub may be used as an adjunct to traditional hand washing, for example during procedures where multiple hand washing episodes are required.
- Cuts and abrasions on the hands and forearms should be covered by water-resistant, occlusive dressings which should be changed as necessary or when the dressing becomes soiled.
- Healthcare workers with exudative lesions or weeping dermatitis must seek medical advice and must be removed from direct patient care until the condition resolves.

### **3. Gloves and other barrier protection**

#### **Gloves**

- Gloves are worn as a barrier to protect the wearer's hands from contamination or to prevent the transfer of organisms already on the hands.
- Sterile gloves (AS/NZS 4179) must be worn if the procedure involves contact with tissue that would be sterile under normal circumstances.
- Medical examination gloves (AS/NZS 4011:1997) should be used for all procedures that might involve contact with blood, body fluid or mucous membranes.
- For housekeeping activities, instrument cleaning and decontamination procedures, general purpose household gloves are appropriate. These can be washed and re-used but should be discarded when they become peeled, cracked, discolored, torn or punctured.
- Gloves need not be worn for subcutaneous, intramuscular or intradermal injections unless exposure to blood is anticipated.
- Gloves must be changed and discarded as soon as they are torn or punctured, after contact with one individual is complete and before care is provided to another and when performing separate procedures on the same patient if there is a risk of transmitting infection from one part of the body to the other.
- Hands should be washed after removal and disposal of gloves

#### **Masks, face shields and protective eye wear**

- A mask (AS 4381) and protective eye wear (AS/NZS 1337) or a face shield must be worn during procedures where splashing, splattering or spraying of blood or other body substances may occur.
- It must be worn and fitted in accordance with the manufacturer's instructions.

- If re-usable, it is to be cleaned according to the manufacturer's instructions.
- A particulate filter mask (filters 0.3 um particles) is suitable for protection against laser plume.

### **Gowns**

- A fluid resistant gown or apron made of impervious material should be worn to protect the wearer's clothing or skin during any procedure where there is a likelihood of splashes or contamination with blood and body substances.

### **Footwear**

- Enclosed footwear which protects from injury or contact with sharp objects should be worn.

## **4. Skin preparation**

The following may be used for preoperative skin disinfection. The selected agent should be appropriate for the nature and site of the procedure:

70-80% V/V Ethyl Alcohol

60-70% V/V Isopropyl Alcohol

Alcoholic or aqueous formulations of Chlorhexidine (0.5 to 4% W/V)

10% W/V aqueous or alcoholic Povidone iodine (1% W/V available iodine)

Note: 0.5% W/V aqueous Chlorhexidine is recommended for use on facial skin.

Manufacturers instructions regarding the contact time of each antiseptic used should be followed. A minimum contact time of two minutes is usually recommended. Alcohol should not be used for skin disinfection prior to the use of cautery, diathermy or laser.

Disinfectants must be dated when opened and discarded after the designated use-by date.

Sufficient disinfectant for each patient's individual use should be decanted into a sterile disposable container or a container which may be sterilised. The container and any fluid remaining in the container at the end of each procedure must be discarded or the container resterilised.

## **5. Surgical techniques**

**It is incumbent upon Fellows to know their infective status in relation to blood-borne viruses. Fellows should not perform exposure-prone procedures if they are actively infectious with human immunodeficiency virus, hepatitis B virus or hepatitis C virus.**

- Hair should be clipped when necessary **not** shaved.

