

Controlling Infection



Madeleine Myers FNP-BC

Core Curriculum Elements



- Professional Responsibilities
- Infection Cycle
- Work Practice Controls
- Barriers and PPE
- Safe Client Care Environment
- Prevention and Control in Health Care Workers

Element 1



Professional Responsibilities Adhering to Standards and Monitoring Others



Sources of Standards

- Board of Regents
- Health Codes
- ANA

Conduct Standards

- Monitoring Others
- Consequences
- Complaints

*Professional Responsibilities Adhering to
Standards and Monitoring Others*



Compliance

- Training
- Adherence to Principles and Practices

Element 2



Infection Cycle



Infectious Agents

- Fungi
- Protozoa
- Bacteria
- Rickettsiae
- Viruses

Infection Control Cycle



Reservoirs

- Animate vs Inanimate
- Acute vs. Carries

Infection Control



Portals of Exit

- Respiratory
- Draining Lesions
- Diarrhea

Modes Of Transmission

- Common vehicles
- Vector borne
- Contact
- Airborne

Infection Control



Ports Of Entry

- Skin, Mucous Membrane
- Airborne
- Invasive Devices

Controlling Routes Of Transmission




- Handwashing
- Use of Barriers
- Disinfection/Sterilization
- Isolation/Cohorting
- Environmental Practices
- Support and Protection of the Host

Element 3



Hierarchy of Controls



- Engineering
- Work practice
- Personal Protective Equipment

Percutaneous Exposures



- Sharps
- Procedures that place HCWs at risk
- Blind suturing
- Sharps
- Bone, metal fragments

Mucous Membrane/Non-Intact Skin Exposures



- Direct contact with blood or body fluid
- Splashes or sprays of blood or body fluid

Parenteral Exposures



- Injection with infectious material
- Infusion of contaminated blood products
- Transplantation of contaminated organs/tissues

Whose at Risk



- Direct care provider
- Assistants
- Ancillary personnel
- Clients/patients

Engineering Controls



Safer devices for needle stick prevention

- Provide protection of the sharp

Splatter shield on medical equipment

Puncture resistant containers

Work Practice Controls



- Avoid unnecessary use of sharps
- Use care-no recapping
- Modify procedures to avoid injury
- Handwashing
- Prompt cleaning of spills

Work Place Precautions



- Standard
- Airborne
- Droplet
- Contact
- Special Respiratory

Standard Precautions



A combination of the old
universal precautions and
body substance isolation

Standard Precautions



- PPE must be used for all patients when exposure to blood and body fluids is a possibility.
- Apply to all body sections and excretions EXCEPT sweat

Some examples Urine, Feces, Vomitus

Airborne Precautions



- Negative Pressure Room/Door Closed
- Adjunctive Measures (UV Light)
- PPE: respirator mask upon entry to room
- Client transport: Limit/surgical mask for client

Ex. of diseases: Measles, varicella, TB

Droplet Precautions



- Private room/cohort
- PPE:surgical mask within 3 feet
- Pt. Transport :limit/surgical mask for pt.

- Ex. Influenza, Meningitis, bacterial
- Meningococccemia, Pertussis, Rubella

Contact Precautions



- Private room/cohort
- PPE: gloves, gowns if pt. or environmental contact anticipated
- Limit transport:gown on pt.
- Dedicated equip: steth, thermometer, BP cuff
- Diseases: Diarrhea, MRSA, Scabies, Lice, VRE

Element 4



Personal Protective Equipment



- Gloves
- Face & Eye Protection
- Cover Garb
- Masks
- Shoe & head cover
- Wound Dressings

Guidance on Proper Usage of PPE




- Proper Fit
- Integrity of Barrier
- Disposable vs. Reusable
- Changing Between clients
- Under/Over Utilization

Element 5



Practices for cleaning, Disinfection and Sterilization



- Contaminated equipment
- Handling & cleaning
- Choice of reprocessing method
- Effectiveness of disinfection
- Effectiveness of sterilization

Cross-Contamination



- Between Patient Cleaning
 - Reuse of disposable equipment
- Touch Contamination

Element 6



Definitions



- Infections disease
- Communicable Disease
- Occupational Health Strategies

Goals of Occupational Health Strategies



- Prevent Disease Transmission
- Protect Susceptible Health-Care Workers

Assessment for Disease Risk



- Pre-employment & periodic check-up
- Immunization/ screening
- Evaluation of acute/incubation illnesses
- Post-exposure management

Prevention and Control of Bloodborne Pathogens



- Risk of HIV, HBV & HVC
- HBV Prevention through vaccination
- Elements of post- exposure management
- Post-exposure prophylaxis
- Post-exposure management of clients or othr HCW when exposed by a HCW