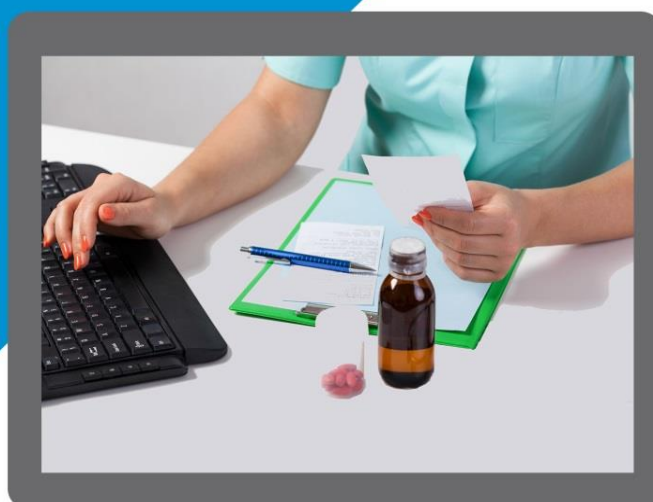


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MEDICATION ADMINISTRATION MANUAL

January
2016



Disability *services • research • enterprise*

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PURPOSE

The manual will:

- Help you recognize and understand your role in medication administration, within your scope of practice
- Provide best practices and safe guidelines for medication administration
- Help you think responsibly and in a confident and safe manner
- Help you understand how to reduce medication errors
- Help you know how to get information

The manual will not:

- Replace or change instructions from a doctor or a pharmacist
- Give information about specific drugs
- Provide specific agency policies and procedures
- Train or qualify you to diagnose

OBJECTIVES

The information in this manual will help you:

- Identify and explain the four steps of the **medication process**
- Understand how communication is an important part of medication administration
- Identify the '**7 RIGHTS**' of medication administration
- Understand the **3-check system** of medication
- Understand **medication errors and incidents** and the difference between them
- Understand standard precautions and infection control
- Understand how drugs work
- Understand what to do in medication emergencies
- Understand the importance of **safe practices** for you and your client
- Define **PRN** (as needed) and the **four judgments** of PRN medication administration

SCOPE OF PRACTICE - Medication Administration

Scope of practice: The roles, functions, responsibilities, and activities which support workers are educated and authorized to perform. A support worker is defined as a designated employee trained to do medication administration.

Competence: Knowledge, skills, attitude and judgment required to safely administer medications and treatments.

Delegation: Assignment of a restricted activity, normally performed by a regulated nurse (Registered Nurse, Licensed Practical Nurse, as defined in the Health Professions Act), to a support worker. The task must meet the standard of 'activity of daily living':

- It is an activity that a client would do on their own as part of daily self-care, if they were able
- The client's needs are stable
- The outcome of the activity is predictable
- The client will not be at risk
- The client or their legal authority approve
- The person assigned the responsibility for the procedure has received instruction from a qualified professional and is authorized to perform the task for this client

Medication administration is a task that is delegated to support workers by the specific agency. The support worker, upon meeting the training requirements for Medication Administration, may:

- Administer oral medications packaged in pharmacy - approved dispensing systems (for example, bubble-pack, dosette, pill bottles, envelope strips, or bottles) bearing a label, which includes the client's name, name of the medication(s), dose, route and schedule
- Administer 'over-the-counter' medications from the original manufacturer's package, according to agency policy
- Apply topical medications, including transdermal patches
- Administer eye, ear and nasal medications
- Administer respiratory medications via metered-dose inhaler, spacer(AeroChamber®), Turbuhaler®, Diskus®, or Diskhaler®
- Administer Epipen® or Allerject® according to a doctor's order and agency policy
- Teach and/or prompt and monitor clients regarding self-administration of medication
- Ensure timely renewal of prescriptions
- Ensure the client has taken the prescribed medication
- Monitor side effects and other situations related to medication
- Document medication administration according to policy and procedure

In addition, the agency may **delegate** and authorize the following medication administration duties to a support worker, who has met **additional training requirements and successfully demonstrated proficiency** in accordance with agency policy and procedure:

- Insert rectal medications including suppositories, creams, or enemas *
- Insert vaginal medications *
- Administer respiratory medication via a nebulizer according to direction from a qualified respiratory technician
- Administer topical anti-lice or anti-scabies medications according to direction from a physician and/or pharmacist
- Administer subcutaneous medication, for example, insulin, by injection and use a glucometer *
- Administer medication via G-tube *

* Training must be provided and proficiency assessed by a qualified professional

COMMUNICATION

- Good communication is important because medication administration is a **shared** responsibility
- You are not alone – you are part of a team and you need to know who the other team members are and what their roles are



ROLES AND RESPONSIBILITIES OF TEAM MEMBERS

The Client

- The **most important person** on the team!
- They have a **right to be involved** because they are directly affected by the medications you give
- They have a **right to be informed what you are doing**, even if you are not sure the client understands what you are saying - this is a matter of courtesy and respect and it is not the same as informed consent
- They tell us how the medication is working – by verbal and non-verbal communication, for example, behaviour, reactions etc.

The Doctor

- Their role is to assess, diagnose, **prescribe**, and coordinate care
- It is important to communicate well with the doctor
 - o What you see – signs and symptoms
 - o Does a drug appear to be working and why?
 - o Report side effects – be specific
 - o Is the client better or worse?

The Pharmacist

- **Dispenses** medications (fills prescriptions)
- **Prescribes** medications only under specific guidelines
 - o The pharmacist must be on the clinical register (as defined in the Health Professions Act) and orientated by the Alberta College of Pharmacists before they are competent and eligible to prescribe
 - o If the pharmacist has the competencies and appropriate information he or she may:
 - ✓ initiate drug therapy for minor, self-limiting or self-diagnosed conditions, or refer the patient to another part of the health system
 - ✓ monitor and refill prescriptions to ensure appropriate and effective care
 - ✓ provide emergency supplies of previously prescribed medication
 - ✓ provide comprehensive drug therapy management in a collaborative health team environment
- Provides education – very knowledgeable specialist
- Communicates the purpose of medications, incompatibilities (undesirable reactions between two or more drugs), and side effects of medications
- Maintains a record of drug allergies
- Maintains a record of reactions and overdose

- Provides information on all drugs a client is taking, including:
 - o Prescription medications
 - o Over-the-counter medications
 - o Herbal medications(refers to using a plant's seeds, berries, roots, leaves, bark, or flowers for medicinal purposes)
 - o Nutraceutical medications (a combination of "nutritional" and "pharmaceutical" and refers to foods that act as medicines)
 - o Provide drug profiles to clients/caregivers
- **It is important and safer to use the same pharmacy to:**
 - o Prevent or decrease the possibility of **drug incompatibilities**
 - o Prevent **overdose**, because they have a complete list of the client's medications and a client drug profile
 - o Maintain a complete **history** about **allergies/reactions**
 - o **Co-ordinate information**, especially if a client sees several doctors, for example, dentists, specialists, podiatrists, etc., all who can prescribe medication

Support Worker

- Assesses, evaluates and documents the effectiveness of medications
- Reports changes, including side effects
- Communicates with other team members to ensure the continuity of care

Legal Authority

- The person with the legal authority to make decisions in this area
- Can be the client, a family member, a guardian
- The Legal Authority is the **only** person who can sign a consent for medication administration
- Must be kept informed
- Support workers need to know who is responsible for communication with the legal authority

Family/Significant Others

- Keep in the communication loop with consent of legal authority. Be aware of what information may be shared and who is authorized to share information
- May be an important relationship to client – may enlist their assistance when there are challenges with medication administration for a specific client only with the approval of the legal authority

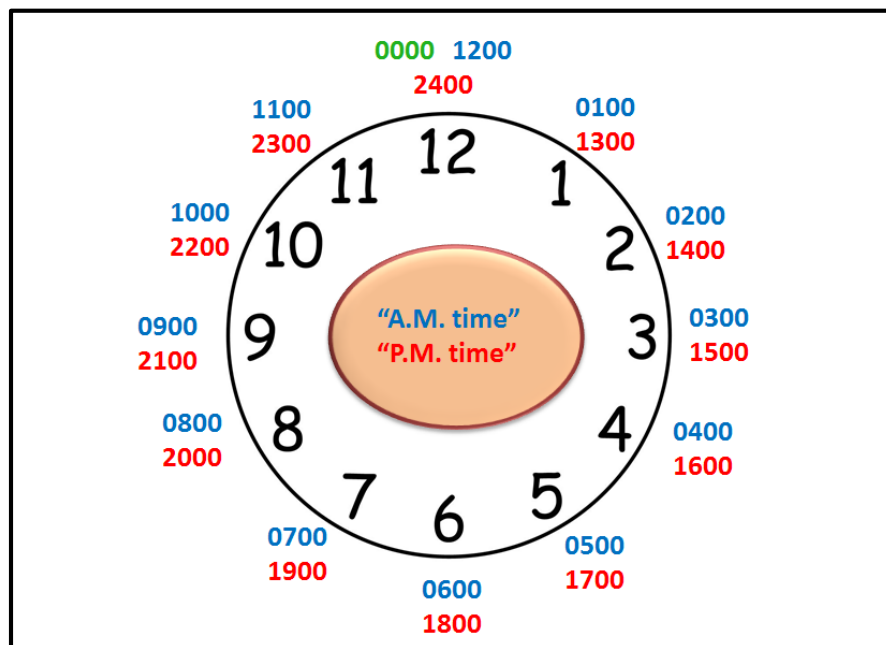
- Remember that your client is their loved one – respect the relationship while keeping confidentiality and the role of the guardian in mind as well
- Other professionals/organizations/agencies who work with a client may be considered team members who it is important to communicate with

FORMS OF COMMUNICATION

- **Written** communication may include:
 - o Forms, for example, Medication Administration Records, Incident Reports
 - o Log notes, contact notes, communication books
 - o Manuals – provide consistent, written guidelines
 - o Policies and procedures
- **Verbal and non-verbal** communication requires close attention and observation and may include:
 - o What you see - client behaviour, physical changes such as rashes or bruising, sign language or gestures (show me)
 - o What you hear – verbal reports or changes in speech, for example, slurring speech, tone of voice, whispering, hoarseness
 - o What you smell- for example, breath, fecal or urine odor
 - o What you feel - such as skin that is clammy or hot to touch

WHAT MAKES COMMUNICATION EFFECTIVE?

- **Clarification** – if you do not understand, or you are not sure that you have been understood, clarify the information
- **Ask questions** – get the information you need
- Appropriate **language** – plain English
- Information has to be **important** to the listener
- Good **listening** skills
- Be **clear and concise**
- Written communication should be **legible (easy to read)**
- Avoid use of standard accepted **abbreviations** – use terms in full to avoid confusion (see Appendix 2)
- Use the **24 hour clock** to reduce risk of error



POLICY AND PROCEDURE

- **Policies** – a guide or plan for carrying out the philosophy of the organization (what and/or why you do something). Another word for policy is **rule**

For example:

- o An employee must successfully complete an approved medication administration course and demonstrate proficiency before they are authorized to administer medications to clients.

- **Procedures** – written instructions that tell you how to carry out the policy. They tell you **how** to do your job.

For example:

- o How to give medications from a bubble pack or how to administer eye drops

KEY POLICIES AND PROCEDURES FOR MEDICATION

ADMINISTRATION

Consent:

- Must be signed by the legal authority
- Format may vary depending on whether the client or someone else is the legal authority
- May be renewed according to time frames determined by the agency

Doctor's Orders:

- Communicate the doctor's treatment plan for the client
- Must be reviewed at least once a year
- A complete, unaltered prescription label may be accepted as a doctor's order because a written prescription was required to dispense the medication

Emergency Telephone Orders:

- Agency policy must be clear and followed to the letter
- **Best and safe practice:** Include requirement for written or fax confirmation of the order

Standing Orders:

- Have traditionally been on an "as needed" or PRN basis for over-the-counter medications in anticipation of future, non-emergency medical issues such as coughs, nausea or seasonal allergies
- Do not address the client's condition at the time they are prescribed
- Do not reflect best practice of prescribers and are not recommended

Over-the Counter (OTC) Medications:

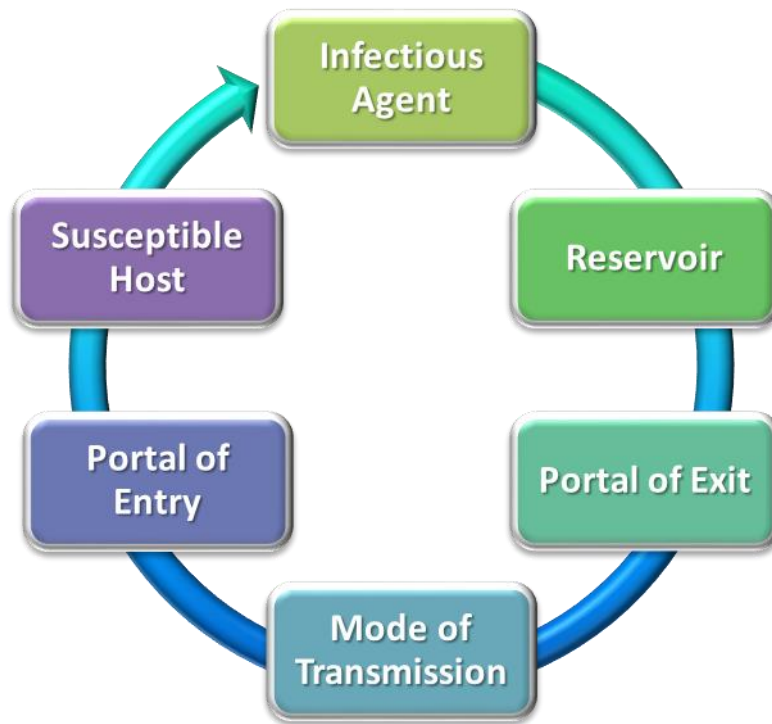
- Include non-prescription medications, herbal medications, vitamins, natural health and nutritional supplements
- Are intended for short-term use only (2-3 days) unless regularly prescribed by physician
- Can only be administered with a signed consent

- May be administered without a doctor's order only if agency policy is clear
- **Best and Safe Practice:** *Consult with a pharmacist before considering an over-the-counter medication*

Injections:

- You may have an assistance role such as cuing a client
- Exception: Administering an EpiPen® or Allerject® auto-injector for life-threatening allergic responses with training by a qualified professional
- You may not give other injections, such as insulin, without additional training by a qualified professional

INFECTION PREVENTION AND CONTROL



The Chain of Infection

- A model used to understand the infection process is the **chain of infection**, a circle of links, each representing a piece of the cycle
- **Each link must be present and in a specific order** for an infection to occur. The links are:
 - **Infectious agent** – An organism with the ability to cause disease. They are bacteria, virus, fungi and parasites (germs)
 - **Reservoir** - A place where the germ can thrive and reproduce, for example, human beings, animals, and inanimate objects such as water, table tops, and doorknobs

- o **Portal of exit** - A way for a germ to leave the reservoir, for example through the nose or mouth, when someone sneezes or coughs, or by feces from an infected bowel
- o **Mode of transmission** – How the germ moves or is carried from one place to another. The hands of a care worker may carry bacteria from one person to another
- o **Portal of entry** - How the germ enters the host, such as body openings (mouth, nose), mucus membranes, or breaks in the skin
- o **Susceptible host** - A person who cannot resist a germ invading the body, resulting in infection because they lack immunity or physical resistance to the germ

Breaking the Chain of Infection

The specific **clean techniques** involved with medication administration include:

- Hand hygiene is the most effective way to prevent the spread of communicable diseases and infections. Wash hands or use hand sanitizer for 20-30 seconds:
 - o After touching blood, body fluids, secretions, excretions and contaminated items
 - o After removing non-sterile surgical gloves
 - o Before and after preparing medication
 - o Between client contact
- Use of non-sterile surgical gloves for contact with:
 - Blood and other body fluids, secretions and mucous membranes
 - Broken skin
 - Contaminated items

- Use of other barrier devices, such as masks, gowns or goggles
- Housekeeping techniques to be sure work spaces, medication storage and surrounding areas are as clean as possible
- Appropriate and safe waste disposal methods, such as double bagging contaminated material
- Maintain clean equipment and avoid contact with sources of contamination, for example, avoid touching droppers to body tissue or placing bottle caps on contaminated surfaces
- Follow policies, procedures and guidelines for standard precautions

Prevention and Control of Infection

- The practice of medical asepsis and standard precautions provide techniques for destroying or containing pathogens and for preventing contamination to other people
- There are **four categories** of infection control measures
 1. Medical Asepsis
 2. Standard Precautions
 3. Universal Precautions
 4. Body Substance Isolation

Medical Asepsis (clean technique)

- The practice of **medical asepsis** helps to control infectious organisms and reduce contamination
- The techniques used include **hand hygiene, gowning** and wearing facial **masks** when required, **separating clean from contaminated** materials and providing **information** about basic hygienic practices

Appropriate hand hygiene remains the most important factor in preventing the spread of microorganisms

Standard Precautions

- **Combine universal precautions** and **body substance isolation** to situations that require **barrier techniques** that are used where **possible** contact with **blood or body fluid** exists
- Although universal precautions are often referred to in infection control situations, **standard precautions are best and safe practice** in the disability services field.
- Consistent practice of standard precautions will reduce the level of risk to the individual

Universal Precautions

- Help control contamination from **viruses carried in the blood (blood borne)** such as HIV and hepatitis
- When in contact with a client's blood or other body secretion that may be contaminated with blood, protective measures such as wearing gloves, gown, mask, and/or goggles must be used
- When cleaning body fluids off surfaces wear proper protective clothing such as rubber gloves, for example
- Spray hard colourfast surfaces with a bleach solution (1:9 concentration). Let sit for 5 minutes and wipe with a clean cloth
- Spray cloth or non-colourfast surfaces with a disinfectant spray such as Lysol® Spray, according to manufacturer's directions
- Wash all cleaning supplies, such as rags, mops, rubber gloves etc., that have contacted body fluids in a bleach solution, or dispose of properly
- Contaminated linen/clothing must be washed in a separate load with bleach added to the water. If it is sent out to be washed, it must be bagged separately and marked 'contaminated'
- Garbage that is contaminated must be double bagged – placed in one bag, tied shut and then placed in a second bag that is also tied shut
- Dispose of contaminated sharps, such as needles and lancets using appropriate safety measures

Body Substance Isolation

- Prevents the contamination of the worker and the client from infected body fluids (feces, phlegm, mucous, urine, pus)
- **Gloves** - for contact with moist body surfaces and areas of non-intact skin (open areas such as sores, cuts)
- **Gowns** - when in contact with body secretions
- **Facial mask** - when in danger of contact with respiratory droplet secretions

NOTE: Infection control measures can limit contact between the worker and client.