- Prior to any surgical or operating procedure the surgeon and scrub nurse should decide on the routine for passage of sharp instruments during the procedure.
- The surgeon must avoid placing his/her less dexterous hand in potential danger.
- The diathermy and suction should be placed on the opposite side of the table to the surgeon, thereby ensuring that the assistant does not reach across the table between the surgeon and nurse.
- Sharp instruments should not be passed by hand. A specified puncture resistant sharps tray must be used for the transfer of all sharp instruments. Only one sharp must be in the tray at one time. Hand held straight needles should not be used.
- Needles must never be picked up with the fingers nor the fingers used to expose an increased access for the passage of the suture in deep tissues.
- When suturing, forceps or a needle holder should be used to pick up the needle and draw it through the tissue.
- Hands of assisting staff must not be used to retract the wound during surgery. Self-retaining retractors should be used or a swab on a stick instead of a finger.
- Certain instruments should be avoided unless essential to the procedure, for example, sharp wound retractors such as rake retractors and skin hooks.
- Where appropriate, wound dressings with an impervious outer covering that will contain wound exudate should be used.
- Closed wound drainage systems should be used.
- All blood should be cleansed from the patient's skin after the operation using an aqueous solution of Chlorhexidine (0.05% W/V Chlorhexidine is adequate).
- Sterile drapes should be used where appropriate.
- Syringes used to hold single-use anaesthetic cartridges ("dental syringes") must be sterilised between patients.
- Diathermy and cautery hand pieces must be covered with a plastic sheath which is discarded and replaced between patients.
- Cautery tips must be sterilised after use.
- Single-use diathermy tips must be discarded after use. Reusable tips must be sterilised.
- Special precautions apply to dermabrasion and laser (see Appendix 1).
- Further techniques are applicable to Mohs' surgery (see Appendix 2).

## Cryotherapy

The use of liquid nitrogen during cryotherapy should not allow contamination of the canister, as viruses or bacteria may survive immersion in liquid nitrogen.

When warts are treated with liquid nitrogen spray, the nozzle head should not be brought into contact with wart tissue. If contact has been made, then the nozzle head should be sterilised. Likewise, if a cryoprobe is used, this should be sterilised between patients.

Liquid nitrogen use via a swab stick or other applicator requires that liquid nitrogen be poured into a disposable cup or dish, or one that can be sterilised. The swab stick/applicator should be used for one patient only and should subsequently be disposed of. The cup or dish should also be disposed of or appropriately sterilised.

## 6. Instrument cleaning and sterilisation

(AS/NZS 4815:2001)

Two agents are available to office-based health care facilities to free items from viable organisms.

- A. Moist heat (Steam-under-pressure)
- B. Dry heat

**Currently moist heat in the form of steam under pressure is the most dependable, economical and quickest medium known for the destruction of microbial life. It sterilises by coagulation of protein in the microbial cell.**

The production of items required to be sterile depends not only on the correct medium being selected for the item to be processed and the validation of the sterilisation process, but also on the cleaning and disinfection processes, facility design/workflow, prevention of contamination and effective quality control prior to, during and after the sterilising process.

Fellows should ensure that personnel involved in the cleaning, disinfecting, sterilisation, storage and distribution of items are trained and educated to enable them to correctly undertake any task that they will be required to perform.

## 7. Cleaning of work areas and equipment

Cleaning is a prerequisite to sterilisation.

**If an item cannot be cleaned, it cannot be sterilised.**

Standard precautions should be followed at all stages of handling used items. Appropriate personal protection should be worn such as heavy duty kitchen gloves, fluid repellent masks/eye protection/face shields and fluid resistant aprons or gowns.

### Initial Cleaning

Removal of gross soil may be achieved by dry wiping, damp wiping or rinsing in **warm** running water. Cold water will congeal fatty substances; hot water will coagulate protein. Instruments should not be allowed to dry before cleaning.

### Manual Cleaning

Fill a sink or bowl with warm water and detergent with the concentration recommended by the manufacturer. Mild alkaline detergents with a pH range 8 to 10.8 are preferred over neutral pH detergents in most applications. Dismantle and open all items for cleaning prior to placement in the cleaning solution. Clean instruments by scrubbing with a firm bristled brush, holding instruments low in the sink, preferably under water, to prevent aerosols when scrubbing. For removal of stubborn material or stains use a non-abrasive scouring pad. Push a thin brush down through lumina, holes and valves, rinse in warm to hot running water, dry with a lint-free cloth or in a drying cabinet. Inspect all items prior to further processing.

