Part 3
Infection Prevention and control policies and procedures in routine practice

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Part 2
Infection control
Organisms of concern &
modes of transmission

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Quality Improvement Campaign

Infection control and biosecurity: Infection prevention and control policies and procedures in routine practice

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RCVS Knowledge Trustee

Session will cover

- Creating an Infection Control Group

- Developing a biosecurity policy

- The role of the Infection Prevention and Control Nurse

- Considerations for Infection Control in practice

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The Infection Control Group (ICG)

Representatives from all practice teams

Set realistic goals:

- Protect staff and clients from Zoonotic disease

- Create an optimum environment for patient care where risk of nosocomial infection is minimised

- Demonstrate appropriate infection control and disease surveillance practices

- Provide advice to staff and clients regarding the control and prevention of infectious disease

The Infection Control Group

Remit:

- Develop policies and procedures for biosecurity

- Manage implementation of procedures to ensure compliance

- Report on group activities to rest of the practice

- Develop staff expertise in biosecurity with information and education, champions for infection control within the practice to encourage everyone to take responsibility

Developing a Biosecurity Policy

The policy will include measures specific to the practice that will minimise the risk of transmission of infectious diseases and reduce the incidence of Hospital Associated Infections (HAIs)

- animal to animal

- human to human

- animal to human

The Biosecurity policy

What to include? Will depend on type of practice and will be developed following ICG discussion.

The following can be designed to suit practice requirements :

- Specific goals and remit for the ICG

- Infection Control principles and how these would guide development of policies:

  1. Optimize hygiene-use of standard precautions (hand hygiene, PPE, cleaning and disinfection etc.)

  2. Break transmission- by understanding routes of transmission

  3. Target and refine infection control procedures- through surveillance

  4. Enhance education and awareness

The role of the Infection Prevention and Control Nurse

- Role should be embedded in organisational structure

- Formalise approach to infection control with evidenced based protocol development

- Survey perceptions within the practice and review procedures and protocols

- Surveillance and audit (eg culture and antibiotic surveillance and adherence to protocols such as hand hygiene)

- Education and training

- Adapt and revise protocols in discussion with clinical teams in light of infection outbreak

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Managing Infection Control in practice- optimizing hygiene

- Hand hygiene- single most important factor in minimising the transmission of contagious organisms.

- Every team member should be aware of when hands should be cleaned and adhere to a standard hand hygiene protocol.

- 'Bare arms below the elbow' policy

- Hand rub or hand wash?

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Managing Infection Control in practice- optimizing hygiene
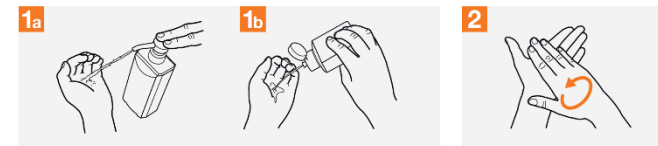
WHO Hand hygiene- 5 key moments

1.   Before touching a patient

2.   Before clean/aseptic procedure

3.   After body fluid exposure risk

4.   After touching a patient

5.   After touching patient surroundings

How to Handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

Duration of the entire procedure: 20-30 seconds

1a / 1b Apply a palmful of the product in a cupped hand, covering all surfaces;

2 Rub hands palm to palm;

3 Right palm over left dorsum with interlaced fingers and vice versa;

4 Palm to palm with fingers interlaced;

5 Backs of fingers to opposing palms with fingers interlocked;

6 Rotational rubbing of left thumb clasped in right palm and vice versa;

7 Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;

8 Once dry, your hands are safe.

World Health Organization | Patient Safety A World Alliance for Safer Health Care | SAVE LIVES Clean Your Hands

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Managing Infection Control in practice-Environmental Cleaning and disinfection

- All areas of the practice-clinical and non-clinical, assess according to risk of infection to determine levels of cleaning required

- Standardised process (if possible one disinfectant/one dilution) with written easy to follow protocols / cleaning schedules- evidence review and update at regular intervals

- Appropriate training, at induction and reviewed

- Protocols readily available for reference

- Checklists to establish routine intervals and compliance

- Monitor efficacy of environmental cleaning:

  – Swab cultures

  – Surface hygiene monitoring with Adenosine tri-phosphate (ATP) monitor to detect residue of organic material

  – Fluorescent markers

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Managing Infection Control in practice- Categorising patients

All patients should be categorised according to clinical condition and risk of infection.

Provides a standardised approach and guides people to where the patients should be kennelled and how they should be nursed (level of PPE)

A simple tier system can be adopted

Managing infection control in practice- categorising patients

Create a document for easy reference include:

- Tier levels

- Definition of patient type within each of the tiers

- Examples of cases / conditions for each tier

- Where in the practice the patients should be housed

- PPE required with further comments regarding nursing considerations

Managing infection control in practice- Wards and Patient care considerations

Wards for different disciplines and isolation facilities

Keep food preparation in a designated area

PPE should be readily available

Appropriate waste management- foot operated bins

Elbow operated/automatic soap dispensers, hand washing sinks

Written protocols for management of cases

Cleaning schedules and checklists

This sink for hand wash only

Managing infection control in practice- Wards and Patient care considerations

When developing cleaning and disinfection protocols for wards consider the following:

- Zoned cleaning if multiple areas/wards

- Fomites- high touch sites within the environment and shared equipment

- Keep surfaces uncluttered

- Cleaning equipment (colour coded, fit for purpose, clean or replace regularly)

- Cleaning technique –double mopping, steam cleaning

- Industrial washing machine for bedding/hot wash, disinfectant in washing machines, separate from theatre attire

- Staff to change into work wear on arrival and change again before leaving

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Managing infection control in practice- the isolated patient

- Ideally hospitalised in designated isolation ward or room (if not possible mark a zone around cage/kennel with hazard tape)

- Written protocols for managing isolated patients

- Separate equipment (colour code bedding/leads)

- Change clothing, appropriate level of PPE

- Separate exercise area

- Label/identify patient but keep written patient notes separate

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Managing infection control in practice – isolated patients undergoing procedures

Plan- where and when should the procedure take place?