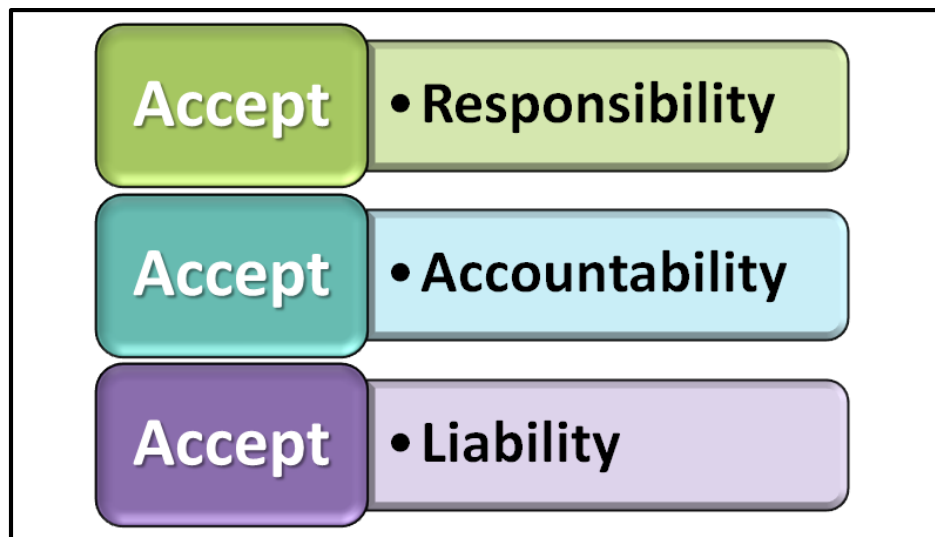
- This may cause a client to feel 'dirty' or contaminated and can result in feelings of loneliness and interfere with emotional support
- Knowledge of the infectious agent allows a worker to use protective measures and provide appropriate contact within safe limits
- For example, nurses wear barrier gloves when handling moist body secretions. However, holding a hand without the barrier glove to provide psychological comfort is, in most situations, acceptable and important as well

See Infection Control Procedures: Appendix 3

MEDICATION ADMINISTRATION PROCESS

When you are authorized to administer medication you accept:

- responsibility to use best practices, safe procedures and follow medication administration policies and procedures
- accountability for your actions
- liability (legal responsibility) for medication errors



Administration of medication is a **4-step process**. It is not a single action. The **4-steps** are:

1. **A**ssessment
2. **I**mplementation
3. **E**valuation
4. **D**ocumentation

Assessment

This is the **preparation** or “**getting ready**” step. The depth of assessment is determined by individual:

- Values
- Beliefs
- Educational background
- Experience

1. Data collection

- Ask questions before giving medications
- Get the facts
- Review client information and history

2. Know your client

- Ask questions before giving medications
- Understand the needs of the client
- Review client information and medical history
- Respect religious and cultural beliefs
- Consult with others such as a doctor or family member, if appropriate

3. Identify knowledgeable resources

- Ask questions before giving medications
- Team members such as a nurse, co-workers, supervisors, pharmacist or doctor

- Policy and procedure manuals, Compendium of Pharmaceuticals and Specialties (CPS), client profile, MAR (medication administration records), product monographs
- External resources – Health Link (**811** in Alberta and NWT, PADIS (Poison and Drug Information Service)
Note: for complete listing of Poison Control Centres in Canada <http://www.capcc.ca/en>
- Reliable internet resources identified in consultation with a pharmacist

4. Understand the purpose and effect of the medication

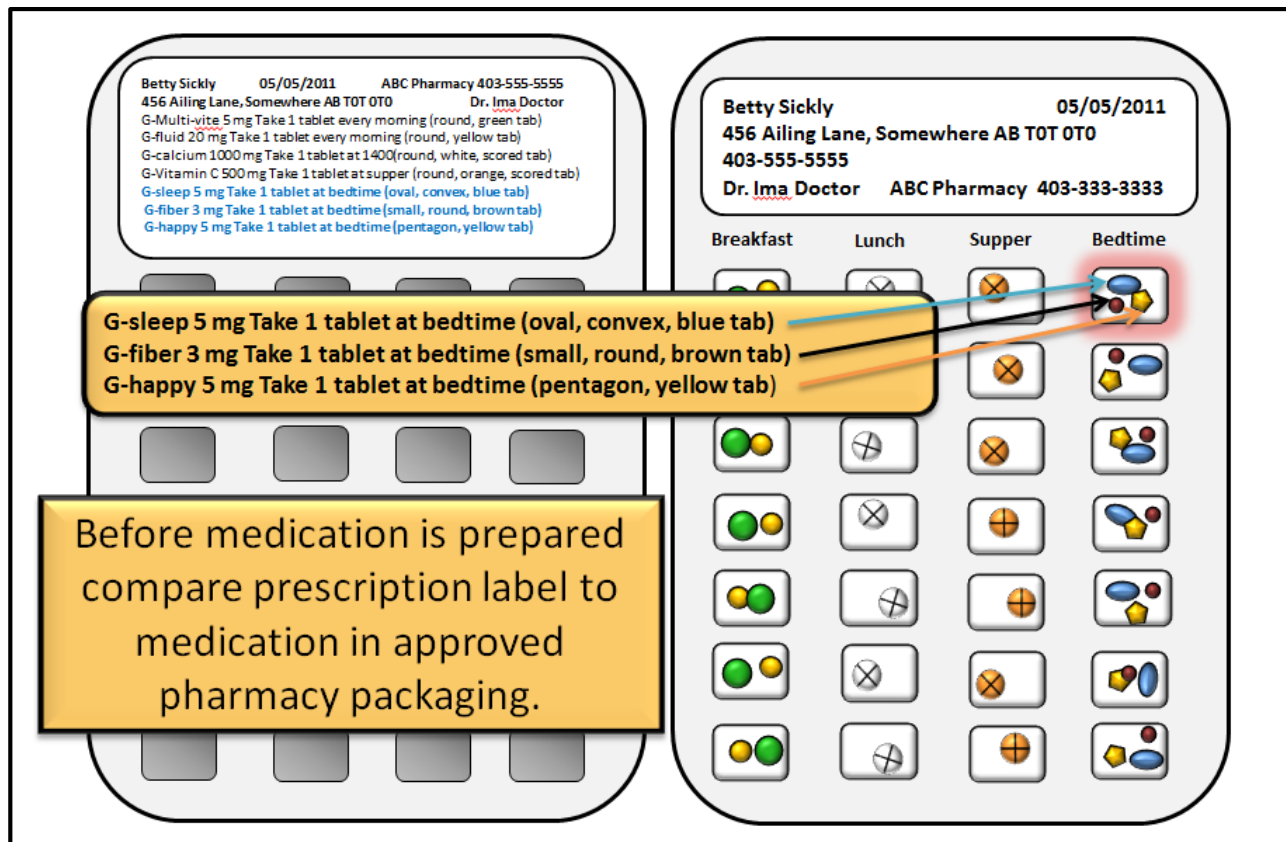
- Ask questions before giving medications
- Refer to the client's drug monograph (a written summary of key information about a medication including reasons it is prescribed, side effects and precautions)
- What is the medication prescribed for? For example, seizures, depression or behaviour
- What should you see? For example, a medication is prescribed for anxiety: you should expect to see decrease in anxiety

**Assessment is the step where you:
QUESTION? QUESTION? QUESTION?**

Implementation

This is the step where you give the medication or the “**doing**” step.

1. Always follow the **3-check system**. Failure to follow the **3-check system** is the #1 cause of medication errors!
 - **First Check:** Before medication is prepared compare the prescription label to the medication in the approved pharmacy packaging



- **Second Check:** Compare the prescription label to the Medication Administration Record before preparing the medication

The diagram illustrates a medication administration station. At the top left, a prescription label for Betty Sickly lists various medications and their dosages. A yellow callout box highlights the instruction for G-calcium 1000 mg. Below this, a Medication Administration Record (MAR) table is shown with columns for Medication, Time, and two columns for administration (1 and 2). The table is partially filled with the medication name, dosage, and time (1400). A blue arrow points from the callout box to the medication entry in the table.

Prescription Label:

Betty Sickly 05/05/2011 ABC Pharmacy 403-555-5555
456 Ailing Lane, Somewhere AB T0T 0T0 Dr. Ima Doctor
G-Multi-vite 5 mg Take 1 tablet every morning (round, green tab)
G-fluid 20 mg Take 1 tablet every morning (round, yellow tab)
G-calcium 1000 mg Take 1 tablet at 1400 (round, white, scored tab)
G-Vitamin C 500 mg Take 1 tablet at supper (round, orange, scored tab)
G-sleep 5 mg Take 1 tablet at bedtime (oval, convex, blue tab)
G-fiber 3 mg Take 1 tablet at bedtime (small, round, brown tab)
G-happy 5 mg Take 1 tablet at bedtime (pentagon, yellow tab)

**Before medication is prepared
check prescription
label with MAR.**

G-calcium 1000 mg Take 1 tablet at 1400 (round, white, scored tab)

Medication	Time	1	2
G-Calcium 1000 mg Take one tablet daily at noon	1400	SW	SW

Calcium® Dietary Supplement for bone health

- **Third Check:** Compare the Medication Administration Record to the prescription label before the medication is put away

Betty Sickly 05/05/2011 ABC Pharmacy 403-555-5555
456 Ailing Lane, Somewhere AB TOT OTD Dr. Ima Doctor
G-Multi-vite 5mg Take 1 tablet every morning (round, green tab)
G-fluid 20 mg Take 1 tablet every morning (round, yellow tab)
G-calcium 1000 mg Take 1 tablet at noon (round, white, scored tab)
G-Vitamin C 500 mg Take 1 tablet at supper (round, orange, scored tab)
G-sleep 5 mg Take 1 tablet at bedtime (oval, convex, blue tab)
G-fiber 3 mg Take 1 tablet at bedtime (small, round, brown tab)
G-happy 5 mg Take 1 tablet at bedtime (pentagon, yellow tab)

After medication is prepared check MAR to prescription label.

G-calcium 1000 mg Take 1 tablet at noon (round, white, scored tab)

Medication	Time	1	2
G-Calcium 1000 mg Take one tablet daily at noon	1200	SW	SW

Calcium® Dietary Supplement for bone health

2. Use the '**7 RIGHTS**' of medication administration

- Right **person**
- Right **drug**
- Right **dose**
- Right **route**
- Right **schedule**
- Right **reason**
- Right **documentation**

3. **Teach/explain the purpose of the medication** to the client – the ‘what and why’ of what you are doing, for example “Hello John, this is an antibiotic to help treat your infection.”
4. Know and use the **proper procedure/technique**

**Implementation is the step where you:
CHECK! CHECK! CHECK!**

Evaluation

This is the step where you observe the client’s response to medication.

1. Did the drug do what it was intended to do?
 - **Objective data** – factual, for example, acetaminophen given for fever → fever is gone
 - **Subjective data** – what you think or what the client tells you, for example, acetaminophen given for headache → client reports headache is gone
 - **Therapeutic effect** – the drug is working, for example, anti-inflammatory given for arthritis pain → pain is controlled
2. Be alert to changes in appearance, behaviour or emotions that indicate effects of the medication on the client
3. Be alert for signs and symptoms of:
 - **Side effects** – predictable and often unpleasant drug effect (e.g. antibiotics - mild diarrhea, antihistamines - dry mouth)

- **Adverse reactions** – unexpected, undesirable and often unpleasant drug effect (e.g. hives, rashes)
4. Be alert for medication incidents and errors
 5. Observations reported to the doctor should include:
 - Information about any new symptoms since the medication was started
 - Effect of the medication on the symptom(s) it was prescribed for
 - Information about side effects/adverse reactions

**Evaluation is the step where you:
OBSERVE! OBSERVE! OBSERVE!**

Documentation

This is the step where all necessary forms are completed, such as Medication Administration Records (MAR), incident and error reports, or contact notes.

1. Written documentation must be accurate (correct), legible (readable), timely (recorded as soon as possible) and written in ink
2. Inform others verbally of any concerns, results or actions as appropriate. **Verbal communication does not replace written documentation – it reinforces it**
3. Document all medication incidents and errors

4. Use approved forms such as MAR sheets or incident reports
5. **Remember – legally – if you did not write it down, it did not happen!**
6. Mistakes are corrected by a single line through the error and must be initialed
7. Never use White-out® or Liquid Paper® products
8. Only use accepted abbreviations
9. Entries must be dated and signed
10. Only use the 24-hour clock to reduce incidents and errors

Documentation Guidelines for Medication Administration Records (MAR)

The Medication Administration Record is a legal document which documents whether or not medications have been given according to doctor's orders.

Forms may vary in format however, the following guidelines still apply and ensure that documentation will be complete, consistent and no 'initial box' will be left blank.

General Information

The Medication Administration Record (MAR) should provide a minimum of the following information:

- The month and year
- The name and contact number for the pharmacy
- The name of the physician may be included

- The legend or code to explain why a medication was not administered (the legend may vary according to agency or pharmacy) **Note:** *when a medication is not administered for any reason other than hospitalization or planned social leave, follow your agency policy and procedure for documenting medication incidents*

Example: General information and legend for codes

Medication Administration Record	Codes:
Month/Year: MAY 2016 _____	1. Drug Refused
Rexall Pharmacy: (555) 555-5555	2. Nausea Or Vomiting
	3. Hospitalized
	4. Social Leave
	5. Drug Ordered Not Received
	6. Other

Client Information

- Name, date of birth, allergies, diagnosis
- Other information may be included according to agency policy or to provide support staff with additional valuable information, for example: medication is crushed and mixed with applesauce, takes with yogurt, follow protocol for dysphagia, or weight record

Example: Client Information

Client Name: Jane Doe	DOB: January 01, 1980	Other: Takes pills with Orange juice
	Allergies: No known drug allergies	
	Diagnosis: Down Syndrome, Type 2 Diabetes, Asthma	

Support Worker Identification

- The MAR will include space to record the name, initial and signature of every support worker responsible for administering medications to an individual each month
- **Note:** *It is acceptable to maintain a master signature identification form with the approval of the agency. Best practice is to file the master signature form with the Medication Administration Records for each client for each year and begin a new master form.*

Example: Support Worker Identification

Init.	Print Name	Signature
SW	Support Worker	S Worker

Medication Information

- Must be complete, including drug name/ dose/ route/ schedule
- Medication times must be listed using the 24 hour clock
- The reason for use for PRN medications must be clear
- The person who prepares and administers the medication must initial in the appropriate box to indicate that the medication has been given
- **Best and safe practice:** Avoid use of abbreviations to minimize potential errors
- **Note:** *It is helpful to identify the trade or generic name of the medication and the reason the medication is used*

Example: Medication Information

Medication	Time	1	2	3	4	5	6	7	8	9	10
Acetaminophen 325 milligrams by mouth 4 times daily <i>Drug/dose/route/schedule</i> Tylenol® Arthritis pain relief	0800	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
	1200	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
	1600	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
	2000	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW

- Medication orders may change after the monthly MAR has been prepared
- Good documentation practices can prevent medication errors resulting from such changes, for example:

Discontinued Medication

- Draw a single line through the medication information
- Note the time and date the last dose was administered
- Draw lines through the 'initial' boxes which will not be used for the rest of the month

Example: Discontinued Medication

Medication	Time	1	2	3	4	5	6	7	8	9	10
Acetaminophen 325 milligrams by mouth 4 times daily Tylenol® Arthritis pain relief	0800	SW	SW	SW	SW	←					→
	1200	SW	SW	SW	SW	←					→
	1600	SW	SW	SW	SW	←					→
	Discontinued: Last dose 2000 MAY 04	SW	SW	SW	SW	←					→

New Medication

- Enter the information about the new medication
Drug/dose/route/schedule
- Note the time and date the first dose was given
- Draw lines through the 'initial' boxes which have not been used for the days of the month leading up to the first dose

Example: New Medication

Medication	Time	1	2	3	4	5	6	7	8	9	10
Ibuprofen 400 milligrams by mouth 4 times daily Motrin® Arthritis pain relief New Med: First dose 0800 MAY 07 2016	0800	←					→	SW	SW	SW	SW
	1200	←					→	SW	SW	SW	SW
	1600	←					→	SW	SW	SW	SW
	2000	←					→	SW	SW	SW	SW

Periodic Medication

- When a medication is not scheduled to be administered every day, the risk of documentation error is reduced by crossing out (X) the 'initial' boxes for the days the medication will not be taken for the entire month

Example: Periodic Medication

Medication	Time	1	2	3	4	5	6	7	8	9	10
Furosemide 20 milligrams by mouth every other day Lasix® Diuretic (fluid pill) Odd days in May	0800	SW	X	SW	X	SW	X	SW	X	SW	X

Short Term Medication

- Medications like antibiotics which are administered for a fixed number of days are entered as new medications
- Draw lines through the 'initial' boxes which have not been used for the days of the month leading up to the first dose and
- Draw lines through the 'initial' boxes which will not be used for the rest of the month after the medication is finished

Example: Short Term Medication

Medication	Time	1	2	3	4	5	6	7	8	9	10
Cipro 500 milligrams by mouth once daily Ciprofloxacin Bladder infection <i>Start May 04. Last dose May 08</i>	0800	←→			SW	SW	SW	SW	SW	←→	

Medication Dosage Range

- A doctor may order medication with a dosage range, for example 5 – 10 ml (milliliters) or 1 to 2 tablets
- Record the specific dose administered above the initial
- Follow agency guidelines for additional documentation

Example: Medication Dosage Range

Medication	Time	1	2	3	4	5	6	7	8	9	10
Ratio-Lactulose Syrup 15-30 milliliters once daily See individual bowel protocol Relieve Constipation	# mls →	15	15	30	15	15	15	30	15	15	30
	0800	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW

Medication Time Change

- A doctor or pharmacist may change the time a medication is given, without changing any other part of the order.