### Ultrasonic Cleaning

(AS 2773.1 or AS 2773.2)

Ultrasonic cleaners are used to assist in cleaning jointed and serrated stainless steel instruments. They are not suitable for cannulated instruments, plastics, cemented glass syringes or lenses. Ultrasonic cleaners work by subjecting instruments to high frequency, high energy sound waves causing soil to be dislodged from instruments and dropped to the bottom of the tank, or be sufficiently loosened to be removed during the rinsing process.

To operate, fill the tank with cold or tepid water and add the correct amount of detergent as recommended by the manufacturer. Operate the machine to degas the solution. Rinse off blood and other visible soil before immersing the instruments in the water tank. Place the open instruments in a basket, preferably with a solid base and perforated sides, submerge the basket in the water tank, close the lid and commence the cycle. After the specified time remove the basket and rinse the instruments in clean hot water. Inspect instruments prior to further processing.

During use, Workplace Health and Safety precautions must be considered:

1. The machine must have a lid and must not be operated unless the lid is closed.
2. No part of the operator's body should be submerged in the water during operation as this is thought to cause long term arthritic conditions.

Cleaning the ultrasonic cleaner and replacement of the cleaning solution is necessary at least daily or more frequently depending upon usage and thoroughness of precleaning. Performance tests should be performed daily, or when used, according to the manufacturers instructions, and documented. Manufacturers handbooks should be consulted for further information on the use and limitations of ultrasonic cleaning.

### **Steam Sterilisers**

(AS 2182, AS/NZS 4815)

Bench top (portable) steam sterilisers are appropriate for use in office-based practice for the sterilisation of small quantities of small items. They are regulated by the Therapeutic Goods Administration (TGA).

Unpackaged items should be used immediately following sterilisation.

Packaged items should only be processed in a steam steriliser that has a built-in drying cycle. The door should remain closed for the duration of the drying cycle.

Bench top sterilisers that do not have a built-in drying cycle are only appropriate for the sterilisation of unwrapped items.

The manufacturer's recommendations in the operation, monitoring and validation of the sterilisation process must be complied with. An operator's manual should be available in the vicinity of the steriliser at all times.

The following table is used as the recognised international temperature-pressure-time relationship for steam-under-pressure sterilisation.

°C	KPa	Mb	Psi	Holding time (in min) plus safety factor
121	103	1030	15	15
126	138	1380	20	10
132	186	1860	27	4
134	206	2060	30	3

Associated equipment should meet any relevant Australian and New Zealand Standards.

Routine calibration checks, sterilization cycle performance and maintenance of all measuring devices, timers, gauges and displays should be carried out by a skilled person using measuring equipment certified by a recognised certification body such as the National Association of Testing Authorities (NATA).

Penetration time tests shall be performed at the time of commissioning using the largest pack and whenever pack contents or packaging materials are changed.

### **Dry Heat Sterilisers (AS 2487)**

Dry heat sterilisation destroys infectious agents by oxidation.

Dry heat is a simple sterilising process involving heating of the chamber, the air in the chamber and the load, and holding at a high temperature for a long time. It is used for anhydrous items and items sealed within impermeable containers which cannot be sterilised by steam under pressure but can withstand a temperature of 160 C for a minimum holding time of 120 minutes plus penetration time.

This method of sterilisation is less practical in office-based practice.

### **Loading of Sterilisers**

- Prepared labelling systems or non-toxic, solvent-based felt-tipped marking pens and rubber stamps using a similar ink shall be used for labelling packs prior to sterilisation. Labelling shall include batch control data on both packs and bags and the contents if not visible through the pack or bag.
- Hollow wear should be tilted on edge in a draining position – the opening should be against the paper and not the plastic.
- Packs of drapes and soft goods with layers vertical. Racks may be used to allow for adequate separation of packaged instruments.
- Packs of hollow wear and trays of instruments should not be placed above textile packs or soft goods in order to avoid wetting caused by condensation from items above.
- Loading trays should be loosely loaded to capacity.

