



**SAFE PATIENT CARE
CORK 2019
"BUGS AND DRUGS"**

@SafePatientCar1
bugsndrugs

1

Agenda

- Infection Prevention and Control Management
- Standard Precautions
- Hand Hygiene and
- The Environment

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2

Standard Precautions

Standard precautions are designed to reduce the risk of transmission of micro-organisms from known and unknown sources of infection.

These precautions apply to the care of ALL patients at ALL times regardless of their diagnosis or presumed infection status.

They apply to blood and all body fluids (except sweat), non intact skin and mucous membranes.

(Siegal, 2007)



3

Standard Precautions

- Hand hygiene
- Occupational Health Programme
- Use of personal protective equipment
- Management of needle stick injuries / blood body fluid exposure
- Management of blood and body fluid spillages
- Appropriate patient placement
- Management of sharps
- Safe injection practices
- Respiratory hygiene and cough etiquette
- Management of waste and laundry
- Decontamination of reusable medical equipment
- Decontamination of the environment



4

HCWs can assume....

That every person is potentially infected or colonized with an organism that could be transmitted in the healthcare setting.



5

Standard Precautions

- The implementation of SP breaks the chain of infection thus minimising transmission of infection
- However some highly transmissible infections require addition precautions to SP
- These are called??...



6

Transmission Based Precautions

Contact

Person to Person by contact



- MRSA
- VRE
- MDRO
- ESBL
- CPE
- D&V



7

Transmission Based Precautions

Droplet

Person to Person via respiratory secretions



- Influenza



8

Transmission Based Precautions

Airborne

Person to Person via the air



- Tuberculosis (TB)



9

Hand Hygiene

Hand hygiene is the single most important intervention to prevent transmission of infection

EVERY HCW has a responsibility to prevent transmission of infection

(SARI, 2005)



10

WHO 5 Moments of Hand Hygiene



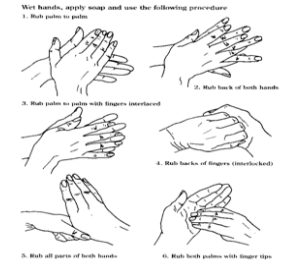
11

Time and Technique

• Ayliffe Technique

• Hand hygiene technique with alcohol rub 20 - 30 seconds

• Hand hygiene technique with soap and water 40 - 60 seconds



"Anything worth doing is worth doing right the first time." ~Unknown



12

Barriers to Hand Hygiene

- Keep nails short and clean to prevent dirt collecting under the nail
- Do not wear false / artificial nails or nail polish (including strengthener), they may allow bugs to collect in chips and imperfections and discourage vigorous handwashing
- Do not wear wrist watches, bracelets or rings other than a plain wedding band, (HPSC 2015)



13

Don't forget the patient...

- Patients should wash their hands after toileting and before meals
- HCW's should assist those unable to perform hand hygiene independently



14

PPE



- Types of PPE:
- Gloves
 - Aprons / Gowns
 - Eye / Nose & Mouth protection

- Select PPE depending on:
- Nature of procedure
 - Risk of blood/BF exposure
 - Risk of contamination



15

Management of Blood and Body Fluid Spillages

- All spillages must be considered potentially hazardous and be dealt with immediately
- Non-sterile gloves must be worn when dealing with all spillages
- Personal Protective Equipment (PPE) – Aprons, gloves, goggles to be worn at ALL times.
- Glass or sharps should NEVER be removed from spillage by hand
- Sharp be removed using forceps or cardboard scoop / Dispose of glass / sharp into a rigid sharps container
- The spill should be contained and further spillage minimised
- Access to the area should be restricted so as to limit exposure



16

Management of Blood and Body Fluid Spillages

Splashes, Drips & Small or Large Spillages

- Remove any gross contamination with a disposable cloth (urine, vomit, faeces)
- Cover the spillage area with paper towels to absorb the liquid (blood)
- Dilution **One 1.7g tablet to 100mls** of water
- Carefully pour the ACTICHLOR PLUS solution over the spillage
- Leave for minimum contact time of **2 minutes**
- Dispose of soiled paper towels into the yellow clinical waste bag
- Using a j-cloth the surface area is wiped with fresh ACTICHLOR PLUS solution as above
- Remove PPE and Wash hands



17

Management of needle stick injury / blood body fluid exposure

Needle-stick

- ✓ Bleed it
- ✓ Wash it
- ✓ Report it



Splash in a mucous membrane

- ✓ Wash it with cold running water
- ✓ Report it



18

Appropriate patient placement

- ❖ Isolation (single) room with en-suite
- ❖ ? Ante room required
- ❖ Negative pressure isolation / HBN04
- ❖ Some patients isolated until diagnosis is confirmed
- ❖ If single room not available, patients with same condition/ strain may be cohorted
- ❖ Patient movement and transfer
 - The patient may be required to wear a mask on leaving the room for a test



19

Waste Management

Healthcare waste is defined as solid or liquid waste arising from healthcare or health related facilities