Example: Medication Time Change

Medication	Time	1	2	3	4	5	6	7	8	9	10
Ratio-Lactulose Syrup 15-30 milliliters once daily See individual bowel protocol Relieve Constipation	# mls →	15	15	30	15	15	15	30	15	15	30
	0800	SW	SW	SW	←						→
	2000	←		→	SW	SW	SW	SW	SW	SW	SW

Medication Reminder

- Individual medications are not signed for by the support worker
- The initial indicates that the client was cued or reminded to take medication

Example: Medication Reminder

Medication	Time	1	2	3	4	5	6	7	8	9	10
Medication Reminder Set watch alarm & cell phone alarm	0800	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
	1200	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
	1600	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
	2000	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW

Medication Monitored

- Individual medications are not signed for by the support worker
- Initial indicates that the client was monitored:
 - Observed through the process, or
 - Checked (example: weekly check of medication/packaging)

Example: Medication Monitored

Medication	Time	1	2	3	4	5	6	7	8	9	10
Medication Monitored Weekly check of compliance pack. Biweekly check that new packs are correct.	0800	←→		SW	←→						SW
	1200	←→		SW	←→						SW
	1600	←→		SW	←→						SW
	2000	←→		SW	←→						SW

Medication Assistance

- Individual medications are not signed for by the support worker
- Initial indicates that the client was assisted
- Describe the level of assistance provided to the client

Example: Medication Assistance

Medication	Time	1	2	3	4	5	6	7	8	9	10
Medication Assistance Take medication from locked cupboard and set out on kitchen table with medication cup and glass of water. Return medication to locked cupboard after client takes medication	0800	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
	1200	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
	1600	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
	2000	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW

Medication Signed in Error

When an employee has recorded their signature in the incorrect 'initial' box, draw a single line through the error

- Circle the error in red
- Document on the back of the Medication Administration Record and follow agency policy for Medication Errors and Incidents

Example Part 1: Medication signed in error

Medication	Time	1	2	3	4	5	6	7	8	9	10
Acetaminophen 325 milligrams by mouth 4 times daily <i>Drug/dose/route/schedule</i> Tylenol® Arthritis pain relief	0800	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
	1200	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
	1600	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
	2000	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW

Example Part 2: Documentation notes regarding the medication error

Medication Administration Notes		
Date	Details	Signature
May-02-2016	1200 Acetaminophen 325 milligrams by mouth 4 times daily signed in error. Correction by writer. Medication error report completed.	S. Worker
May 02-2016	1200 Acetaminophen 325 milligrams by mouth administered by writer.	R. Nurse

Transdermal Patches

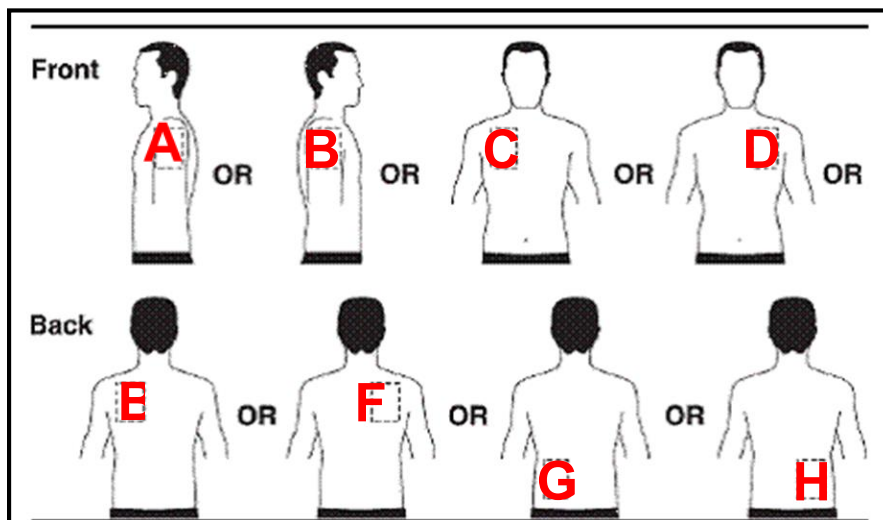
- Important to document the site where the new patch is placed and also that the previous patch has been removed

- Use a chart or plan to ensure the site is rotated and documented
- Prevents complications of overdose

Example Part 1: Transdermal patch

Medication	Time	1	2	3	4	5	6	7	8	9	10
Nicotine patch 42 milligrams Apply once daily for 2 weeks. Nicotine Smoking Cessation	0800	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
	Site	A	B	C	D	E	F	G	H	A	B
	Removed previous	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW

Example Part 2: Chart to guide rotation of transdermal patch sites



PRN (as needed) Medication

- Enter the medication information
- Drug/dose/route/schedule
- The reason for use must be clear

- Draw lines through all the 'initial' boxes for the month and direct to the PRN MAR to complete document according to the 4 judgments

Example Part 1: MAR (Medication Administration Record)

Medication	Time	1	2	3	4	5	6	7	8	9	10
Ibuprofen 400 milligrams by mouth 4 times daily as needed DOCUMENT ON PRN MAR ONLY Motrin® Arthritis pain relief	PRN	←									→
		←									→
		←									→
		←									→

- Document the 4 judgments, with no blank spaces
- All information must be accounted for as the following example illustrates
- If there is no effect within the reasonable evaluation time, simply record "No effect noted" or "No effect reported" or "No effect observed"
- Draw a line through any spaces not used

Example Part 2: PRN Medication Administration Record

Date	Time	Init.	Medication and Dose	Reason (symptoms)	Date	Time	Effectiveness	Init.
05/05	2130	SW	Tylenol #3 x 2 tabs	Dental pain	05/05	2230	Client reports pain relieved.	SW
05/06	1230	gc	Tylenol 325 milligrams x 2 tabs	Mild dental pain	05/06	1330	Client reports effective.	gc
05/06	2000	gc	Colace 100 milligrams x 1 cap	No Bowel Movement for 3 days	05/06	2100	No effect reported.	gc
←					05/07	0830	Colace effective – large BM	SW

MEDICATION INCIDENTS AND ERRORS

- Incidents and errors compromise the health and safety of the client
- Follow agency policy, procedure and the medication administration process to prevent medication errors and incidents
- Consult agency policy and procedures to determine guidelines for reporting and documenting medication errors/incidents, for example when to consult a pharmacist or doctor

Error

- o You (support worker) cause it – **under your control**
- o Usually a failure to follow policy or procedure (**3-check system** or the '**7 RIGHTS**' of medication administration)

Examples:

- o Wrong client
 - Confusion due to similar names
 - Failure to confirm client identity before giving the medication
- o Wrong drug
 - Administer antibiotic cream instead of antibiotic ointment
 - Administer a discontinued medication
 - Administer an expired medication
- o Wrong dose
 - Administer Acetaminophen 325 milligrams instead of Acetaminophen Extra Strength 500 milligrams

- o Wrong route
 - Chew and swallow a sublingual tablet
- o Wrong time
 - Outside of acceptable window according to agency policy and procedure. Most often the window is one hour which means administered within 30 minutes (before/after) the scheduled administration time unless there is a specific doctor's order which states otherwise
 - Giving 8:00 a.m. (0800) medication at 8:00 p.m. (2000). This is why the 24-hour clock is best practice
- o Wrong reason
 - A pain medication is ordered for headache but is given for a sore foot
- o Wrong documentation
 - Forgetting to sign that a medication has been given
 - Failing to enter a code to indicate that a medication was not given
 - Failing to document the effectiveness of a PRN (as needed medication)
- o Unauthorized drug
 - Giving an over-the-counter medication without consent

Incident

- Not under your control

Examples:

- o A client spits out or refuses a pill
- o The client vomits immediately after taking oral medication

- o The client refuses to take medication
- o The individual was not available to take medication
- o Client chews and swallows a sublingual medication
- o Adverse reactions and side effects

Common causes of medication errors:

Medication Orders:

- Incomplete orders – drug/dose/route/reason are not clear
- Confusing terminology or abbreviation such as qd (every day), qid (4 times daily) or qod (every other day). **Best and safe practice** is to write abbreviations out in full
- Inappropriate drug name – confusion between trade name and generic name, spelling errors
- Illegible (cannot read handwriting)
- Verbal order misunderstood – always seek to clarify and request written follow up from the prescriber

Unclear Dosage

- o Use of trailing zero after a decimal point (1.0 milligram)
It is unnecessary to add a zero after the decimal. 1 milligram eliminates confusion.
- o Use of naked decimals (.25 milligrams instead of 0.25 milligrams). It is necessary to add a zero before the decimal for a fractional dose of less than 1 dosage unit (milligram, milliliter, cubic centimeter etc.)

Failure to follow agency policy and procedures:

- Did not check that all appropriate documentation was in place, for example, doctor's order, pharmacy issued prescription label, Medication Administration Record, drug monograph, consent, and health information/history
- Did not follow the **3-check system**
- Did not follow the '**7 RIGHTS**' of medication administration

Lack of knowledge:

- Transcribing error – mistake in copying an order
- Did not understand medication order/abbreviations
- Miscalculated dosage
- Use wrong formulation, such as using cream rather than ointment
- Wrong technique

Failure in the system:

- Transcribing error
- New medication order not communicated to others
- Medication not delivered or available
- Pharmacy labeling error
- Distractions during preparation

Documentation of Medication Errors/Incidents

An incident report must be completed for **every** medication error or incident according to individual agency policy and procedure. Some agencies also require that 'near misses' be reported.

All reports should be evaluated to assist in developing policy and procedures which support best practices for safe medication administration.

Medication Error/Incident/Near Miss reports should provide answers to the following questions (at a minimum):

- **Who** is the client?
- **When** did the incident occur? Or **When** was the incident discovered? (or both if known)
- **How** did the incident happen? For example: A pill was dropped
- **Where** did the incident happen?
- **What** medication(s) were involved (include list)?
- **What** action was taken to respond to the incident?
- **What** factors contributed to the incident, if any? For example: Failure to use the 3-check system, the client was absent from program, or the pharmacy made an error
- **Who** was responsible?
- **Who** was the incident reported to? For example: Pharmacist, PADIS (Poison and Drug Information Service), HealthLink.
- **What** advice was given?

- **What** was the observed effect on the client, if any? Keep in mind the support worker must know the intended effect of the medication that was involved in order to understand what to look for.

Refusal of Medication

Every client is a unique individual and has the right to make a choice not to take medication at times. The decision to refuse medication may have a significant impact to the client's health and well-being.

There are a number of strategies that a support worker may use when a client refuses a medication.

- Try again later
- Most agencies have an acceptable 'window' of time for medication administration which gives leeway to try again. Know your leeway, for example: one half hour before or after the scheduled medication time. It is important to be clear that a one hour window means one half hour before or after the scheduled medication time
- In some cases the type of drug may affect the window, for example: drugs used to treat Parkinson's Disease usually must be given precisely at the prescribed time
- Explain the importance of the medication to the client – they have a right to be respected and informed
- Consider using a different approach or support worker
- Determine why the client does not want to take the medication – use assessment skills and ask questions:
 - Is it a control issue? Is the client exerting control over their life, or attention seeking for your time?
 - Is it the approach of the support worker?
 - What else is going on in their life that may affect their decision?
 - How often does the client refuse medication?

- Assess the cost/benefit – how important is it that the client receive this medication now?
 - For example: Is it an anti-seizure medication or is it a multi-vitamin?
 - What are the consequences if client does not take med (e.g. seizures, behaviours, impact on quality of life)
- Identify the knowledgeable resources available to you to solve the immediate problem, for example: Physician, pharmacist, co-workers, nurse, supervisor, family or other key supports, legal authority etc.
- Bottom line – the client cannot be forced to take the medication
- Document the details of the specific incident according to agency policy and procedure
- If medication refusal is a regular issue – consider the importance of a team approach to find a solution to the problem, for example: can the medication schedule be adapted to reduce number of times/day the medication is given?
- Communication between team members, both written and verbal, is essential to finding an effective solution and ensuring everyone on the team is aware of the strategies to use with the individual

This is the step where you:
COMMUNICATE! COMMUNICATE! COMMUNICATE!

LEVELS OF MEDICATION ADMINISTRATION

Support workers assist a client in the administration of medications to the extent that the client requires the support.

There are 4 commonly accepted levels of medication administration.

1. Self-administration

- The client is independent in all aspects of medication administration, including obtaining medications from the pharmacy
- Documented periodic monitoring is recommended in keeping with agency policy and procedure
- The support worker does not sign off each medication on the Medication Administration Record

2. Medication reminders

- The client is reminded, but not assisted, to take medications. For example: Phone reminders or cuing
- The client self-administers the medication
- The support worker may receive medications on behalf of the client
- The support worker documents that the medication reminder has taken place
- The support worker does not sign off each medication on the Medication Administration Record

3. Medication assistance:

- The client recognizes the need to take medication and consents to assistance with his or her medication regime
- The client self-administers the medication
- This will include supervision or monitoring and support while the client prepares and takes medication. For example: Obtain medications from a locked cupboard for the client, order and medications from the pharmacy or open a container
- The support worker documents that the client has taken their medication at the prescribed time and any incidents that may occur
- The support worker does not sign off each medication on the Medication Administration Record

4. Medication administration

- The support worker administers medications following the medication administration process
- The written consent of the legal authority is required
- The support worker is also responsible for all duties related to medications for the client, including ordering, receiving, and storing medications
- The support worker documents every medication that is administered on the Medication Administration Record

MONITORING CLIENT SELF-ADMINISTRATION OF MEDICATIONS

- Monitoring of client self-administration of medications involves observing the medication administration process and its effects, including:
 - o Client understanding of the purpose and effects of each medication
 - o Compliance and implementation
 - o Therapeutic effects
 - o Side effects and adverse reactions
 - o Documentation
- Support workers assist a client in the administration of medications to the extent that the client requires the support
- Ongoing assessment should occur with the client each time there is a change in the medication regime or if the needs of the client change due to medical or cognitive changes. For example: The client has surgery and is unable to manage independently for a specific period of time, or the client has been diagnosed with dementia and will require additional assistance on a permanent basis. Reassessment should occur at least annually (every year)
- Clients do not need to demonstrate knowledge in all areas in order to self-administer medications. For example, if a client is able to safely take the proper dosage of medication on time, he/she may be given this responsibility while support workers take responsibility for monitoring for therapeutic and side effects

Assessment

1. What is the client's understanding of the drug therapy?
 - Name of the drug
 - Purpose of the drug
 - Daily dosage
 - Schedule
 - Side effects
 - What to do if problems occur such as adverse reactions, missed or late doses
2. Is there something about the client's physical condition that could affect their ability to take medication on their own?
 - Sensory deficits affecting sight, hearing, or touch
 - Physical challenges such as swallowing difficulty, impaired coordination or limited mobility
3. Are there other factors that could affect the client's ability to manage their medication?
 - Literacy skills – ability to read and write
 - Ability to tell time accurately
 - Memory impairment

4. What is the client's belief in the need for drug therapy?
 - Cultural values, religious belief
 - View of western or traditional cultural medicines
 - Personal experiences with medications
 - Side effects, allergic reactions
 - History of drug therapy
 - Compliance or non-compliance
 - Reporting or not reporting medication problems

Implementation of Strategies

1. Develop individualized goals for the client based on the assessment. The client should be able to:
 - Describe the purpose of each medication, for example, *"I take Ventolin® to help my breathing" or "I take the blue puffer to help my breathing"*
 - Describe the common side effects, for example, *"I know antibiotics can give me diarrhea. I will take yogurt with probiotics to prevent that"*
 - Describe when it is important to talk to a doctor about medication problems, for example, *"I should call the doctor if my cough isn't better in a week"*
 - Describe what to do when doses are missed, for example, *"If I forget to take my pills I will call the pharmacy and ask them what to do"*
 - Demonstrate preparing and taking medication

- Identify each label, or describe the pill, for example, *"At breakfast I take two pills. One is a round, blue pill and one is a big orange pill (it is not necessary for the client to know or pronounce the name) "*
- Identify the schedule for taking medication, for example, *"I take two pills at breakfast time and one pill at bedtime"*

There are three strategies to use to help the client safely self-administer medications.

Teaching – to give the client the information they did not know, for example:

- Oral teaching or coaching
- Provide them with written information, for example, provide a wallet card with medication information and schedule
- Practice preparing medication

Assisting – to provide minimal help and support to the client, for example:

- Open the medication cupboard and place medications where the client can reach them
- Open a difficult container for a client with poor hand strength
- Use a timer or alarm to remind the client to take medication

Adapting – to change something in the process or packaging that will help the client maintain independence, for example:

- Use of an oral syringe or graduated measure medicine spoon or medication cup instead of a tablespoon for liquid medication for clients with fine motor control limitations
- Use of a spacer (Aerochamber®) for metered dose inhaler
- Liquid formulations for clients who have difficulty swallowing pills
- Talk with pharmacy about packaging that works best for the client such as using a standard snap cap lid on a bottle instead of a child resistant cap

The process of assessment and implementation of strategies must be documented.

Special Considerations

- Client centered approach, unique to each person
- Regular monitoring, observation and documentation to ensure strategies are still effective, in accordance with agency policy and at least once a year
- Strategies should be developed with input from the team and knowledgeable resources, including a pharmacist

UNDERSTANDING PRESCRIPTIONS AND ABBREVIATIONS

Prescriptions

- An order written for a treatment program by a doctor or any legally competent practitioner, licensed by law to prescribe drugs and treatment programs, for example: physician, dentist, nurse practitioner, pharmacist, naturopath etc.

Doctor's Orders

- Communicate the treatment plan
- Written prescription is the most common way to receive an order
- May be for medication, physical therapy, exercise, diet or wound care
- Accepting telephone and emergency orders must be according to specific agency policy and procedure
- A full medication/treatment plan review by the client's doctor must occur at least once a year
- Standing orders: The use of the term ***standing order*** is not supported as best practice by the College and Association of Registered Nurses of Alberta or the Canadian Nurses Protective Society.
 - Standing orders do not specifically address an individual patient's unique medical status, illness or injury at the time they are written

- In the past, a standing order was implemented for every client, regardless of the circumstances. The support worker implementing the standing order was not expected to exercise any judgment regarding the appropriateness of the order for the client. It is now recognized that knowledge, skill and judgment are critical, and that no order, regardless of how routine it may seem, should be automatically implemented

Note: The Canadian Nurses Protective Society (CNPS®) is a not-for-profit society that offers legal advice, risk management services, legal assistance and *professional liability protection* related to nursing practice to *eligible* Registered Nurses.

- Are typically for over-the-counter medications which are not required on an emergency basis which means that there is time to investigate the best option for the client's needs at a specific time

What should you look for on a prescription?