Prepare all anticipated equipment (keep to one side)

Keep people to a minimum- all involved to wear appropriate PPE

When moving a patient, assign a 'clean' runner to help (this person will not handle the patient) and move patient on a trolley where possible. If the patient is likely to be shedding an airborne pathogen check the route is clear of other patients first.

If the patient is walked to and from a procedure the floor may need disinfection afterwards

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Managing infection control in practice –isolated patients undergoing procedures

The procedure- if possible the clean runner will not handle the patient but will be responsible for handling clean equipment

If a clean runner is not available ensure gloves/gowns are removed, hands washed and then PPE replaced at appropriate times.

Work in a small area and tidy as you go, discard waste appropriately

Keep used instruments and contaminated equipment separate and label as such to avoid inadvertent use before decontamination.

Leave a sign to mark the area as 'infected' when you have to move the patient, alert others to the risk of infection.

Cleaning- the room should be cleaned as quickly as possible after the procedure and to the level specified by practice protocols, the person cleaning the room should wear the same level of PPE as was worn for the procedure.

Managing infection control in practice-patient skin preparation

Three stage process:

Stage one- Clipping- Clean, undamaged clipper blades

Wide margins, care to avoid clipper rash.

Vacuum clipped hair. Bandage distal limb with cohesive bandage.

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Managing infection control in practice-patient skin preparation

Stage two- Initial skin preparation- wear non sterile gloves, prepare skin **scrub** solution (4% chlorhexidine gluconate and warm water) just in advance of each procedure, use lint free gauze swabs.

Scrub with methodical back and forth motion, starting at the incision site and moving to the periphery, repeat until swabs are clean.

Five minutes contact time

Protect site whilst moving.
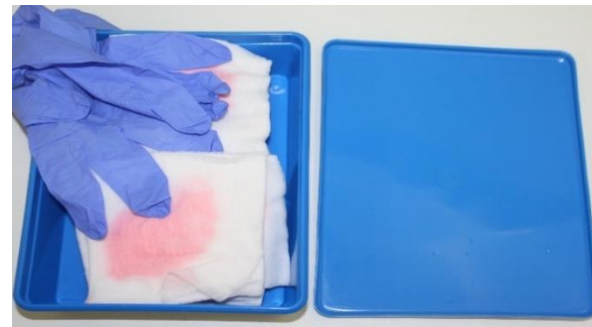
Managing infection control in practice-patient skin preparation

Stage three- carried out in theatre once the patient has been positioned for surgery. With gloved hands repeat the chlorhexidine **scrub** with lint free swabs should this be required.

The final **sterile** skin prep is then carried out using a prepared **solution** of 2% chlorhexidine gluconate and 70% isopropyl alcohol (sterile commercial applicator or sterile sponge forceps) Once dry the area is ready for draping.

Managing infection control in practice- Theatre considerations

- Theatre attire- good practice but limited evidence that non-sterile theatre wear actively contributes to a reduction in surgical site infection rates (McMillan, S (2014), An evidenced-based approach to infection control in the operating theatre. *The Veterinary Nurse* 5(4), 194-200)

- Footwear-non-slip, enclosed and suitable for disinfection

- Cleaning routines, start and end of day and between procedures

- Protocols for managing potentially infected cases

- Surgical safety checklists- ensuring a sterile surgical environment is essential part of surgical safety: sterility of surgical equipment, aseptic surgical technique

- Limit non-essential traffic in theatre area, shoe change lines at theatre entrance

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Managing infection control in practice- Sterile service considerations

Separate areas for instrument decontamination and packing/sterilisation

Protocols to include managing instruments and equipment from infected cases

Packing- use a standardised approach and deliver training

Drying, avoid strike through

Appropriate storage for sterile instruments and equipment

Managing infection control in practice- Diagnostic room considerations

High traffic areas with many fomites, disposable covers allow easier surface disinfection of equipment.

Protocols for set up and shut down of diagnostic areas and case management where an infection risk is increased

Cleaning schedules and checklists

Managing infection control in practice- Waiting area considerations

- Cleaning routines, surfaces to facilitate easy cleaning

- Hand hygiene, training for non-clinical teams

- Fomites –client hand and patient touch areas

- Protocols for managing potentially infected patients

Managing infection control in practice- Offices and other non clinical areas

- Require specific cleaning protocols

- Colour coded cleaning equipment for use in non-clinical and staff room areas

- Consider fomites in these areas too

In conclusion

- Infection prevention and control is a team effort across the whole practice.

- An Infection control group is essential in order to form a consolidated approach

- An Infection Prevention and Control Nurse will ensure evidenced based policies and protocols are appropriate, regularly reviewed and remain effective

Thank you

Coming soon

Part 4: Disinfectant types

More resources at www.rcvsknowledge.org/qi/infection-control

Questions? Email: ebvm@rcvsknowledge.org