### **Unloading**

- On completion of the cycle the load shall immediately be removed and a visual inspection made to ascertain that the load is dry and that sterilising indicators have made the required colour change.
- The operator shall check the recording charts or printouts and sign the designated record sheets to indicate that the required parameters have been met or notify the principal of the office-based health care facility if failure of any parameter is detected.
- Loading trays with cooling items shall be kept away from high activity areas.
- Cooling items shall not be placed on solid surfaces as condensation from vapour still within the pack may result.
- Items that have been dropped on the floor, compressed, torn, have broken seals or are wet shall be considered non-sterile and shall be reprocessed.

## **8. Disposal of sharps and waste**

- Needles should not be re-sheathed unless an approved re-capping device is used.
- For dental syringes, where re-sheathing is required, the needle must be properly re-capped, the sheath must not be held in the fingers and either a single-handed technique or forceps or a suitable protective guard designed for the purpose must be used.
- The needle must not be bent after it is contaminated with blood or other body substances.
- Disposable sharps should be discarded in a clearly labelled puncture-resistant container (AS4031:1992).

- These containers must be waterproof and leak-proof with an opening wide enough to allow sharps to be dropped into the container by a single hand operation.
- They should be clearly labelled with black lettering on a yellow background with the 'BIO-HAZARD' symbol printed on the container.
- They should never be overfilled and be securely sealed with a lid before disposal.
- They should be located as close as practical to the area of use and out of the reach of children.
- Reusable sharps must, immediately after being used, be placed in a puncture-resistant container especially kept for that purpose and labelled as such (AS/NZS 4261:1994).

## 9. Spills protocol

Standard precautions apply where there is a risk of contact with blood or body substances. Gloves and protective clothing should be worn.

### Spot Cleaning

- Wipe up spot immediately with a damp cloth, tissue or paper towel. Clean with water and neutral detergent. An alcohol wipe may also be used.
- Discard contaminated materials in accordance with State/Territory regulations.
- Wash hands.

### Small Spills (Up To 10cm In Diameter)

- Cover spill immediately with absorbent material e.g. paper hand towel.
- Place contaminated absorbent material into impervious container or plastic bag for disposal.
- Clean the area with warm water and neutral detergent using disposable cleaning cloth or sponge.
- If contact with bare skin is likely, the area may also be disinfected by wiping with sodium hypochlorite 1,000ppm available chlorine (or other suitable disinfectant solution) and allowed to dry. This is now not considered necessary.
- Discard contaminated materials in accordance with State/Territory regulations.
- Wash hands.

### Spills on carpet should be managed as follows:

- Mop up as much of the spill as possible using disposable towels.
- Clean with a neutral detergent and arrange for the carpet to be shampooed with an industrial carpet cleaner as soon as possible.

## Large Spills (> 10cm Diameter)

- Contain with granular formulation such as kitty litter or granular chlorine.
- Remove absorbed material with scraper and pan.
- Clean with mop and bucket of water and detergent.
- Clean bucket and mop and store dry.
- Discard contaminated materials in accordance with State/Territory regulations.

## Environmental Cleaning

- A neutral detergent should be used for general cleaning. Disinfectants are not recommended.
- Damp dusting is acceptable.
- Work surfaces should be cleaned regularly. Surfaces should be cleaned immediately following spills or when visibly soiled.

## 10. Management of clinical waste

(See NH & MRC National guidelines for waste management in the healthcare industry, 1999; AS/NZS 3816:1998)

Protocols for waste disposal should follow national guidelines or codes of practice and must comply with State or Territory regulations. The following applies to waste management in NSW following Environment Protection Authority Guidelines. It is assumed that other states have similar guidelines.