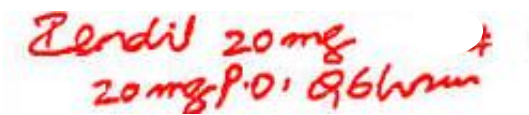
- Name of the client/person
- Name of drug
- Correct dose
- Correct route
- Correct schedule
- Clear instructions. For example: conditions for administration of PRN (as needed) medication or guidelines for medication prescribed with a range in dosage (1 to 2 tablets)

Tips for safe transcribing & documentation of prescriptions

- **Transcribe** means to make a written copy – this would include writing medication information on an incident/update form, packaging label, MAR, contact notes etc.
- Always list information in the correct order: person, drug, dose, route, schedule
- **Best and safe practice** is to avoid use of abbreviations
- Write each prescription order on a separate line
- Ensure the meaning is clear

Common Errors in Transcribing Prescriptions

- Failure to identify specific drug
X - Cough Syrup
✓ - Robitussin
- Dosage is not clear
X - One spoonful
✓ - 5 ml (milliliters)
- Schedule is not clear
X - prn (as needed)
✓ - q4h prn (every 4 hours as needed)
- Purpose/reason (particularly for PRN medication) is not clear
X - Tylenol 325 milligrams q4h prn (every 4 hours as needed)
✓ - Tylenol 325 milligrams q4h prn (every 4 hours as needed) for headache
- Incorrect abbreviations
X - q2d (every second day)
✓ - qod (every other day)

- Trailing zero
 - X – 2.0 milligrams (could be mistaken for 20)
 - ✓ - 2 milligrams
- Naked (or leading) zero
 - X - .25 milligrams (could be mistaken for 25)
 - ✓ - 0.25 milligrams
- Poor handwriting (see note below)
 - X - A handwritten prescription in red ink that reads "Isordil 20mg" on the first line and "20mg p.o. q6h" on the second line. The handwriting is somewhat cursive and difficult to read.
 - ✓ - Isordil 20 mg po q6h (milligrams by mouth every 6 hours)
 - **Note:** A Health Canada Report states the handwriting example used was misinterpreted by a pharmacist and resulted in the death of the patient and both the doctor and pharmacist were found guilty of negligence
 - The pharmacist interpreted the prescription to be for Plendil® and did not check with the doctor to clarify the order which was actually for Isordil®

Abbreviations

- The universal language used by health professionals
- You need to speak the same language in order to understand the treatment plan for your client
- Understanding helps pick up on errors more easily
- See **Appendix 2** for list of common accepted abbreviations
- **Note:** refer to specific agency policy to confirm abbreviations that are acceptable
- **Best and Safe Practice:** To avoid confusion avoid use of abbreviations where possible.

OVER THE COUNTER (OTC) MEDICATION

- Are intended for **short-term** use only, 2 to 3 days. If symptoms continue, a physician should be consulted
- Include **herbal remedies, vitamins** and **nutraceuticals** (a combination of "nutritional" and "pharmaceutical" and refers to foods that act as medicines)
- Are **drugs** and follow the same medication administration process as all other drugs
- Do require **consent** from the legal authority
- Consult specific agency policy and procedures to determine guidelines for administration of OTC medications
- Are **not** taken for life-threatening illness – take the time to determine the best choice

OTCs are available **in 3 broad categories**

- **Behind the counter**
 - o Only available from a pharmacist and without a prescription
 - o No opportunity for patient self-selection
 - o A pharmacist **must** distribute the drug
 - o Example: Products which contain codeine

- **Only available in pharmacies**

- o Available without a prescription from the self-selection area of a pharmacy
- o A pharmacist **must** be available and **may** be consulted
- o Example: Naproxen®

- **Commonly available**

- o Drugs that may be sold from any retail outlet, for example, convenience store, gas station
- o A pharmacist is **not** required
- o Example: acetaminophen (Tylenol 325 milligrams, ibuprofen or ASA in limited package sizes)

Questions to consider before administering Over-The Counter Medications:

- What over-the-counter medicines are available for the symptoms I want to treat?
- Has the client taken this medication before?
- Does the client have an allergy to this medication?
- Should the client avoid alcohol, other medications or certain activities while taking this medication?
- What are the possible side effects? For example, upset stomach, dry mouth, diarrhea etc.

- Have I read the instructions carefully, noting recommended dose and maximum daily dose?
- Have I read the cautions listed in the product information? For example, is it safe to use this medication if a client is elderly, pregnant, has high blood pressure, diabetes, etc?
- How should I store this medication?
- Does this medication need to be taken with food or on an empty stomach?
- Is there anything else I should know before using this medication?

Best and Safe Practice: Consult a pharmacist.

PRN MEDICATIONS

- PRN – is an abbreviation that means ‘as required’ or ‘as necessary’
- Are **not** regularly scheduled medications. They are only taken when needed
- Are **specific medications** given in response to **specific conditions**, such as specific behaviour, pain, fever etc.
- Follow the same medication administration process as all other drugs
- May not be given for any condition other than what the doctor has prescribed

A **doctor’s order** for a PRN medication should include:

- Client’s name
- Name of medication
- Dose/Amount
- Symptoms for use (specific)
- Time - maximum number of times allowed within a specific time frame, for example, every 4 hours up to a maximum of twice a day

Whenever a medication is prescribed on a PRN basis to influence behaviour a restrictive procedure is required.

(Guidelines for the Use of Medications that Influence Behaviour – ACDS).

PRN Judgments

There are **4 judgments** to consider when a PRN is given:

Symptoms

- The conditions or reasons for use
- Must be specific and clear doctor's orders, for example:
 - dental pain, headache, muscle pain – **not** just pain
 - kicking, spitting, pacing, screaming, hitting etc. – **not** simply agitation or aggression

Amount

- For example, one to two tablets
- You have to determine the amount by using assessment skills

Time

- According to the doctor's order and when the last dose was given
- May be a range, for example, every 2 to 4 hours

Effectiveness

- **Required** to observe the client and to document effectiveness – did the drug work?
- It is important to know how long it should take for the medication to be effective, what the desired effect is and when it is most appropriate to reassess the client

Remember the acronym SATE when giving PRN medications.

S ymptoms

A mount

T ime

E ffectiveness

When someone else is responsible for monitoring the effects of a PRN medication, for example, when the drug is given just before a change of shift you must inform them of:

- Medication given
- By whom
- At what time
- For what reason
- Desired effect the drug has had or should have

Always document and communicate PRN medication administration according to policy and procedure. Failure to document the effectiveness of a PRN medication is an error.

GUIDELINES FOR THE USE OF MEDICATIONS THAT INFLUENCE BEHAVIOUR

The Alberta Council of Disability Services in conjunction with Persons with Developmental Disabilities Provincial and Community Boards in Alberta has published written guidelines for the use of medications that influence behaviour.

The basis of best practices addressed in the publication are summarized as follows:

- Conduct a thorough medical investigation before starting a new medication
- State a reasonable hypothesis (reason or theory) for the cause of the behaviour of concern
- Obtain informed consent
- Develop objective outcomes for measuring the effects of the medication
- Monitor for side effects, under-medication and over-medication
- Maintain active treatment objectives
- Maintain optimal functional status

Positive behavioural approaches for behaviours of concern, whether expected or unexpected must be developed and implemented to coincide with any behaviour modifying medication, whether the medication is given on a regular schedule or PRN basis.

Individual agency policy, procedure and practices should reference and reflect adherence to the guidelines.

GUIDELINES FOR THE USE OF MEDICATIONS THAT INFLUENCE BEHAVIOUR
Alberta Council of Disability Services
Calgary, Alberta Canada
www.acds.ca

REPACKAGING MEDICATIONS

When a drug has been dispensed by a pharmacist to an individual, the product, usually in a blister pack, vial or unit dose package, is labeled with the client's name, drug name, dose, route and schedule.

It is considered repackaging to fill an alternate container with **a single dose** from the client's own blister pack or prescription bottle so the client can self-administer the medication or it can be given by another care provider. Repackaging drugs requires that the product be labeled in an appropriate manner

- **Best and safe practice** : Where multiple doses are required, contact the pharmacy to provide a supply of dispensed medications in appropriate packaging, for example: compliance packaging such as bubble packs to reduce the potential for transcribing or packaging errors
- Medications dispensed in strip packaging does not require repackaging or relabeling which reduces the potential for errors



Labeled medication strip package



View of medication in strip package

BEST PRACTICES TO REMEMBER FOR SAFE MEDICATION ADMINISTRATION

- Drugs are most effective if they are taken in the proper manner and for the symptom(s) that they were prescribed for

- The '**7 RIGHTS**' of medication administration are:

Right person	→	Right drug	→	Right dose	→	Right route	→	Right schedule	→	Right reason	→	Right documentation
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- The **3-check system**:
 - Check #1: Before medication is prepared compare the prescription label to the medication in the approved pharmacy packaging
 - Check #2: Compare the Prescription label to the MAR before preparing the medication
 - Check #3: Compare the MAR to the prescription label after preparing the medication before it is put away
- No medication should ever be shared between clients
- The person who **prepares** the medication for administration is the one who must **give** and **sign** for the medication
- Always prepare medication for one client at a time
- Never use a microwave or oven to warm a medication
- Never re-administer a medication, for example, if a client spits it out, or vomits after receiving a medication, without advice from a doctor or pharmacist. You cannot be certain how much of the medication has entered the client's system
- When concerned about drugs containing alcohol, sugar or sodium seek advice from a doctor or pharmacist
- Always use the 24 hour clock

- Always focus on the task and avoid distractions such as the telephone
- Do not administer medications if you suspect or if a client reports consuming alcohol or non-prescribed drugs including illegal or street drugs. Consult with pharmacist, doctor or PADIS (Poison and Drug Information Service).

MEDICATION STORAGE AND DISPOSAL

Although medications may be kept in different storage locations in different settings, there are general guidelines for all settings.

- Store medications in a cool, dry, dark place, unless directions specify particular storage guidelines
- Do not store medications in bathrooms (humid) or on top of the fridge or near other large kitchen appliances (hot)
- All medications administered by staff should be stored under lock and key
- Narcotic medications must be **double locked** (in a locked cabinet in a locked room or in a locked container in a locked cabinet)
- Store medications in the original container or package with the pharmacy label attached
- Check labels to ensure they are legible (readable)
- Check labels to ensure expiry dates are current – a drug expires on the last day of the month on the label. If you cannot find an expiry date on the label or the medication container, consult a pharmacist

- Expired, discontinued and contaminated medications must be separated from current medications and returned to the pharmacy for safe disposal on a regular basis
- Medication should not be discarded down the drain or the toilet

RECEIVING MEDICATIONS

- Support workers may receive medications from a pharmacy in accordance with individual agency policy
- Medication must be checked according to procedure to identify potential dispensing errors – it is important that support workers are familiar with the description of the client's individual medications, or know where to access the written information (drug monograph)
- Check that the prescription label is correct and includes the:
 - Name of the client
 - Name of the drug
 - Dose, route and schedule of the drug
- Check that the number and the description of medications received match the information on the prescription label
- **Best and Safe Practice:** The support worker(s) document on the package to confirm the label and packaging have been checked

Betty Sickly 05/05/2011 ABC Pharmacy 403-555-5555
456 Ailing Lane, Somewhere AB TOT OT0 Dr. Ima Doctor
G-Multi-vite 5 mg Take 1 tablet every morning (round, green tab)
G-fluid 20 mg Take 1 tablet every morning (round, yellow tab)
G-calcium 1000 mg Take 1 tablet at 1400 (round, white, scored tab)
G-Vitamin C 500 mg Take 1 tablet at supper (round, orange, scored tab)
G-sleep 5 mg Take 1 tablet at bedtime (oval, convex, blue tab)
G-fiber 3 mg Take 1 tablet at bedtime (small, round, brown tab)
G-happy 5 mg Take 1 tablet at bedtime (pentagon, yellow tab)
v'd May 04 2015 SW

Betty Sickly 05/05/2015
456 Ailing Lane, Somewhere AB TOT OT0
403-555-5555
Dr. Ima Doctor ABC Pharmacy 403-333-3333

Breakfast	Lunch	Supper	Bedtime
[Green/Yellow Pill]	[Crossed Circle]	[Orange Pill]	[Blue/Yellow Pill]
[Yellow/Green Pill]	[Crossed Circle]	[Orange Pill]	[Blue/Yellow Pill]
[Green/Yellow Pill]	[Crossed Circle]	[Orange Pill]	[Blue/Yellow Pill]
[Green/Yellow Pill]	[Crossed Circle]	[Orange Pill]	[Blue/Yellow Pill]
[Yellow/Green Pill]	[Crossed Circle]	[Orange Pill]	[Blue/Yellow Pill]
[Green/Yellow Pill]	[Crossed Circle]	[Orange Pill]	[Blue/Yellow Pill]
[Yellow/Green Pill]	[Crossed Circle]	[Orange Pill]	[Blue/Yellow Pill]
[Yellow/Green Pill]	[Crossed Circle]	[Orange Pill]	[Blue/Yellow Pill]

- Always check with the pharmacy if you are unsure!
- Report errors to the pharmacy **immediately** and complete detailed documentation on an incident report according to agency policy and procedure
- Once medication is received and checked store it securely according to pharmacy instruction, agency policy and procedure and best practices, for example: double lock narcotics, refrigeration of medications, packaged medication are stored separate from creams and lotions etc.

UNDERSTANDING HOW DRUGS WORK

- Drugs/medications are chemicals that change chemical processes in the body
- All drugs/chemicals go through four stages from the time they enter the body to the time they exit the body
- These four stages are referred to as the **ADME** characteristics of a drug, they are:
 1. **A**bsorption
 2. **D**istribution
 3. **M**etabolism
 4. **E**xcretion

Absorption

- Is the way a drug is made available to the blood for distribution to the tissues (getting into the body)
- The rate of absorption depends on the route the medication is given
- Drugs are absorbed through the following routes/body systems:
 1. **Gastrointestinal** (Digestive) **System**
 2. **Respiratory** (Breathing) **System**
 3. **Integumentary** (Skin) **System**
 4. **Cardiovascular** (Circulatory or Blood) **System**

1. GASTROINTESTINAL SYSTEM (Digestive System)

Sites of Absorption

- Sublingual – under the tongue where drug is absorbed quickly
- Buccal – in the pocket of the cheek
- Stomach – enters by mouth or by a G-tube inserted directly into the stomach (requires additional training)
- Small Intestine – site where most oral medications are absorbed
- Rectum – inserted into the rectum (requires additional training)

Factors that could **change absorption** include:

- Mechanical changes in the form of the medication such as chewing a sublingual tablet, or crushing an enteric coated pill
- Food in the stomach
- Diarrhea
- Vomiting
- Stomach/bowel illness such as ulcers
- Vitamins/other drugs
- Age
- Growth/trauma to the tongue
- Irritation of mucosa

Medication Formulations

Solutions

- Medication dissolved in liquid
- Do not need to shake before pouring
- Example: liquid Tylenol®

Suspensions

- Drug particles are mixed in liquid, but do not dissolve
- Must be shaken to ensure drug is evenly distributed in liquid (like the flakes in a snow globe)
- Example: Pepto Bismol®

Oral Sprays

- Drug is in solution form
- Drug is absorbed rapidly through the oral mucous membrane
- Example: NitroSpray®

Mouthwashes & Oral Rinses

- Used to rinse the mouth, for local effect
- Should be gargled or swirled around the mouth
- Not usually meant to be swallowed (follow pharmacy or manufacturer's instructions)
- Example: Peridex® Oral Rinse

Gel

- Thick liquid or jelly
- Example: Glucose Gel, Lansoyl® laxative jelly

Gelatin Capsule

- Drug in liquid form inside a capsule which dissolves quickly in the stomach
- Example: Vitamin E capsules

Capsule

- 2-piece capsule, usually containing powdered form of drug
- Example: Dilantin® 100 mg

Sustained Release

- Drug is released over several hours
- Usually a capsule containing many tiny beads which are coated to dissolve slowly
- May be a tablet which dissolves slowly (in layers)
- Example: Ritalin® SR

Compressed Tablet

- Hard tablet
- Most common pill formulation
- Example: Tylenol® 325 mg

Enteric Coated Tablets

- Usually shiny and hard in appearance
- Coated to protect stomach from the drug or drug from the stomach acid
- **Do not crush or chew enteric coated tablets** (mechanical change affects absorption)
- Example: Ecotrin® (Enteric Coated Aspirin)

Suppository

- Drug introduced in a medium which melts after insertion to the rectum
- Typically used when medications cannot be taken by mouth, or to treat rectal problems
- Example: Gravol® Suppository

Enema

- The injection of liquid into the rectum through the anus for cleansing, for stimulating evacuation of the bowels, or for other therapeutic or diagnostic purposes
- Example: Fleet® Enema

2. RESPIRATORY SYSTEM (Breathing System)

Sites of Absorption

- Nose – nasal sprays
- Lungs – metered dose inhalers, Diskus®, Turbuhaler®

Factors that could **change absorption** include:

- Smoking
- Tissue damage in the lungs
- Size of the particle to be inhaled
- Disease
- Environmental pollution
- Technique

Medication Formulations

Mists

- A suspension of fine drops or particles in a liquid or gas such as oxygen
- Example: Nebulizer treatment, Flonase® Nasal Spray

Aerosols

- Metered Dose Inhalers (inhalers or puffers)
- Propellant used to help drive medication particles into the lungs
- May be used with a spacer (AeroChamber®)
- Example: Ventolin®

Powders

- Particles are not as fine
- No propellant used, client must inhale using Diskus® or Turbuhaler®
- Example: Advair®

3. INTEGUMENTARY SYSTEM (Skin System)

Sites of Absorption

- Skin
- Vaginal vault

Factors that could **change absorption** include:

- Debris/dirt
- Perfumes, lotions or creams
- Burns
- Rashes
- Skin diseases
- Technique – amount applied not easily controlled

Medication Formulations

Medication formulations applied to the skin are also known as **topical medications**.

