CONTROL OF INFECTION IN OPHTHALMIC PRACTICE

Risk Reduction Principles

**PEOPLE**

- Consider all patients and staff as a potential infection risk.
- Staff and patients should wash hands with soap before commencing any examination.
- Wash hands with soap before and after every clinical procedure, even if gloves are worn.
- Staff and patients with any broken skin, however small, must wear an occlusive dressing.
- Staff with any known or suspected infection should not have direct patient contact.

**SURGICAL INSTRUMENTS AND DECONTAMINATION PROCEDURES**

- Loaded needle holders: lay point down on trolley and table tops.
- Pass sharp instruments to colleagues with verbal warning and eye contact communication.
- Sharp instruments should not project beyond the surface edge.
- Ensure surgical instruments are thoroughly cleaned before being passed for sterilization or disinfection.
- Choose the appropriate sterilization or disinfection method for the specific instrument.
- Emphasise care of instruments and sterilization and disinfection procedures in training programmes.

**CLINICAL PRACTICE AND SAFETY ISSUES**

- Critically review work practices regularly.
- Include control of infection policies in training programmes.
- Implement and emphasise strict adherence to universal control of infection policies.
- Teach correct hand-washing technique and display a written procedure in all relevant areas (see above right).
- Eye drops and ointments: provide individual containers for each patient.
- Eye dressings: following removal, dispose of immediately by burning.
- Eye shields: if removed from a knowingly infected patient, never re-use.
- Pathological specimens: dispose of needles and blades which are used to obtain corneal and conjunctival material into sharps container.
- Wear rubber boots to protect feet in the operating theatre.
- Wear a plastic or rubber apron under sterile gown if large amounts of blood spillage are expected.
- Wear eye protection and face masks in the operating theatre.
- Wear gloves on both hands for all invasive procedures and if possible check their HIV status.
- Wear heavy duty gloves for all cleaning procedures.
- Clear up any spillages of blood or other body fluids immediately, then:
  - Cover with bleach and leave for 15 minutes.
  - Wipe with disposable paper tissue or cloth.
  - Wash the surface with a clean cloth, detergent and water.
  - Burn all cleaning tissue and clothes.
- Burn or bury soiled materials and other waste.

**HAND WASHING TECHNIQUE**

- Wet hands with clean, preferably running, water.
- Apply soap or cleanser.
- Rub palm to palm.
- Rub back of left hand over right palm.
- Rub back of right hand over left palm.
- Rub palm to palm with fingers interlaced.
- Rub backs of fingers on opposing palms with fingers interlocked.
- Rub around right thumb with left palm.
- Rub around left thumb with right palm.
- Rub around fingers of right hand with palm of left hand.
- Rub around fingers of left hand with palm of right hand.
- Rinse off soap with clean, preferably running, water, and dry well.

**ENVIRONMENT**

- Used needles and other sharps: dispose of immediately into a puncture-resistant container. Make sure plenty are available in all areas where needles are used.
- Never re-sheath a disposable needle. One third of needle stick injuries are reported to occur during re-sheathing.
- If a needle stick injury occurs, remove the glove and instrument from the surgical field. (See below for procedure following a needle stick injury).
- Applanation tonometer prisms (tips only), diagnostic contact lenses, A-scan probes, occluders and pin-holes should be wiped with disposable paper tissue after each use. Store in sodium hypochlorite 1% in a non-metallic pot for 10 minutes, rinse in sterile water and dry before re-use.
- Silt lamp: chin rest, head rim, handgrips and table top should be washed with detergent and water between each patient examination.

In the event of a needle stick injury

- Allow the wound to bleed freely for a few minutes.
- Wash with soap and water.
- Cover with a sterile dressing.
- Note the details, if known, of the person on whom the needle was used, and if possible check their HIV status.
- Report the incident to the person in charge.

The injured person should be examined by a medical practitioner and referred for treatment if HIV transmission is a confirmed risk.

**EQUIPMENT**

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**Remember!**

Control of infection principles must be applied in each and every situation, and not only when infection hosts are known or suspected.

The risk of HIV transmission after a single needle stick injury is small; the overall risk is about 3 per 1,000 injuries. HIV remains the least likely occupational infection to be transmitted, but still causes the most anxiety. Health care workers may become complacent about other serious and more likely risks.

The prion diseases, eg Creutzfeldt-Jakob Disease (CJD), also give genuine cause for concern. CJD is resistant to most sterilization methods. The only guaranteed measure to prevent CJD cross-infection is the use of sterile, single-use disposable instruments.
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  - Burn all cleaning tissue and cloths.
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- Soiled linen: soak first, dispose of the water carefully, and boil the linen before (gloved) hand-washing.

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