Categories of Healthcare Waste

- Healthcare Non-Risk Waste (80%)
 - Disposed to landfill ; black or clear bag
 - Potentially contaminated waste such as nappies disposed of here provided the source patient is not suspected of or infected with a transmissible disease.
- Healthcare Risk Waste (20%)
 - Waste that consists wholly or partially of human or animal tissue, blood or other body fluids, excretions, drugs or pharmaceutical products, dressings, sharps
 - Disposed of via heat treatment and pulverisation prior to landfill or incineration



20

Categories of Risk Waste

| Category | Example |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General Infectious Waste | - Blood and items soiled in blood - Contaminated waste from a patient with a transmissible disease - Nappies / pads from patients with known enteric pathogens |
| Microbiological cultures | Specimens and potentially infectious waste from pathology departments |
| Biological | Anatomical Waste |
| Sharps | Any used object that is likely to cause a puncture wound or cut to the skin |
| Radioactive Waste | Materials in excess of authorised clearance levels, classified as radioactive under the General control of Radioactive Substances Order 1993 |
| Chemical Waste | Discarded chemicals and medicines |



21

Management of sharps



Defined as any item that is capable of puncturing the skin:

- Needle
- Scissors
- Scalpel
- Guide wire

- Managed in a manner that prevents injury
- Disposed of immediately at point of use
- Don't fill sharps container >3/4



22

Management of Laundry



- Handling- with care to avoid dispersal of micro-organisms into the environment and to avoid contact with staff clothing.
- Wear appropriate PPE
- Linen skips or baskets
- Alginate or water solvable bags (double bag from isolation rooms)



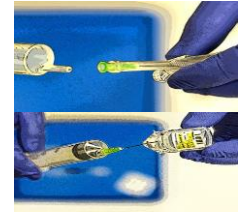
23

Safe Injection Practices (ANTT)

• ANTT is an umbrella term that can be applied to all aseptic procedures from major surgery to IV therapy / wound care

• Key-Parts should never be touched

• If Key-Parts are protected at all times they can't be contaminated by practitioners, contact with other equipment or the air environment.



24

Safe Injection Practices



25

Respiratory Hygiene & Cough Etiquette

- Promote good respiratory hygiene and cough etiquette to staff, patients and visitors
- The focus on this evolved due to the transmission of Severe Acute Respiratory Syndrome (SARS) outbreak in 2003 where many who acquired the disease were HCWs.



26

Environmental decontamination

- **ALL** equipment moving between patients **MUST** be cleaned in between each patient use
- The equipment from non isolation rooms is cleaned with detergent and water or detergent wipes
- Equipment from Isolation rooms cleaned and disinfected with ActiChlor Plus 1.7g/1000mls water
- Equipment with blood or body fluids on it cleaned and disinfected with ActiChlor Plus 1.7g/100mls water. Contact time 2 - 5 mins



27

Survival time on surfaces

Survival Time on Surfaces

- *Acinetobacter* 3 days – 5 months
- *C. difficile* 5 months
- *E. coli* 1.5 hrs – 16 months
- *Enterococcus sp.* 5 days - 4 months
- *Pseudomonas* 6 hrs – 16 months
- *S. aureus* 7 days – 7 months
- HIV > 7 days
- HBV > 1 week
- Influenza 1- 2 days

Kramer, A. et al. BMC ID 2006. 6:130.



28

Decontamination of reusable medical equipment

Medical devices designated as "Single Use Only" must not be reprocessed or reused under any circumstances (MDA DB 2000), (MDD) 93/42/EEC
e.g. needles/ syringes



Reusable Invasive Medical Devices (RIMD)

- Equipment that is classified as semi critical or critical
- In contact with sterile body sites, mucous membranes, breaks in the skin
- Must not be used on another patient until it has been cleaned and reprocessed appropriately
e.g. endoscopy scopes



29

Other considerations

- Screening for MDROs
 - Risk assess for risk factors
 - Pre-assessment screening & decolonisation
- Patient Education
- Staff Education
- Surveillance
- Audit
- Occupational Health Programme
 - Pre employment screening (immunity status e.g. chicken pox)
 - Immunisations for HCW
 - Flu vaccine



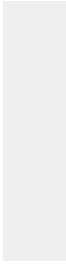
30

Thank You



3

Key points to take home



31

1. Hand Hygiene is no Joke...r



32

2. Infection Prevention and Control is everyone's responsibility

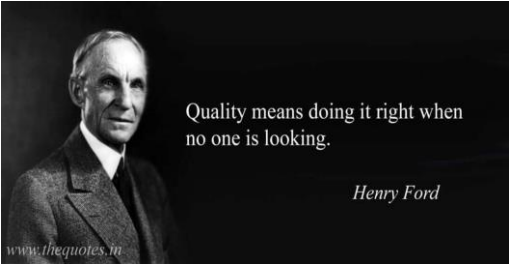


Clean hands save lives.



33

3. Food for thought



34

Useful Websites

- Health Protection Surveillance Centre (HPSC)
<http://www.hpsc.ie/hpsc/>
- Health Service executive (HSE)
<http://hse.ie/eng/>
- World Health Organisation (WHO)
<https://www.who.int/gpsc/5may/tools/9789241597906/en/>
- Centres for Disease Control <http://www.cdc.gov>
- Strategy for the Control of Antimicrobial Resistance in Ireland (SARI)



35