Creams/Ointments

- **Cream:** A water-soluble **medicinal** preparation applied to the skin.
- **Ointment:** An ointment differs from a **cream** in that it has an oil base
- Important to **wear gloves** to prevent medication from being absorbed into your own body

- Example: Cream - Rub-A535®
- Example: Ointment - Polysporin®

Lotions

- A medicated liquid for external application
- Example: Uremol® Lotion

Mists

- Medication suspended in spray or mist form
- Example: Solarcaine® First Aid Spray

Patches

- Also called transdermal patches
- A medicated adhesive pad placed on the skin for absorption of a time released dose of medication into the bloodstream
- Can contain a day's (or longer) supply of medication
- Drug is absorbed at a steady rate
- Precautions must be taken with application and removal
- **Never cut in half** – dose may not be evenly distributed in the patch
- Example: Duragesic® (fentanyl) Patch
- Example: NicoDerm® (nicotine) Patch

Vaginal Medications

- Require additional training to insert
- Formulations include creams, foams, gel, suppositories and ovules (large gel capsules)
- Examples: Monistat® 7 Cream, Monistat® 7 Vaginal Suppositories, MONISTAT® 3 Vaginal Ovules

4. CARDIOVASCULAR SYSTEM (Circulatory or Blood System including the heart)

Sites of Absorption

- Intravenous - administered into a vein
- Intramuscular – administered into a muscle
- Sub-cutaneous - a needle is inserted just under the skin
- Intradermal - between the layers of the skin

Factors that could **change absorption** include:

- Impaired circulation
- Disease
- Shock

Note: Sub-cutaneous injections require additional training. Other injections must be administered by a qualified nursing professional

Distribution

- **Distribution** is the way drugs are carried by the **cardiovascular system** (circulatory/blood) throughout the body to the tissues
- Drugs have certain areas where they work. These areas are called **target sites**
- Drugs also reach other tissues causing chemical reactions, whether we want them to or not. These are called **adverse reactions and side effects**

Factors that could **change distribution** include:

- Gender
- Blood vessel disease
- Age

Metabolism

- **Metabolism** is the way the body changes or breaks down a drug into a form that can be excreted
- The **liver** is the major organ involved in drug metabolism

Factors that could **change metabolism** include:

- Alcohol
- Age
- Gender
- Other drugs

- Liver disease
- Kidney disease
- Exposure to chemicals in the environment

Excretion

- **Excretion** is the way the drug is **eliminated** from the body
- Excretion is **mainly** through the **kidney – urine**, and **rectum – feces**. Small amounts may be excreted in saliva, perspiration, and exhaled through the lungs

Factors that could **change excretion** include:

- Age
- Kidney disease
- Other drugs
- Bowel blockage such as constipation or tumors

ADVERSE REACTIONS AND SIDE EFFECTS

Side Effects

- Predictable and often unpleasant drug effect

Adverse Reactions

- Unexpected, undesirable and often an unpredictable drug effect

EXAMPLES OF ADVERSE REACTIONS AND SIDE EFFECTS BY BODY SYSTEM

Gastrointestinal (Digestive) System

(Mouth, stomach, intestines/bowels & rectum)

- Nausea
- Vomiting
- Diarrhea
- Constipation
- Loss of appetite (anorexia)
- Sore gums (gingivitis)
- Overgrowth of gums (hyperplasia gingivitis)
- Gas (flatulence)
- Dry mouth
- Abdominal cramps
- Sore throat
- Indigestion (dyspepsia)

Respiratory (Breathing) System
(Nose, lungs)

- Wheezing
- Shortness of breath
- Nasal congestion
- Cough
- Difficulty breathing (dyspnea)
- Swelling (edema)
- Dry membranes
- Hiccough

Integumentary (Skin) System
(Skin, hair and nails)

- Sun sensitivity
- Rash
- Pigment changes
- Loss of hair
- Ulceration
- Eczema
- Inflammation
- Itchiness
- Temperature changes
- Dry, scaly skin

Cardiovascular (Circulatory/blood) System
(Heart, blood, veins and arteries)

- Irregular heart rate
- Increased heart rate
- Decreased heart rate
- Blood pressure changes
- Hemorrhage (loss of blood)
- Blood clots
- Blood disease
- Headache
- Shock (due to blood loss)

Central Nervous System (CNS)
(Brain and nerves)

- Stiffness
- Spasticity (involuntary movement)
- Insomnia (inability to sleep)
- Agitation
- Confusion
- Dizziness (vertigo)
- Visual disturbances
- Mood swings
- Co-ordination problems (ataxia)

- Sleepiness
- Loss of appetite (anorexia)
- Muscle cramps

MEDICATION EMERGENCIES & RESPONSES

ALLERGIC REACTION TO MEDICATION

Anaphylactic Shock

Immediate response to signs/symptoms

Life threatening situation



Call 9-1-1



Monitor client's condition



If client becomes unconscious, inform dispatcher



FOLLOW THE ABC'S OF FIRST AID

Maintain an open **A**irway

Restore **B**reathing &

Circulation as necessary

MEDICATION EMERGENCIES & RESPONSES

POISONING

Overdose, wrong medication, etc.



Call PADIS



Follow PADIS Instructions



Monitor client's condition



FOLLOW THE ABC'S OF FIRST AID

Maintain an open **A**irway

Restore **B**reathing &

Circulation as necessary



If client is not breathing – **Call 9-1-1**

APPENDIX 1: TERMINOLOGY (Glossary)

Note: The following terms and definitions are an example of terms used in medication administration, but is by no means a complete list. Refer to additional resources for terminology not listed. (E.g. medical dictionary, web resources)

TERM	DEFINITION
Absorption	Is the way a drug is made available to the blood for distribution to the tissues.
ADME	Acronym for: A bsorption - D istribution – M etabolism – E xcretion
Administration of Medication	A term that describes a whole process that includes assessment, implementation, evaluation and documentation.
Adverse Reaction	An unexpected effect of drug treatment that may range from mild to serious or life-threatening, such as an allergic reaction, a unique individual response or toxic effects.

TERM	DEFINITION
Allergic Reaction	A hypersensitive reaction (exaggerated immune response) to a substance. There are 2 major types: 1) Anaphylaxis and 2) Serum sickness is a delayed type of drug allergy that occurs a week or more after exposure to a medication or vaccine.
Analgesic	Drug or medication used to relieve pain.
Anaphylactic Shock	Is an extreme and life threatening allergic response to a drug or substance, such as peanuts, requiring immediate treatment with an injection of epinephrine (e.g. Epi-pen®).
Anaphylaxis	<p>An emergency condition that results from an abnormal and immediate allergic response to a substance to which the body has become intensely sensitized. Symptoms of anaphylaxis may include the following:</p> <ul style="list-style-type: none">• Skin redness, hives and itching• Swelling of the mouth, tongue & airways enough to cause obstruction• Profuse sweating• Difficulty breathing• Wheezing• Confusion or intense anxiety• Rapid or weak pulse• Irregular heartbeat or palpitations

TERM	DEFINITION
	<ul style="list-style-type: none">• Fainting, light-headedness, dizziness• Nausea, vomiting, diarrhea, abdominal pain, cramps• Slurred speech• Blueness of the skin, including the lips or nail beds
Antianxiety	Drug used to prevent symptoms of excessive anxiety.
Antibiotic	Drug that has the ability to destroy certain microorganisms and is used to treat infections.
Anticoagulant	Drug that prevents or delays coagulation (clotting) of the blood.
Anticonvulsant	Drug that prevents or reduces the severity of seizure activity.
Antidepressant	Drug used to prevent or relieve clinical depression. In everyday language "depression" refers to any downturn in mood, which may be temporary. This is different from Clinical depression where symptoms last two weeks or more and are so severe that they interfere with daily living.

TERM	DEFINITION
Antipsychotic	Drug used to treat or diminish symptoms of psychosis, a mental disturbance characterized by a loss of contact with reality.
Aspiration	When a person cannot swallow properly, some food or liquid may pass into the lungs. This is called aspiration and may result in pneumonia or other illness.
Bioavailability	The amount of the drug that reaches the bloodstream for transport to the tissue.
Brand Name	A copyrighted name (also known as trade name or proprietary name) given to a drug by the manufacturer in agreement with regulating agencies. E.g. Tylenol ®
CNS (Central Nervous System)	Involves the brain, spinal cord and nerves.
Compliance	Refers to the extent to which an individual follows prescribed drug orders.
Contaminated	Soiled, stained, or polluted by the presence of blood or other potentially infectious, toxic or harmful materials on an item or surface.

TERM	DEFINITION
Contra-indication	A specific situation in which the administration of a drug has a high likelihood of harming a person and should not be given.
Controlled Drug	Drugs that are listed in the Narcotic Control Regulations of the Controlled Drugs & Substances Act because use may lead to abuse or dependence.
Distribution	Is the way drugs are carried by the cardiovascular system (circulatory/ blood) throughout the body to the tissues.
Drug	Any substance that can be used to change a chemical process or processes in the body, for example to treat an illness, relieve a symptom, enhance performance or alter state of mind.
Drug – Drug Interaction	The effect of a drug when it is administered with another drug may change, enhance or decrease the intended action of the drug.
Drug Abuse	The self-directed use of drugs for non-therapeutic purposes.
Drug Dependence	An inability to control drug intake that may be physiological, psychological or both.

TERM	DEFINITION
Drug Tolerance	A decreased response to a repeated drug dose.
Dysphagia	A problem with swallowing due to illness, injury or aging, that makes it difficult for food and fluids to get past the airway and into the passageway leading to the stomach. Possible complications include aspiration, choking and malnutrition or dehydration.
Enteric Coating	A chemical coating added to oral medications that resists the effects of the stomach juices/enzymes. This allows the medication to pass through the stomach into the small intestine for absorption.
Excretion	Is the way the drug is eliminated from the body?
Feces	Stool discharged from the rectum, i.e. solid waste products remaining after food is digested and nutrients are absorbed.
Generic Name	A non-owned name (also known as proper or non-proprietary name) indicating the chemical origin of a drug. It refers to the precise chemical composition of the drug. E.g. carbamazepine is the generic name for Tegretol®.

TERM	DEFINITION
Half-life	The amount of time required for 50% of the drug to be eliminated from the body. This is determined by an individual's ability to metabolize and excrete a particular drug.
Hepatic	Refers to the liver.
Insomnia	The inability to fall asleep or to remain asleep for an adequate length of time.
MAR	Medication Administration Record
Metabolism	Is the way the body changes a drug into a form that can be excreted.
Microorganism	Any organism (living thing) too small to be visible to the naked eye; includes bacteria, viruses and fungi.
Narcotic	An addictive drug that reduces pain, changes mood and behavior. It may cause drowsiness and confusion.
Overdose	The use of any drug in such quantities that cause serious adverse effects. It can be deliberate or accidental; lethal or non-lethal.
Over-the-counter Drug (OTC)	Drugs sold directly to the public without supervision of a health care professional. They are usually used for minor symptoms and are meant for short term use only (2-3 days).

TERM	DEFINITION
Palpitations	An awareness of the beating of the heart (pounding, fluttering or skipping), whether it is too slow, too fast, or at its normal frequency; brought on by overexertion, alcohol, disease or drugs, or as a symptom of panic disorder.
Paradoxical reaction	An unexpected or untypical drug response that is not the intended drug action and may actually produce the opposite effect, for example, a sedative leading to hyperactivity.
Pathogen	An agent that causes disease, especially a living microorganism such as bacteria, virus, fungi and parasites.
Peak Plasma Level	The point at which the drug is at its highest concentration in the blood.
Pharmacodynamics	The action of drugs on the human body.
Pharmacokinetics	What the body does with a drug.
Pharmacology	The study of drugs and their actions on the body.
Placebo	A placebo is an inactive pill, liquid, or powder that has no treatment value. It is not a drug. Any effects it has are due to the expectations of the patient. It may also be called a "sugar pill" or any dummy medication or treatment.

TERM	DEFINITION
Polypharmacy	The administration of many drugs together. It may be beneficial, in combination drug therapies, or hazardous, as in drug interactions, or when other medications are being taken without knowledge of the person prescribing the medication.
Prescription Drug	A drug that can be used safely only under the supervision of a health care professional licensed to prescribe or dispense drugs, according to provincial/federal law.
Psychosis	Severe mental illness that prevents people from being able to distinguish between the real world and the imaginary world. Symptoms include hallucinations (seeing or hearing things that aren't really there) or delusions, irrational thoughts and fears.
Renal	Refers to the kidney.
Respiration	The act of breathing – inhaling and exhaling air for the purpose of gas exchange (i.e. oxygen and carbon dioxide).

TERM	DEFINITION
Seizure	<p>Uncontrolled electrical activity in the brain, which may produce a physical convulsion, minor physical signs, thought disturbances, or a combination of symptoms.</p> <p>The type of symptoms and seizures depend on where the abnormal electrical activity takes place in the brain, what its cause is, and other factors such as age and general state of health.</p>
Shock	<p>Shock is a life-threatening medical emergency caused by the inability of the body to supply enough oxygen to meet tissue requirements. Loss of blood is an important cause of shock. Without prompt medical attention shock usually causes death.</p>
Somnolence	<p>An extreme form of drowsiness, sleepiness.</p>
Spasm	<p>Involuntary muscle contraction with involuntary movement of the limbs. Limbs are difficult to control (for example, Cerebral Palsy).</p>

TERM	DEFINITION
Steady State	A condition that is achieved when the amount of medication administered on a regular schedule equals the amount of medication eliminated.
Support Worker	A support worker is defined as a designated employee trained to do medication administration. The job titles may vary from agency to agency.
Tardive Dyskinesia	It is a movement disorder that may result from the long term use of certain antipsychotic medications. The condition is characterized by involuntary, rhythmic movements of the face, jaw, mouth, and tongue, such as lip pursing, chewing movements, or protrusion of the tongue.
Target Organ	An organ intended to receive a therapeutic dose of medication.
Therapeutic Blood Level	The amount of drug circulating in the bloodstream that produces therapeutic effect with minimal side effects.
Therapeutic Effect	The intended, beneficial action of a drug.
Toxicity	Harmful effects produced by some drugs because of their action (usually to specific organ or tissue sites such as the kidney) or caused when the drug level in the body is too high.

TERM	DEFINITION
Tremor	Trembling or shaking.
Universal Precautions	A method of infection control including standard precautions, such as the use of personal protective equipment, disposal of sharps and safe housekeeping, to prevent possible exposure to pathogens carried by blood and other body fluids.

APPENDIX 2: PRESCRIPTION ABBREVIATIONS

Term	Meaning
ac	before meals
bid	twice daily
caps	capsules
cc	cubic centimeters
d	day
d/c or dc	discontinue
fl	fluid
gtt	a drop
gtts	drops
h or hr	hour
hs	at bedtime
NKA	no known allergies
NKDA	no known drug allergies
MAR	medication administration record
mcg	microgram
mg	milligram(s)
ml	milliliter
od	once daily
OTC	over-the-counter medication
oz	ounce
pc	after meals
po	by mouth

Term	Meaning
prn	as required/necessary
q	every
q4h	every four hours
q6h	every six hours
qd	every day
qh	every hour
qid	four times daily
qm or qam	every morning
qod	every other day
Rx	prescription
sc	subcutaneous
sl	sublingual/ under the tongue
stat	immediately
supp	suppository
tbsp	tablespoon (15 cc or 15 ml)
tid	three times daily
tsp	teaspoon (5 cc or 5 ml)
ung	ointment

APPENDIX 3: HOW TO GIVE MEDICATIONS – PROCEDURES

The following procedures are intended to assist support workers to safely administer medications.

Be sure to follow the master procedure every time medications are administered.

Certain types of medication, such as suppositories, enemas, vaginal medications and injections require specific additional training and may not be administered by support workers who have not been trained.

MEDICATION ADMINISTRATION: MASTER PROCEDURE

WHEN ADMINISTERING ANY MEDICATION THE
FOLLOWING STEPS MUST TAKE PLACE **EVERY TIME**
TO ENSURE SAFE PRACTICES.

1. Assessment – Question! Question! Question!

- Review the consent form
- Check for allergies
- Review client information and history
- Review to the client's drug profile and drug monograph
- Review purpose of the medication

2. Implementation – Check! Check! Check!

- Wash your hands
- Clean work space
- Gather the medication, clean equipment and supplies such as water glass, bubble pack etc.
- Do not leave drugs unattended
- Prepare medications for one client at a time
- Do not touch medication with your hands. If the client plans to use his/her hand to place medication in their mouth, encourage them to wash and dry hands before they take medication

- Review medication documents by using the **3-check system**
 - Before medication is prepared check prescription label to medication in the approved pharmacy packaging.
 - Prescription label to MAR before pouring medication
 - MAR to prescription label before the medication is put away
- Immediately before giving medication be sure to follow the **'7 RIGHTS'** of medication administration

Right person	➔	Right drug	➔	Right dose	➔	Right route	➔	Right schedule	➔	Right reason	➔	Right documentation
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- Teach/explain the “what and why” of what you are doing to the client, including the purpose of the medication and any expected outcome
- Use proper technique to give the medication, for example a sublingual pill is placed under the tongue
- Wash your hands again after each client’s medication is given
- Return supplies and documents to proper location
- Store medications in a dark, dry, secure place, or as directed, for example, refrigerated medications
- If the medication is a PRN be sure the **4 Judgments** are considered:

Symptoms – **A**mount – **T**ime – **E**ffectiveness

3. **Evaluation** – **Observe! Observe! Observe!**

- Evaluate the client's response to medication
- Is the medication doing what it is supposed to do?
- Watch for side effects and adverse reactions

4. **Documentation** – **Communicate! Communicate! Communicate!**

- Record each drug given on the Medication Administration Record in accordance with agency policy
- If the medication is PRN, record the symptoms, amount (dose), time and effectiveness
- Document any medication errors or incidents

WHEN ADMINISTERING ANY MEDICATION THESE STEPS
MUST TAKE PLACE **EVERY TIME** TO ENSURE SAFE PRACTICES.

The following pages will outline the procedures for giving specific formulations of medications.