Clinical waste is waste that has the potential to cause sharps injury, infection or offence. It includes the following: sharps, human tissue (excluding hair, teeth and nails), bulk body fluids and blood, visibly bloodstained body fluids and visibly bloodstained disposable material and equipment.

- Clinical waste should be segregated (i.e. placed in appropriate leak-proof bags or containers) and contained at the source of generation.
- Clinical waste bags must have sufficient strength to contain the waste safely, should not be over filled, should be tied or sealed then stored in a secure place for collection, should not be transported in chutes.
- Clinical waste bags and containers should be yellow with the 'BIO-HAZARD' symbol printed on the bag.
- After daily collection the bags should be kept for commercial disposal in a locked skip bin which is used exclusively for this purpose.
- Contaminated drapes should be kept separate and collected in designated bags for appropriate cleaning. Australian Standard AS4146 provides guidelines for correct laundry practice.

- Sutures are contaminated waste and the cut ends of threads should be treated as potentially infectious material and disposed of in a contaminated waste bag. The same applies at the time of removal of sutures.
- Standard precautions should apply when handling infectious waste.

## 11. Needlestick injury and blood/body substance exposure management

### Reducing the risk of transmission

- Use eye protection and gloves
- Dispose of sharps safely
- Immunise against Hepatitis B

### Post exposure management

#### First Aid

- Skin wounds should be washed with soap and water. Mucous membranes rinsed with water or saline.
- Make risk assessment. If infectivity of source patient is unknown, immediate serological testing should be undertaken after obtaining informed consent. Repeat serology in three months if there is a history of at risk behaviour.
- The injured worker should have baseline serological testing,
- If the source patient is known to be HBsAg, HIV or HCV antibody positive, contact an infectious disease physician immediately for further advice.
- Pregnancy testing should be offered to exposed women of child bearing age if pregnancy status is unknown.

### Post-exposure prophylaxis Hepatitis B

- Test source for HBsAg as soon as possible.
- If **positive**, no further action if injured person is known to be immune (anti HBsAg  $\geq$  10 mIU/mL) or shown to be immune within 48 hours.
- If injured person is not immune, or is of unknown immune status, give HBVlg within 48-72 hours of exposure. HBV vaccine should also be given to workers who have not been immunised. If the exposed person is a known non-responder to HBV vaccination then HBVlg should be given within 48-72 hours.

- HBV vaccine should be given within 7 days of exposure, repeated at 1 month and at 6 months.
- If **negative**, no further action is required.

## HIV

- Observational studies have shown decreased seroconversion rates in those who receive prophylaxis although no random clinical trials have been performed.
- Test source blood for HIV antibodies as soon as possible.
- Test recipient blood. Retest at 1, 3 and 6 months if source is positive or has recently engaged in at-risk behaviour.
- If source **positive**, consult with an infectious diseases/HIV physician as soon as possible for an assessment of the risks and benefits of antiretroviral therapy.
- If a decision is made to commence prophylaxis, therapy must begin as soon as possible after the injury (preferably within 2 hours). It may still be indicated if a longer interval has elapsed and the risk of transmission is thought to be high. Therapy continues for 4 months.
- The appropriate prophylactic regimen depends on the source patient's stage of infection and current and previous antiretroviral therapy.

N.B. The safety of most of the new antiretroviral agents in pregnancy is not known.

## Hepatitis C

- If source **positive**, perform HCVPCR as transmission is less likely if PCR is negative. Repeat at 1, 3 and 6 months.
- Test recipient and retest at 1, 3 and 6 months.
- Consult an infectious diseases physician.
- Other than thorough washing at the time of injury, there is no known treatment that can alter the likelihood of transmission.

Post-exposure counselling and follow up should be undertaken by an infectious diseases physician.

