





- Aseptic technique
- Legalities and policies
- Adverse drug events
- Special considerations



# Body Substance Isolation Equipment





# Body Substance Isolation Equipment

 Always take appropriate body substance isolation measures to reduce your risk of exposure during medication administration.





# Medical Asepsis

- Asepsis
  - Condition free of pathogens
- Sterile
  - Free of all forms of life
- Medically clean
  - Involves careful handling to prevent contamination



# Body Substance Isolation Equipment

 Treat all blood and body fluids as potentially infectious.





# Needle Handling Precautions

- Minimize the tasks performed in a moving ambulance.
- Immediately dispose of used sharps in a sharps container.
- Recap needles only as a last resort.



# Seven Rights of Drug Administration

- Right person
- Right drug
- Right dose
- Right time
- Right route
- Right documentation
- Right to refuse at any time





 Knowing all drug administration protocols is essential.





## Medical Direction

- Paramedics do not practice autonomously
- Medical director will determine which medications you will use and by what routes



# Standing Orders

- Standing orders authorize you to perform certain procedures without contacting a physician
  - Most often encountered in settings where patient needs have been defined that can be met competently by a health care provider
  - Example: Registered Nurses on PACU at NHI can admin 0.5mg atropine IV for patients with HR <40</li>
- Not often encountered in the preshopital setting where paramedics work under protocols and guidelines

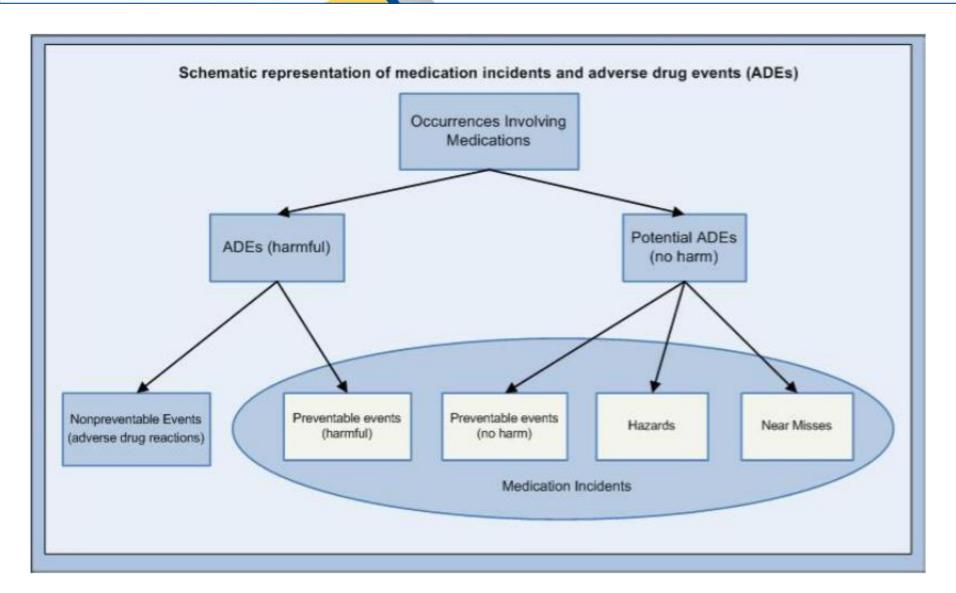


## **Medication Errors**

- Canadian Adverse event study
  - 7.5 adverse events per 100 admitted hospital patients
  - 37% preventable
  - 9,250 23,750 preventable deaths
  - Drugs were the second most common cause of adverse events behind surgery
- Need to move away from a culture and blame and shame to a culture of reporting and learning from our mistakes
- High alert medications have an increased risk of harm when they are used in error
  - Pre-hospital examples of high alert medications
    - Dextrose higher than 20%, amiodarone, epinephrine, neuromuscular blockers
  - In hospital policies often include double checks



## Adverse Drug Events







- Med errors and near misses
  - Institute for safe medication practices (ISMP) Canada (www.ismp-canada.org)
    - Independent, non-for-profit organization committed to advancement of medication safety in all healthcare settings
    - Anonymous reporting tool
    - ISMP reviews and analyzes medication incident and near-miss reports according to a hazard ID tool. They then can use that information to identify contributing factors, causes, and make recommendations to prevent harmful medication incidents
- Medication adverse drug reactions
  - Canada Vigilance collects post-market information through surveillance from reports of suspected adverse reactions to health products marketed in Canada







Healthcare Professional - (e.g., nurse, pharmacist, physician)



General Public Preventing harm from medication incidents is a responsibility of health professionals. Consumers like you can also play a vital role.

SHARE US ...