ORAL MEDICATIONS: LIQUID PREPARATIONS

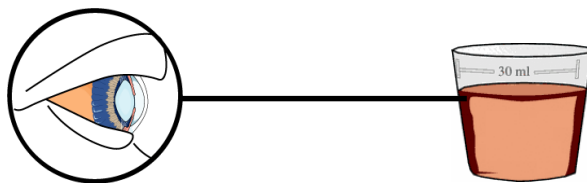
(Solutions, suspensions, syrups, elixirs, tablets dissolved in liquid)

Purpose:

- To provide safe effective drug therapy
- To provide a safe route for drug administration

Procedure:

- Shake medication if indicated on the bottle (suspensions)
- Remove bottle cap and place it upside down on a clean surface. Note: If the lid becomes contaminated, wipe it clean with an alcohol swab
- Hold the bottle with the label covered by the palm of your hand while pouring. Clear tape placed over the label prevents drops from spoiling the label
- Place the medication cup on a flat surface at eye level to filled to the desired mark

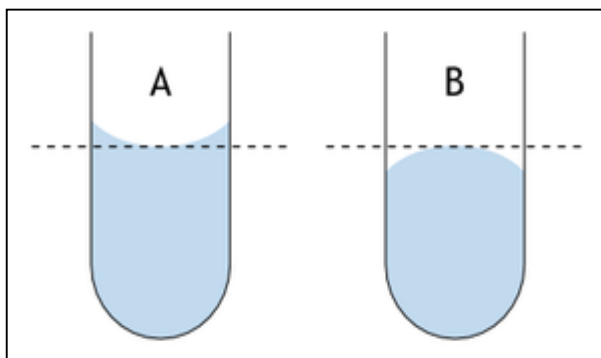


Best and safe practice: use a medication syringe for most accurate measurement and empty syringe into medication cup

- If dissolving effervescent tablets or powders, give medication immediately after dissolving in the liquid
- Ensure the client is in an upright position to swallow safely and prevent choking

Special Considerations:

- If you pour too much into the medication cup when preparing the liquid the excess can be returned to the container (it is not contaminated)
- Excess medication in a medication cup should never be placed back into the original container if the client has not taken it all (it is contaminated)
- If spillage occurs around the mouth/neck of the bottle, clean with an alcohol swab
- A meniscus is a curve in the surface of a liquid and is produced in response to the surface of the container or another object



A: Read the *bottom* of a concave meniscus.

B: Read the *top* of a convex meniscus

Plastic medication cups used for liquid medication should not be reused for other medication

ORAL MEDICATION: ORAL SPRAYS

Purpose:

- To provide safe effective drug therapy
- To provide a safe route for drug administration

Procedure:

- Hold the container in upright position and remove plastic cover. **Do not shake.** Oral sprays are usually solutions
- The container must be primed prior to first use. Pump the spray in the air and away from the face before using for the first time or if it has not been used in several weeks
- Spray once onto or under the tongue according to directions



Special Considerations:

- Oral spray medications are absorbed rapidly through the oral mucous membrane so the observed effect of the drug should be evident quickly
- Do not inhale or get the medication in your eyes
- Some oral sprays have specific directions to use if the initial dose is not effective, for example: NitroSpray®. Follow pharmacy instructions accordingly

ORAL MEDICATION: MOUTHWASHES & ORAL RINSES

Purpose:

- To provide safe effective drug therapy
- To provide a safe route for topical oral drug administration

Procedure:

- Use after brushing teeth
- The solution should be swished, gargled or swirled through the mouth then spit out
- Use a syringe or calibrated medication cup to measure the right amount of the rinse
- The client should not rinse the mouth, eat, or brush teeth for 30 minutes after rinsing with mouthwash or an oral rinse unless otherwise directed

Special Considerations:

- Oral rinses and mouthwashes are mainly used for local effect
- Not usually meant to be swallowed, however there may exceptions (follow the pharmacy or manufacturer's instructions)
- Example: Peridex® Oral Rinse
- Do not dispose of medications in wastewater (e.g. down the sink or in the toilet)
- Store oral rinses and mouthwashes at room temperature, unless otherwise instructed

ORAL MEDICATIONS: LIQUID PREPARATIONS via ORAL LIQUID SYRINGE

Purpose:

- To provide safe effective drug therapy
- To provide a safe route for drug administration for clients with swallowing difficulties (dysphagia)



Bung (bottle adapter) inserted into liquid medication bottle

Procedure:

- Pour a small amount of liquid into a small, clean cup or glass or insert an adapter into the opening of the medicine container (device known as a 'bung' or bottle adaptor)
- Push the syringe plunger in as far as it will go
- Turn the syringe so that the markings face you and find the marking for the desired dose
- Place the syringe tip below the surface of the liquid and draw the plunger back to pull the medication into the syringe to a point just beyond the appropriate marking
- With the syringe at eye level, point it up and tap lightly to dislodge any air bubbles and then push the plunger until it lines up with the desired dose marking

- Direct the syringe toward the inside of the cheek and gums near the back of the mouth and press the plunger slowly (to prevent choking and drooling)
- Administer the dose in several small portions, allowing the client to swallow each portion before giving the next

Special Considerations:

- A client who has a swallowing problem (dysphagia) requires a swallowing assessment by a qualified speech pathologist, occupational therapist or dietitian
- Recommendations for safe medication administration must be written and clearly communicated
- Follow the recommendations to the letter to prevent aspiration or choking
- The client should not lie down until you are sure the medication has been swallowed
- If you draw too much into the syringe, when preparing the liquid, the excess can be returned to the container (it is not contaminated)
- Excess medication in a syringe should never be placed back into the original container if the client has not taken it all (it is contaminated)

ORAL MEDICATION: BUBBLE PACK/ DOSETTE/ PILL BOTTLE

Purpose:

- To achieve safe practices
- To minimize medication incidents and errors
- To minimize contamination of medications

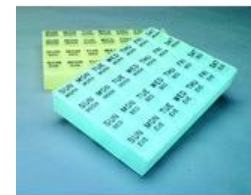
Procedure: Bubble Pack

- Place medication cup behind the bubble pack, covering the foil behind the dose to be poured
- Holding the bubble pack down, close to counter, pop the bubble to release the pills into the med cup
- Check carefully to confirm that all the pills have been released into the med cup (tiny pills can get caught in the foil quite easily)



Procedure: Dosette

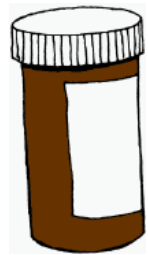
- Slide the cover to reveal the dose to be poured
- Place medication cup upside down over the opening
- Keep the dosette close to the counter surface
- Carefully flip the dosette while holding the med cup, to release the pills into the cup



- Check carefully to confirm that all the pills have been released into the med cup
- Slide the cover to close the dosette
- **Note:**
 - A dosette must bear a complete pharmacy label
 - Support workers cannot fill a dosette from other medication containers – only a pharmacist can do this

Procedure: Pill Bottle

- Pills from a pill bottle are always poured into the cap – this prevents problems when several medications are prepared at the same time
- The inside of the cap is a clean surface
- Gently pour the medication into the cap and then empty the cap into the medication cup
- Be sure to keep the inside surface of the cap clean – if it becomes soiled, clean it with an alcohol swab, let dry and then reseal the pill bottle



Special Considerations:

- Always work on a clean surface
- Work close to the surface to ensure pills don't bounce and fall to the floor
- Always, always – **3-check system** and the '**7 RIGHTS**'

ORAL MEDICATIONS: SOLID FORM BY MOUTH

(tablets, capsules, chewable tablets, lozenges etc.)

Purpose:

- To provide safe effective drug therapy
- To provide a safe route for drug administration

Procedure:

- Assess that the client is alert and able to swallow
- Give medications with a full glass of water unless otherwise directed, such as “take on an empty stomach”
- The client should be sitting upright in order to swallow safely
- Watch to ensure the client swallows the medication

Special Considerations:

- Pills may need to be crushed and mixed with applesauce, pudding or yogurt to help a client swallow
- Enteric coated, sugar coated or slow release tablets, should not be broken or crushed – call the pharmacy to find out if you are not sure
- Chewable tablets must be chewed first – then water may be used to rinse the mouth
- Lozenges are meant to ‘melt’ in the mouth, not to be chewed or swallowed whole

ORAL MEDICATIONS: CRUSHED MEDICATION

Purpose:

- To provide safe effective drug therapy
- To provide a safe route for drug administration when a client cannot swallow whole tablets

Procedure:

- Assess that the client is alert and able to swallow
- Confirm with the pharmacist that medications can be crushed
- Select the pill crushing tool and make sure it is clean
- Place pills in the pill crushing tool (some tools require that pills are placed into a disposable medication cup)
- Follow the directions for the pill crushing tool to grind the tablets into a fine powder
- Mix the powdered medication into applesauce, pudding, yogurt or other choices according to the client's preference
- Administer the medication mixture to the client



- The client should be sitting upright in order to swallow safely
- Watch to ensure the client swallows all the medication

Special Considerations:

- Enteric coated, sugar coated or slow release tablets, should not be broken or crushed – call the pharmacy to find out if you are not sure
- The pill crushing tool must be cleaned thoroughly after each use
- Pill crushers such as example 3 which are made of an acrylic product are for individual client use only as there is always a risk that some medication residue may be present

Examples of mechanical tools used to crush medications:



Example # 1



Example # 2



Example # 3

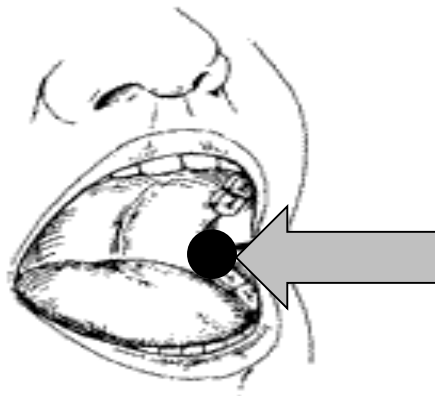
ORAL MEDICATIONS: BUCCAL TABLETS

Purpose:

- To provide safe effective drug therapy
- To provide a safe route for drug administration

Procedure:

- Offer the client a sip of water to moisten the mouth if it is dry. The water should be swallowed or spit out
- Place a tablet in the pouch between the inside of the cheek and the upper edge of the lower gum with a spoon or small forceps
- Close the mouth and ask the client not to swallow until the tablet has dissolved completely



Special Considerations:

- The tablet should not be swallowed or chewed
- The client should not eat, drink or smoke while the tablet is dissolving
- Do not rinse the mouth until a few minutes after the tablet has dissolved

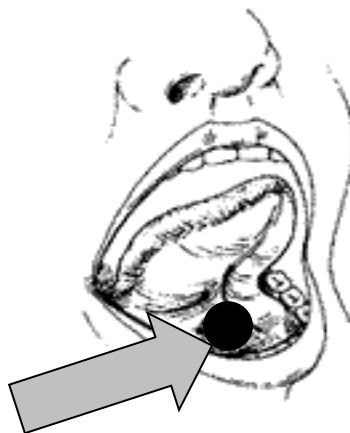
ORAL MEDICATIONS: SUBLINGUAL TABLETS

Purpose:

- To provide safe effective drug therapy
- To provide a safe route for drug administration

Procedure:

- Offer the client a sip of water to moisten the mouth if it is dry. The water should be swallowed or spit out
- Place the tablet under the tongue with a spoon or small forceps
- Close the mouth and ask the client not to swallow until the tablet has dissolved completely



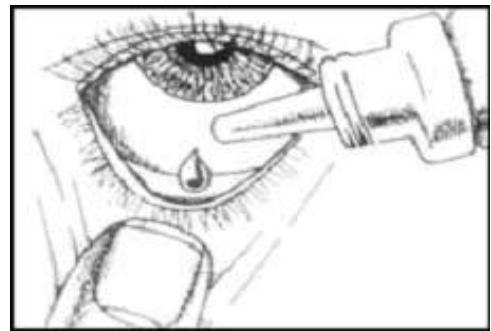
Special Considerations:

- The tablet should not be swallowed or chewed
- The client should not eat, drink or smoke while the tablet is dissolving
- Do not rinse the mouth until a few minutes after the tablet has dissolved

EYE MEDICATIONS: EYE DROPS

Purpose:

- To provide safe effective drug therapy
- To provide a safe route for drug administration
- To relieve local irritation of the eye
- To treat eye infections
- To maintain lubrication of the eye



Procedure:

- Wash hands thoroughly
- Remove glasses or contact lenses
- Clean lids and eyelashes if necessary. Using a warm, moist cloth, wipe gently from the inner to outer corner of the eye
- Have the client hold a clean tissue, if they are able, to wipe away any excess tears
- Remove the cap of the eye drop container and place upside down on a clean surface to prevent contamination
- Ask the client to lie down or sit with head tilted back and look toward the ceiling (this prevents blinking)
- With your non-dominant hand placed under the client's chin, put your thumb on the cheek bone and gently pull down the lower lid, creating a small pocket called the conjunctival sac (see diagram)
- Do not apply pressure to the eyeball

- Place the heel of your dominant hand on the client's forehead with the eye drop dispenser in your hand
- Gently put the required number of drops into the center of the exposed pocket and release the lower lid and have the client close eyes gently for 10-15 seconds, trying not to blink (do not squeeze eyelids together or rub the eyes).
- For medicated eye drops, with gloved finger, apply very slight pressure to the tear duct until excess is blinked away to limit the effect to the whole body
- Gently wipe any excess tears away
- Wash hands thoroughly
- Wait 5 minutes before applying another eye medication (follow doctor's orders)

Special Considerations:

- If cap or dropper is contaminated, clean with an alcohol swab
- Gloves should be worn according to agency policy, and always when the eye is infected
- If drops are stored in the refrigerator, warm to room temperature before administering
- Warn clients when an expected outcome is blurred vision
- Clients should avoid activities requiring acute vision until vision clears
- Remember – even antibiotics used as eye drops can cause systemic allergic reactions, including anaphylaxis

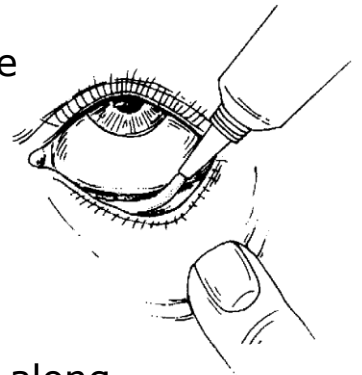
EYE MEDICATIONS: EYE OINTMENT

Purpose:

- To provide safe effective drug therapy
- To provide a safe route for drug administration
- To relieve local irritation of the eye
- To treat eye infections
- To maintain lubrication of the eye

Procedure:

- Wash hands thoroughly and put on gloves
- Remove glasses or contact lenses
- Clean lids and eyelashes if necessary. Using a warm, moist cloth, wipe gently from the inner to outer corner of the eye
- Remove the cap of the eye ointment tube, taking care not to touch anything with the tip of the tube, and place upside down on a clean surface to prevent contamination
- Ask the client to lie down or sit with head tilted back and look toward the ceiling (this prevents blinking)
- With your non-dominant hand placed under the client's chin, put your thumb on the cheek bone and gently pull down the lower lid, creating a small pocket (see diagram)
- Do not apply pressure to the eyeball
- Apply a ribbon of ointment about 1 centimeter along the lower lid from the inner toward the out corner of the eye – twist your wrist to break the ointment strip from the tube



- Have client close eyes gently for 1-2 minutes, rolling eyeball in all directions so that the ointment coats the eye
- Use a clean, soft tissue to wipe away any excess ointment from around the eye
- Use another clean tissue to wipe the cap of the ointment tube and tightly replace cap to prevent it from drying out

Special Considerations:

- When the tube is opened for the first time, discard the first 0.5 cm of ointment, as it may be too dry
- If you are administering more than one ointment, wait about 10 minutes between applications (follow doctor's orders)
- If you are administering both eye drops and ointment, use the drops first, wait five minutes, then apply the ointment (follow doctor's orders)
- Warn clients when an expected outcome is blurred vision
- Clients should avoid activities requiring acute vision until vision clears
- Remember – even antibiotics used as eye ointment can cause systemic allergic reactions, including anaphylaxis

EAR MEDICATIONS: EAR DROPS

Purpose:

- To relieve local inflammation and discomfort
- To soften ear wax
- To treat local infection

Procedure:

- Warm medication bottle to body temperature by placing the sealed bottle in warm water or holding it in your hand for a few minutes
- Wash your hands thoroughly and apply gloves as required such as when an infection is present
- Clean the outer ear with a clean warm cloth to remove drainage and debris
- Place cap of bottle upside down on a clean surface to prevent contamination
- Have the client lay on their side in bed, or sitting upright with head tilted to the side to expose the affected ear
- Straighten the client's ear canal by pulling gently on the outer curve of the ear (pinna) **upward and backward**



Adult: Pull pinna up and back before giving eye drops



Press and gently massage the ear flap (tragus) after giving ear drops

- **Note:** In children the canal is straightened by pulling down and back
- Place the heel of your hand on the client's forehead with the dropper in your hand and give the required number of drops by holding the dropper ½ inch or 1.25 cm above the ear canal



- Gently massage the tragus, the small piece of cartilage over the ear canal, to help the drops move into the ear canal
- The client should try to remain in the side lying position or with head tilted for 3-4 minutes if possible
- If both ears are to be treated, wait 3-5 minutes before treating the other ear

Special Considerations:

- Never force the ear solution into the ear
- Do not put the dropper into the ear canal itself
- Avoid using cotton tipped applicators in the inner ear canal because they can push the wax in further or damage the ear drum
- Never put a cotton ball in the ear unless directed to do so by a physician because the wicking action of cotton can actually draw the medication out of the ear
- Any hearing loss should be investigated by a physician

MEDICATIONS BY INHALATION: METERED DOSE INHALER (MDI) (commonly called puffers)

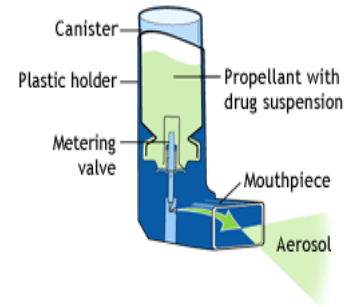
Purpose:

- To provide rapid and sustained relief from airway obstruction due to bronchospasm, inflammation/secretions
- To provide an alternate route of drug administration

Procedure:

- Remove the cap from the MDI and make sure nothing is in the mouthpiece
- Shake the MDI well (it is a suspension)
- Ask the client to tilt head back slightly to open airway
- **Open mouth method:** Position the MDI within 2 finger widths of open mouth. Direct the client to breathe out as completely as possible (coach client as needed)
- Direct the client to inhale slowly and deeply through the mouth as you depress the canister into the mouthpiece to release the dose
- **Closed mouth method:** Direct the client to breathe out completely, fully emptying the lungs. Then place the tip of the MDI mouthpiece between the teeth and instruct client to gently close the lips around the mouthpiece, creating a seal
- Ask the client to breathe in slowly and deeply through the mouth **immediately** before activating the MDI

- As the client begins to inhale, firmly press the container down into the mouthpiece once only. This releases the medication. The client should continue to inhale slowly after the MDI has been activated until they reach maximum inhalation
- Direct the client to hold breath for 10 seconds or as long as is comfortable, then exhale slowly
- If the client requires more than one puff, wait 1-2 minutes and repeat the process
- Rinse mouth with water after using steroid based inhalers