Immediate advice may be obtained from the **NATIONAL NEEDLESTICK INJURY AND OTHER EXPOSURES HOTLINE 1800 804 823**

Health care establishments should have protocols in place for dealing with needlestick and other blood/body fluid incidents involving patients or health care workers. These should include:

- The physician to be contacted
- The laboratory which will process emergency specimens
- The pharmacy which stocks prophylactic medication

An incident report should be completed indicating:

- Date and time of incident
- How the incident happened
- Nature of exposure
- Source details.

## Appendix 1

### Lasers & dermabrasion

- The generation of a potentially infected aerosol plume during laser therapy requires purpose-designed plume-suction which must be safely vented. The plume extractor must be as close as possible to the area of skin being worked on.
- The generation of air borne particulate matter and blood spray during dermabrasion requires the use of shielding to cover the entire face of all staff in the work area, caps to protect the hair from such debris must be worn by all personnel. As much as possible of the area in the vicinity of the procedure should be covered with either disposable or sterilisable drapes.

## Appendix 2

### Moh's surgery

Standard infection control guidelines must be observed during the entire procedure of Mohs' micrographic surgery including the transfer and processing of tissue taken after a cut. Adequate protection must be observed during the transfer to laboratory and cutting up and marking of fresh tissue. The wearing of gloves is mandatory during dressing changes between cuts. All contaminated waste must be disposed of along State-based Contaminated Waste Guidelines.

The following recommendations are designed to allow safe handling of tissue specimens which are all deemed to be potentially infectious.

### Specimen handling

Safety measures are directed toward prevention of cuts, and protection of the eyes, nose and mouth.

### Protective clothing

- Gloves
- Eyeglasses or goggles
- Mask
- Gown

### Technique

- Confine possible bench top contamination to small area.
- Drop mounting medium onto specimen holder plate, and at the appropriate time, add tissue. DO NOT allow dispenser to touch tissue.
- DO NOT create any aerosol in the cryostat chamber.
- Briefly immerse entire frozen section slide in 10% formalin.
- Change gloves, withdraw slide from formalin with clean forceps, and proceed with staining procedure.
- When technical procedure is completed, place residual tissue in 10% formalin to fix thoroughly before it is handled again.

### Decontamination of cryostat

HIV and other communicable pathogens are known to be inactivated by 95% ethanol and 10% formalin. Therefore, 95% ethanol is favoured for the inside of the cryostat. The HIV virus does survive both freezing and drying so decontamination is essential.

- Turn off refrigeration.
- With protective clothing in place, remove the knife from microtome and place it in a pan of 10% Novatain in 95% alcohol for at least fifteen minutes. If a disposable blade has been used, discard in an appropriate sharps container.
- If complete defrosting is desired, pour a small amount of 10% Novatain in 95% alcohol on the floor of the cryostat chamber where water will collect.

- Wipe all exposed surfaces inside and outside the cryostat chamber with a towel or sponge that has been soaked in 10% Novatain in 95% alcohol.
- Replace the knife or use a clean microtome knife from the freezer.
- Turn on refrigeration for return to desired temperature .
- Use Medol disinfectant when pathogen is atypical mycobacterium

### **Clean-up of work area**

Personnel not directly involved with preparing frozen sections and decontaminating the cryostat must also be protected from exposure to HIV and other communicable disease.

- Do not touch other objects in room while wearing contaminated gloves.
- Place instruments in 10% Novatain in 95% alcohol for fifteen minutes, wash well in tap water.
- Wipe bench top with 10% Novatain in 95% alcohol.
- Place all contaminated towels, protective clothing, etc. in biohazard bags. Use separate containers for disposable and re-usable items. Bags **MUST NOT** contain sharp objects.
- Contaminated garments should never be worn outside the frozen section room.
- Wash hands before leaving the area.
- Remove residual tissue shavings from Cryostat chamber by wiping surfaces with 10% Novatain in 95% alcohol.