#### ISMP Canada Activities for the CMIRPS:

- · Reporting Systems for Medication Incidents
- · A consumer medication safety reporting and
- learning program: SafeMedicationUse.ca · Safety bulletins and alerts by ISMP Canada about
- medication incidents and prevention strategies Medication Safety Self-Assessment programs
- · Root Cause Analysis workshops and frameworks
- Failure Mode and Effects Analysis workshops and frameworks
- · Responding to queries on medication safety (email or telephone)
- · Medication safety workshops and webinars

The key partners in the development and implementation of CMIRPS are Health Canada, ISMP Canada. Canadian Institute for Health Information (CIHI), and with recent support from the Canadian Patient Safety Institute (CPSI).

Contact us by sending an email message to cmirps@ismp-canada.org or call 416-733-3131 or toll free: 1-866-544-7672.

Purpose of the CMIRPS

Evaluation of ISMP Canada Activities

Bulletins

PDF Downloads

- . Labelling and Packaging: An Aggregate Analysis of Medication
- Incident Reports
- Evaluation of the Canadian Medication Incident Reporting and
- Prevention System Services provided by ISMP Canada
- Consultation Document: Working with Consumers to Prevent Medication Incidents - A Consumer Reporting and Learning Strategy for the Canadian Medication Incident Reporting and Prevention System
- · Medication Incident Analysis and Learning Framework
- . Roles and Responsibilities for the CMIRP
- . Business Plan for a Medication Incident Reporting and
- Prevention System in Canada
- · CMIRPS Information brochure Joint Publication: Development of the Canadian Medication
- Incident Reporting and Prevention System
- . ISMP Canada CMIRPS Project Charter CMIRPS conceptual systems model
- CMIRPS Core Data Set for Individual Practitioner Reporting

Background Information on the CMIRPS



Health

Canada



Home > Drugs & Health Products > MedEffect Canada

#### MedEffect Canada

Adverse Reaction Database

Adverse Reaction Information

Adverse Reaction Reporting

Advisories, Warnings & Recalls

**Advisory Committees** and Working Groups Health Product

InfoWatch Learning Centre

Resource Centre

Safety Reviews Stav Informed -MedEffect Canada

Explore... Main Menu

Healthy Canadians

Media Room Site Map

Transparency Regulatory

### **Drugs and Health Products**

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Health Product

Canada Vigilance Program

### MedEffect™ Canada Together we can improve health

product safety www.healthcanada.gc.ca/medeffect

The Canada Vigilance Program is Health Canada's post-market surveillance program that collects and assesses reports of suspected

adverse reactions to health products marketed in Canada. Post-market surveillance enables Health Canada to monitor the safety profile of health products once they are marketed to ensure that the benefits of the products continue to outweigh the risks.

The Canada Vigilance Program has collected reports of suspected adverse reactions since 1965. Adverse reaction reports are

submitted by health professionals and consumers on a voluntary basis either directly to Health Canada or via Market Authorization Holders. The following health products marketed in Canada are collected by the program:

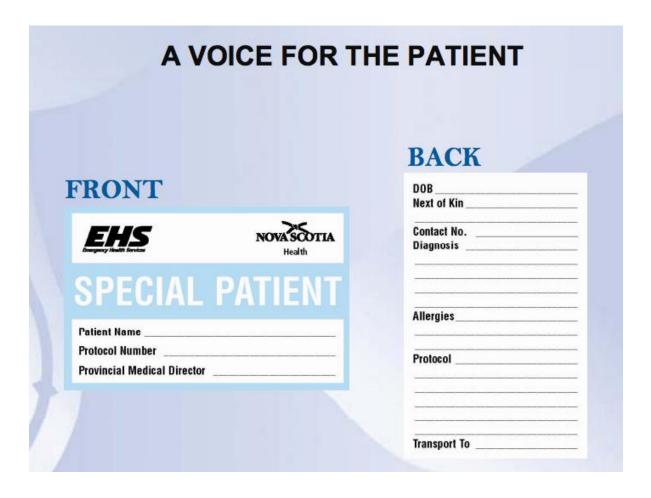
prescription and non-prescription medications, biologics, natural health products and radiopharmaceuticals. The information collected by the program can be accessed through the Canada Vigilance Online Database.

The Canada Vigilance Program is supported by seven Canada Vigilance Regional Offices who provide a regional point-of-contact for health professionals and consumers. Reports are collected by the regional offices before being forwarded to the Canada Vigilance National



# Special considerations

Special patients





# **Special Considerations**

- Drugs that have dosage adjustment requirements for renal or hepatic impairment
  - Most often seen with patients who have altered creatinine clearance
    - Lower creatinine clearance is a sign of decreased function
- Medications that are dosed by weight
  - Some are dose by absolute body weight and some by ideal body weight
  - Often the case with pediatric patients
    - Refer to Broselow tape





- Regardless of the governing body, it is the responsibility of the Paramedic to fully understand the medication they are going to be administering.
- The paramedic must provide the patient with all pertinent information with regards to the medication.
- It is the duty of the paramedic to know the indications, contraindications, dosages, routes of administration, side effects and safe handling techniques for all required medications.