Special Considerations:

- Prior to administering medications by inhalation, make sure mouth is clear of food or gum
- A client's need for an inhaler more than every 4 hours may signal additional respiratory problems requiring medical follow-up
- Signs of overuse include increased heart rate, restlessness and insomnia
- Wash the mouthpiece with warm water twice a week
- An Aerochamber® may be prescribed for use with an MDI



OPEN MOUTH METHOD



CLOSED MOUTH METHOD

MEDICATIONS BY INHALATION: MDI WITH SPACER (Aerochamber®) or SPACER AND MASK

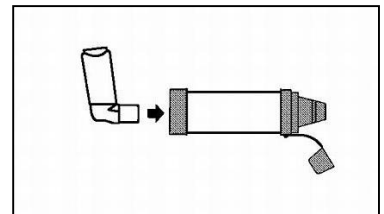
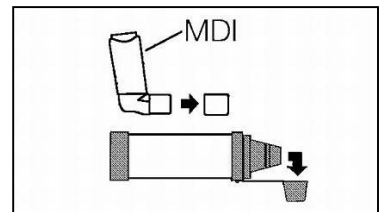
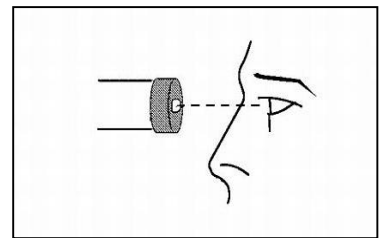


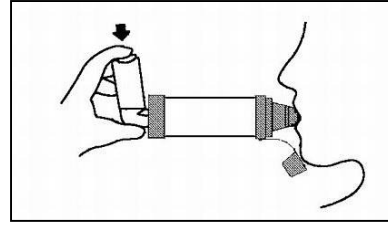
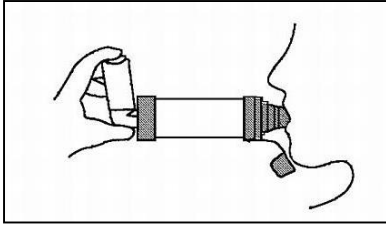
Purpose:

- To allow more medicine to get to the lungs
- To assist clients unable to follow MDI technique

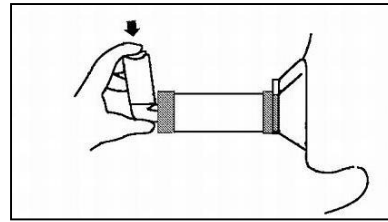
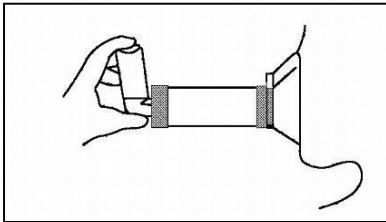
Procedure:

- Carefully examine the product for damage, missing parts or foreign objects
- Remove caps and shake the MDI well
- Insert the MDI into the back piece of the chamber
- Depress inhaler at beginning of slow deep inhalation, hold breath as long as possible, up to 10 seconds before breathing out. If client has difficulty with slow deep breaths they can keep mouth tight on mouthpiece and breathe slowly 2-3 times after depressing the inhaler (give 1 puff at a time)

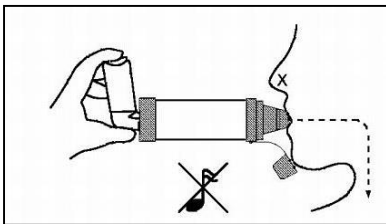




- If using the spacer with mask, ensure there is a good seal and maintain the seal for 2-3 breaths after depressing the inhaler



- Direct client to slow down inhalation. If you hear the whistle sound – it means the client is breathing too quickly



- Follow instructions supplied with the inhaler or by the pharmacist on amount of time to wait before repeating the steps

Special Considerations:

- Do not use the spacer if there is any damage or missing parts - use the MDI alone until a replacement is obtained
- Clean the equipment regularly (at least once a week), and after each use if the client has an upper respiratory infection
- **Best and safe practice:** use a spacer for inhalers

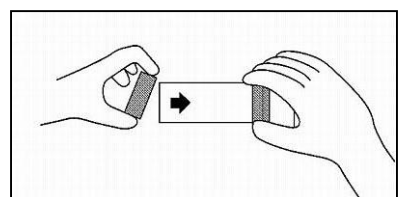
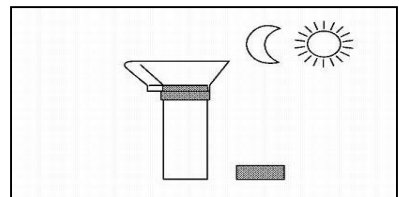
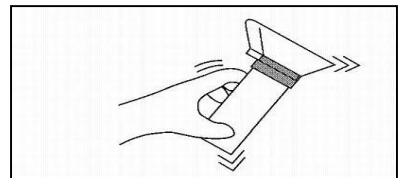
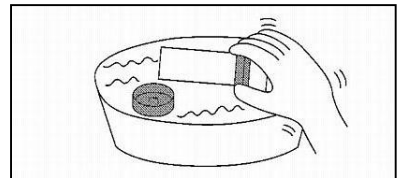
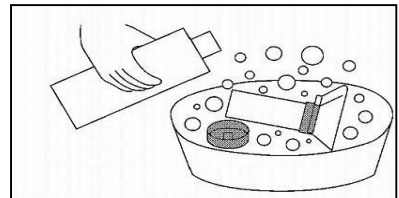
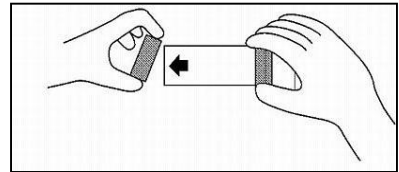
MEDICATIONS BY INHALATION: CARE & CLEANING OF SPACER/SPACER WITH MASK

Purpose:

- To reduce the growth of bacteria
- To maintain equipment

Procedure:

- Remove back piece only
- Do not remove mask or tamper with valves during cleaning
- Soak both parts for 15 minutes in lukewarm water with mild liquid detergent & agitate gently
- Rinse in clean water
- Shake out excess water.
Do not rub dry
- Let air dry in vertical position
- Replace back piece when unit is completely dry and ready for use



MEDICATIONS BY INHALATION: DRY POWDER INHALER (DPI) (Diskus®)

Purpose:

- To deliver medications directly to the airway
- To provide an alternate route of drug administration

Procedure:

- A client can take a dose from the DISKUS® with three simple steps:

- **Step 1—Open**

- o Hold the DISKUS® in one hand
- o Place the thumb of the other hand on the grip
- o Push away from you, until the mouthpiece appears and snaps into place



- **Step 2—Click**

- o Hold the DISKUS® level
- o Slide the lever away from you as far as it will go. You should hear a click. Breathe out as far as is comfortable



- **Step 3—Inhale**

- o Put the mouthpiece to your lips
- o Breathe in quickly and deeply through the DISKUS[®]
- o Hold your breath for about 10 seconds. Breathe out



- Then close the DISKUS[®]

Special Considerations:

- Keep the DISKUS[®] closed when not it use
- Never breathe out into the DISKUS[®]
- Never try to take the DISKUS[®] apart
- Always use the DISKUS[®] in a level position
- After breathing in, rinse the mouth with water and spit it out
- Never wash the mouthpiece or any part of the DISKUS[®]. Keep it dry. If the mouthpiece is dirty, wipe it with a cloth
- Always keep the DISKUS[®] in a dry place
- It has a dose indicator that counts down the number of doses as you use them. When there are 5 doses left the numbers on the indicator will turn red. When the red number is at 0 start using a new DISKUS[®]
- **Note:** There are other brands of dry powder inhalers in the marketplace. The DISKUS[®] and Turbuhaler[®] are most common. A pharmacist may demonstrate if a different type is prescribed.

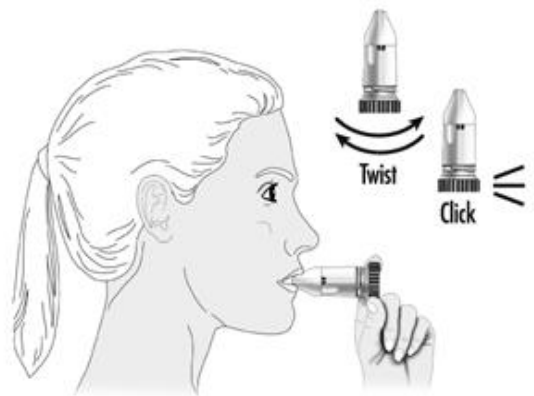
MEDICATIONS BY INHALATION: DRY POWDER INHALER (DPI) (Turbuhaler®)

Purpose:

- To deliver medications directly to the airway
- To provide an alternate route of drug administration

Procedure:

- Read the instructions that come with the DPI
- Check that the mechanism is clean and the mouthpiece is free of obstruction
- Load and prepare the medication for inhalation
 - Hold the device upright
 - Turn the coloured wheel one way and back the other way until it clicks – it is now loaded
- Exhale slowly and completely without straining or breathing into the DPI (moisture from the breath can interfere with the DPI's function)
- Place teeth over the mouthpiece, seal lips around it and tilt head slightly
- Take a fast deep full inhalation to activate the flow of medication



- Encourage the client to hold the medication in the lungs for 5 to 10 seconds
- Breathe out slowly against pursed lips
- Wait 30 seconds before taking a second inhalation (when required)

Special Considerations:

- Keep the Turbuhaler® closed when not in use
- Never breathe out into the Turbuhaler®
- Never try to take the Turbuhaler® apart
- After breathing in, rinse the mouth with water and spit it out
- Never wash the mouthpiece or any part of the Turbuhaler®. Keep it dry. If the mouthpiece is dirty, wipe it with a dry cloth 2-3 times a week to remove particles
- Always keep the Turbuhaler® in a dry place
- It has a dose indicator that counts down the number of doses as you use them. When there are 5 doses left the numbers on the indicator will turn red. When the red number is at 0 start using a new Turbuhaler®
- **Note:** There are other brands of dry powder inhalers in the marketplace. The DISKUS® and Turbuhaler® are most common. A pharmacist may demonstrate if a different type is prescribed.

MEDICATIONS BY INHALATION: NEBULIZER

Medications by nebulizer may only be given after successful completion of an approved training course and skills demonstration by a qualified Respiratory Therapist or Registered Nurse.

Purpose:

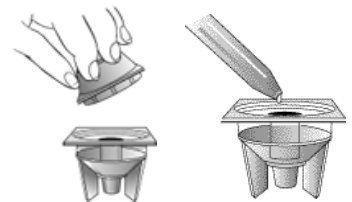
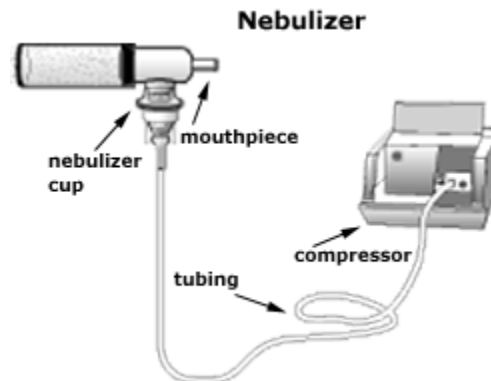
- To deliver medicine as a vapour for the client to inhale

Procedure:

- NOTE: Before using a nebulizer staff must receive training from a person qualified to do so
- Place the air compressor on a sturdy surface that will support its weight. Plug the cord from the compressor into a properly grounded (three prong) electrical outlet
- Wash hands thoroughly
- Carefully measure the medicine exactly as instructed

- Remove the top part of the nebulizer cup and place medicine in the bottom of the cup
- Assemble the mask or mouthpiece and connect the tubing from this to the port on the compressor

- Turn on the compressor look for a light mist coming from the back of the tube opposite the mouthpiece



- Have client sit up as straight as possible
 - If using a mask, position it and secure
 - If using a mouth piece, place it between teeth and seal with lips around it
- Direct client to take slow, deep breaths through the mouth. If possible hold each breath 2-3 seconds to allow the medication to settle in the airways
- Continue the treatment until the medication is gone
- If the client becomes jittery or dizzy, stop the treatment and rest for 5 minutes and continue, breathing more slowly
- Turn compressor off
- Direct the client to take several deep breaths and cough to clear secretions
- Wash hands thoroughly



Special Considerations:

- After each treatment rinse the nebulizer cup with warm water and let it air dry
- Once daily – the nebulizer cup, mask or mouthpiece should be washed in warm soapy water, rinsed and air dried
- Every third day, after washing your equipment, disinfect the equipment for 30 minutes using a ½ c vinegar: 1½ c water solution or the disinfectant solution the supplier suggests. Rinse well and air dry
- Cover the compressor when not in use
- Do not store on the floor
- Keep extra nebulizer cup and mask or mouthpiece on hand
- Change the filter as required

MEDICATIONS BY INHALATION: NASAL SPRAYS

Purpose:

- To deliver medication directly to nasal passage and sinuses
- To provide an alternate route for drug administration

Procedure:

- Client should blow the nose to clear mucous before using the medication

Pressurized canister

- Ensure canister is snug in the holder. Shake several times
- Direct client to keep head upright and breathe out slowly
- Hold canister to nostril receiving the spray
- Gently press side of nose to close other nostril
- Press down on the canister as client begins to breathe in slowly through the nose
- Repeat for other nostril as required



Pump bottle

- Remove cap, shake the bottle and prime it (squirt into the air until a fine mist comes out)
- Tilt the head slightly forward and breathe out slowly
- Hold the pump bottle to the nostril receiving the medication with your thumb at the bottom and your index and middle fingers on top



- Gently press side of nose to close other nostril
- Squeeze the pump firmly and quickly as client begins to breathe in slowly through the nose

Squeeze Spray Bottle

- Hold the spray bottle to the nostril receiving the medication with your thumb and your index finger on the sides
- Gently press side of nose to close other nostril
- With head tilted slightly forward spray gently 1 or 2 times as directed into the nostril, breathing in deeply (sniff)



Special Considerations:

- Direct client to try not to sneeze or blow their nose just after using spray
- Client must be able to sniff air through each nostril otherwise medication will be wasted and ineffective
- Aim straight. Point the nozzle of the nasal spray container toward the back of your head. If you don't spray straight, you will waste the medicine and may cause more irritation in the nose
- If the pump spray is used correctly, the spray should not drip from the nose or down the back of the throat
- If the client reports that the nose hurts, begins to have nosebleeds or if the inside of the nose stings, stop using the spray for one to two days. Sometimes it helps to use an over-the-counter saline nose spray just before the regular medicine. If bleeding or irritation continues consult a doctor
- Use nasal sprays only as directed

TOPICAL MEDICATIONS (applied to the skin) CREAM, LOTION, OINTMENT, PASTE, POWDER)

Purpose:

- To maintain or improve hydration of skin
- To protect skin surface
- To reduce local skin irritation
- To treat local skin infection
- To provide an alternate route for medication administration

Procedure:

- Put disposable gloves on prior to applying any medicated cream, lotion, ointment or paste to a client to prevent absorbing of medication through your own skin
- Position the client so that they are comfortable. Expose only the area to be treated
- Wash the area with mild soap and warm water (unless other directions are given by the doctor or pharmacist)
- Dry thoroughly (irritated skin should be patted dry)
- Re-glove
- If medication is for excessively dry and flaking skin it may be beneficial to apply it while the skin is still damp.
- Remove medication from container with a wooden tongue depressor or gloved finger – **DO NOT DOUBLE DIP**



- The product should be spread over the skin surface in the direction of hair growth, from the most healed to the least healed area ('clean to dirty'), to prevent cross contamination, whenever possible, for example: in diagram **A** the cream would be applied from the buttock toward the anus



A



B



C

- Apply medicated cream sparingly (less is better), avoiding rubbing or patting of the skin, and leaving a thin layer over the affected area
- If more product is required to cover the affected area, follow the procedure again with a clean gloved finger or tongue depressor surface
- Apply a covering or dressing as necessary
- Remove and discard gloves. Wash hands thoroughly

Special Considerations:

- The client should avoid swimming or such activities that could cause the treatment to be washed off
- Creams, lotions and ointments may cause staining in clothing
- Be sure to dispose of soiled dressings according to good infection control practices
- Powder should be applied as directed by the doctor or pharmacist

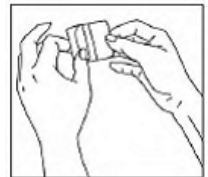
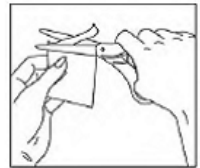
TOPICAL MEDICATION: TRANSDERMAL PATCH

Purpose:

- To provide a steady, even dose of medication through the skin, into the body, over several hours or days
- To provide an alternate route for medication administration

Procedure:

- Be sure to remove the old patch before applying a new one
- Choose a dry, unbroken, non-hairy part of the skin to put the patch
- The buttocks, lower abdomen, lower back, and upper arm (outer part) are good choices
- If the area has body hair, clip the hair with scissors (do not shave)
- Remove the protective liner on the sticky side of the patch. Some patches will have a 2-piece protective liner – remove one piece first
- Try not to touch the adhesive side of the patch because the medication may come off on your fingers
- Attach sticky side of the patch to the skin. Remove 2nd piece of liner and press patch firmly with palm of the hand for about 30 seconds. Make sure the edges stick well to the skin



- Discard used patches in container for return to pharmacy, being careful not to touch adhesive side
- Wash hands thoroughly

Special considerations:

- If the patch does not stick well, use medical tape to tape the edges down
- Very hot water or steam may loosen patch. If the patch falls off, a new patch must be applied as directed by the doctor or pharmacist
- Swimming, showering or bathing should not affect the adhesiveness of the patch
- Avoid use of lotions, creams and powders that could interfere with the patch sticking well
- If you must use the products, apply them after the patch has been securely fixed to the skin
- Do not put the patch on skin that is burned, broken out, cut, irritated or damaged in any way.
- Rotate patch sites – use a new site each time to prevent irritation to the skin
- Avoid highly sensitive areas such as the breast
- Do not cut or trim the patch – this will cause the drug to leak out and prevent the patch from working properly
- If redness or irritation of the skin develops inform the doctor or pharmacist

MEDICATION BY INJECTION: EpiPen® (Epinephrine Injection)



EpiPen® Adult Auto-injector Trainer

Purpose:

- To treat life-threatening allergic reactions caused by insect bites, foods, medications, latex and other causes

Procedure:

- The EpiPen® is a single-dose pre-filled automatic injection device to be injected into the thigh. It is only to be used in response to a serious allergic reaction. **Use only as ordered by a physician**
- Some symptoms of life threatening allergic reactions include:
 - o Wheezing
 - o Shortness of breath
 - o Itching
 - o Swelling

To use the injection device, follow these steps:

1. Remove the device from the carrier tube. Hold the device firmly in your fist with the orange tip pointing down. Do not touch the orange tip: hold only the cylinder. Pull the blue safety release straight out from the top of the EpiPen®.



2. Move your hand so the orange tip is near the outer thigh. Swing your hand away from the body, and then jab the orange tip firmly into the **mid-outer thigh** at a 90-degree angle. Do not worry about bruising the client! You may inject the needle through clothing that is covering the thigh. You should hear an audible '**click**' that indicates the device is working
3. Keep the device firmly in position for several seconds, then remove the device from the thigh and rub the area with your fingers for a few seconds
4. The extended orange needle cover and black indicator in the observation window indicate that the auto-injector delivered the drug.



After you use the EpiPen®, follow these steps:

- **ALWAYS CALL 9-1-1.**
- The client must go to hospital for emergency treatment
- Wait for emergency medical services to arrive
- The used EpiPen® must go to hospital with the client

Note: After use the auto-injector will not fit back into the carrier tube because the orange needle cover is extended.

Visit www.epipen.ca for more information and video instruction.

MEDICATION BY INJECTION: Allerject® (Epinephrine Injection)

Purpose:

- To treat life-threatening allergic reactions caused by insect bites, foods, medications, latex and other causes

Procedure:

- The Allerject® is a single-dose pre-filled automatic epinephrine auto-injector with voice instructions to guide you through the injection process. It is only to be used in response to a serious allergic reaction. **Use only as ordered by a physician**
- Some symptoms of life threatening allergic reactions include:
 - o Wheezing
 - o Shortness of breath
 - o Itching
 - o Swelling

To use the injection device, follow these steps:

1. Pull Allerject® from the outer case

Do not go to step 2 until you are ready to use Allerject®. If you are not ready to use, put it back in the outer case.



2. Pull off RED safety guard

To reduce the chance of an accidental injection, do not touch the black base of the auto-injector, which is where the needle comes out. If an accidental injection happens, get medical help immediately.



NOTE: The safety guard is meant to be tight. Pull firmly to remove.

3. Place BLACK end against the middle of the outer thigh (through clothing, if necessary), then press firmly and hold in place for five seconds.

Only inject into the middle of the outer thigh (upper leg). Do not inject into any other location.



Note: Allerject® makes a distinct sound (click and hiss) when you press it against your leg. This is normal and indicates Allerject® is working correctly.

After you use the Allerject®, follow these steps:

- **ALWAYS CALL 9-1-1.**
- The client must go to hospital for emergency treatment
- Wait for emergency medical services to arrive
- The used EpiPen® must go to hospital with the client

Visit www.allerject.ca for more information and video instruction.

RECTAL MEDICATIONS: SUPPOSITORIES

Rectal medications may only be given after successful completion of an approved training module and skills demonstration and documentation by a qualified Registered Nurse.

Purpose:

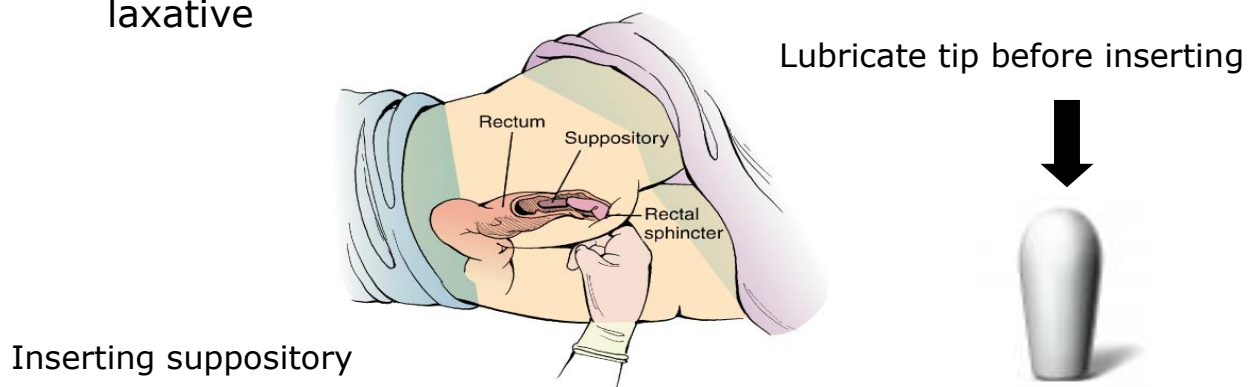
- To promote evacuation of stool from the lower bowel
- To decrease local inflammation and discomfort
- To provide an alternative route for medications when the oral route is unsuitable (e.g. vomiting, swallowing difficulties)

Procedure:

- Encourage client to defecate if possible prior to giving suppository
- Assist client to lie on the left side, if possible, with upper leg bent up toward the chest (left lateral Sims' position)
- Remove clothing over buttocks and place disposable pad under buttocks
- Wash hands and put on gloves
- Remove suppository from wrapper
- Lubricate the rounded end of suppository and gloved index finger with water soluble lubricant (e.g. Muco® or K-Y Jelly®)
- Ask client to take in a slow, deep breath and try to relax
- With non-dominant gloved hand, spread client's buttocks to visualize the rectum



- With dominant gloved and lubricated index finger insert suppository GENTLY through the anus, past the anal sphincter and push it against the rectal wall, about 10 centimeters (4 inches deep). If not inserted past this sphincter the suppository may pop out
- If client has difficulty retaining the suppository, hold buttocks together for a few seconds
- Withdraw finger, cleanse anal area of lubricant
- Remove gloves and wash hands
- Encourage client to remain on their side or back for 10 – 15 minutes to avoid the suppository coming out
- Assist client as required to washroom if suppository is a laxative



Special Considerations:

- If client has hemorrhoids, use liberal amounts of lubricant
- Store suppositories in a cool place to avoid melting
- Fingernails should be trimmed and jewelry removed before giving a suppository to avoid injury to the anal/rectal tissues
- Do not attempt to give a suppository if the rectum is full of impacted feces

RECTAL MEDICATIONS: SINGLE-DOSE ENEMA

(Ready to use, hand-size, disposable, squeeze bottle with a pre-lubricated rectal tip – e.g. Fleet® or Enemol®)

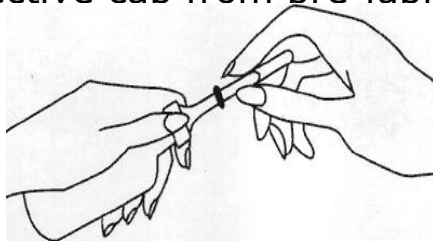
Rectal medications may only be given after successful completion of an approved training course and skills demonstration by a qualified Registered Nurse.

Purpose:

- To promote evacuation of stool from the lower bowel

Procedure:

- Enema should be at room temperature – it does not require warming
- Assist client to lie on the left side, if possible, with upper leg (right) bent up toward the chest (left lateral Sims' position)
- Remove clothing over buttocks and place disposable pad under buttocks
- Wash hands and put on gloves
- Remove protective cap from pre-lubricated rectal tip



- Insert tube GENTLY into the anus, pointing it in the direction of the navel
- Insertion may be easier if the client bears down, as if in having a bowel movement – it helps relax the muscles of the anus. Once inserted the client should stop bearing down

- SLOWLY squeeze bottle from the end until nearly all the liquid is expelled
- **Note:** don't worry about emptying the container completely, because it is designed to contain extra liquid
- Withdraw the tube
- Encourage client to maintain body position until a very strong urge to defecate is felt
- Contents of bowel should then be expelled

Special Considerations:

- Do not use if client is experiencing abdominal pain, nausea, fever or vomiting, cardiac disease or severe dehydration
- STOP if there is resistance or the client complains of pain – forcing the enema can result in injury to the intestines
- Frequent use may result in loss of independence in bowel function
- Use only as prescribed by a physician
- If there are no results from the enema or there is bleeding from the rectum, contact a doctor
- There are different types of enemas – ensure you follow the doctor's orders and read package information before the procedure

Only ready to use, single-dose enemas may be administered by trained staff – other enema formulations are not approved for use.

VAGINAL MEDICATIONS:

(cream, foam, gel, tablet, ovule or suppository)

Vaginal medications may only be given after successful completion of an approved training course and skills demonstration by a qualified Registered Nurse.

Purpose:

- To combat infection, inflammation or dryness of the vaginal mucosa
- To prevent contraception

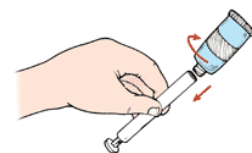
Procedure:

- Encourage the client to urinate just before procedure and cleanse perineum
- The client should be positioned on her back, with knees bent, legs drawn up toward the hips and heels flat on the bed (use of a sheet over the abdomen/upper legs will decrease the client's feeling of exposure)
- Follow the directions for filling the applicator for the specific medication/formulation – these directions are guidelines only
- Wash hands and put on gloves



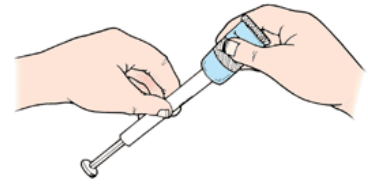
a) Cream/foam/gel

- Take the cap off the tube and screw the applicator onto the tube



- Squeeze the medicine in slowly to fill the Applicator

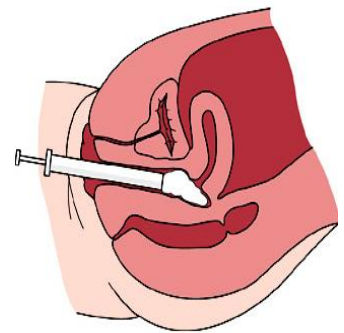
- Remove the applicator from the tube and replace the cap



- Lubricate applicator with water soluble lubricant

- Gently spread labia to expose vaginal opening

- Put the applicator into the vagina as far as it will comfortably go (about 7.5 cm or 3 inches)



- Slowly press the plunger until it stops
- Remove applicator and set on paper towel

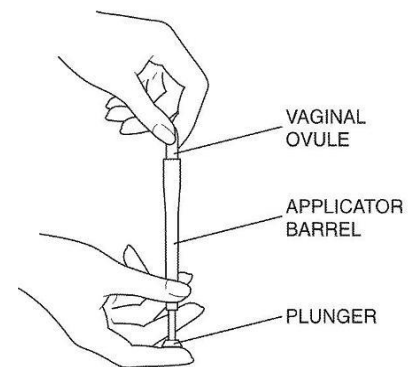
b) Ovule/Suppository with applicator

- Remove suppository/ovule from package and place in applicator

- Lubricate applicator with water soluble lubricant

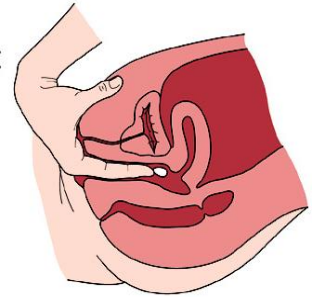
- Put into the vagina as above and slowly press plunger to release ovule/suppository

- Remove applicator and set on paper towel



c) Ovule/Suppository without applicator

- Remove suppository/ovule from the package
- Lubricate ovule/suppository and index finger of glove of dominant hand with water soluble lubricant
- Insert into the vaginal orifice about 3 inches along the posterior (back wall)



For all methods:

- Wipe perineal area after insertion (front to back)
- Client should be encouraged to remain in bed or on side for 20-30 minutes to allow for absorption of medication
- Provide sanitary pad as needed
- Discard applicator or if it is reusable, wash in soapy water, rinse, air dry and place in a sealed plastic bag until the next use
- Remove gloves and wash hands

Special considerations:

- Do not attempt to give vaginal medication if the client is confused or combative –vaginal walls must be relaxed
- The client should not use tampons after vaginal medication as they absorb medication and full effect of the drug will not be achieved

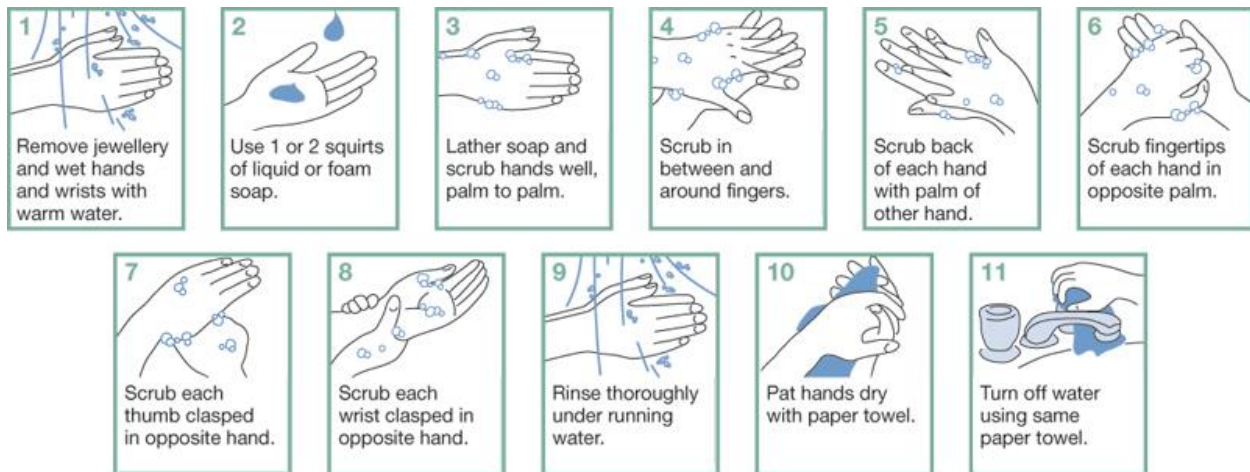
INFECTION PREVENTION:

HAND HYGIENE

Purpose:

- To reduce disease transmission

Procedure:



When to wash hands:

- When hands are visibly soiled
- After using the washroom (includes assisting a client in the washroom or changing incontinence products)
- After blowing your nose or sneezing on your hands
- Before and after eating or handling food, drinking or smoking
- After touching raw meat, poultry or fish
- After handling garbage
- Visiting or caring for sick people
- Handling pets, animals or animal waste

Special considerations:

- When there is no soap or water available one alternative is to use waterless hand scrubs
- Frequent hand washing can dry the skin – use appropriate lotions to keep skin moisturized

ALCOHOL-BASED HAND SANITIZER

Purpose:

- To reduce disease transmission

Procedure:

- Ensure product is at least 60% alcohol
- Follow steps as illustrated below



<http://www.scicancanada.ca>

When to use hand sanitizer:

- When hands are not visibly soiled
- When there is no access to soap and water, use hand sanitizer
- After using the washroom or assisting a client in the washroom or with changing of incontinence products
- After blowing your nose or sneezing on your hands
- Before and after eating or handling food, drinking or smoking
- After touching raw meat, poultry or fish
- After handling garbage
- Visiting or caring for sick people
- Handling pets, animals or animal waste

Special Considerations:

- Alcohol-based hand sanitizers are not effective when hands are visibly soiled
- The Centers for Disease Control and Prevention in the US have found that alcohol-based hand sanitizers are not effective against Norovirus, a gastrointestinal virus
- Alcohol-based hand sanitizers can dry the skin. Use appropriate lotions to keep skin moisturized
- Alcohol-based hand sanitizers contain either ethyl alcohol or isopropyl alcohol and should be kept safely out of reach of children. They are not intended for internal use. If used as directed no documented risk of harm or toxic effects has been reported.

SURGICAL MASK

Purpose:

- To prevent the spread of droplet and respiratory tract infections
- To protect the client or the caregiver from infectious agents

Procedure:

- Wash hands before wearing a mask
- Open the mask – pull at the top and bottom to open the pleats or chambers

Note: There are three layers

- Inner layer facing wearer absorbs water
- Middle layer is a cotton filter
- Outside layer is water resistant
- Pre-bend the nose piece
- Place the mask on your face – making sure to cover your nose
- Bring both top ties to the crown of your head and secure with a bow and tie bottom ties securely in a bow at the nape of your neck, or
- Secure elastic ties behind each ear
- Press the flexible nose piece until a secure fit and good seal are achieved. This will reduce blow-by which is the amount of air that escapes from the top, bottom or sides of the mask due to improper fit

- Perform security check – test security of ties and nose piece and test for blow-by



- Remove the mask by handling only the ties
 - Untie bottom first then the top
 - Remove the mask from face
 - Properly dispose by touching only the ties, folding blue side out
- Discard and double bag for disposal
- Wash hands thoroughly

Special Considerations:

- Masks are intended for single use only
- Do not reuse – discard after each use
- Bacteria thrive in warm, dark, moist places – exactly the environment created when a mask is removed and tucked in a pocket
- Masks should be worn for a maximum of three hours

GLOVES

Purpose:

- To act as a barrier to protect the client or the caregiver from infectious agents which may exist in body fluids such as blood, saliva, secretions, wounds, mucous membranes and excreted waste products
- To act as a barrier to prevent topical medications from being absorbed through the skin of the caregiver

Procedure: How To Put On Examination Gloves

- Wash hands thoroughly
- Remove any sharp jewelry
- Remove glove from box and make sure the glove is the best fit for your hand – snug but not tight, and not too large
- Ensure the glove is intact – free from tears or holes
- Hold the glove with your thumb and forefinger



Carefully insert hand into glove and work your fingers into the proper places

- Pull the glove over the heel of your hand
- Repeat the procedure with the other hand



Procedure: How To Remove Examination Gloves

- Using your fingers and thumb on one hand, grab the first glove to be removed at the heel of the hand. Pull the glove off, turning it inside out into the other gloved hand
- To remove the other glove, insert ungloved fingers inside the glove and pull it down over the first glove (you do not want your fingers to touch the outside of the gloves). Both gloves should be inside out when they are removed
- Dispose of gloves properly after use
- Wash hands again



Special Considerations:

- Do wear the correct size glove – a poorly fitting glove can limit your ability to do a task and may be torn or cut more easily
- Keep fingernails trimmed short to reduce the risk of tears
- Remove any rings which may tear the gloves
- Use oil free hand lotions and moisturizers to prevent hands from drying due to frequent hand washing and gloving. Oil-based product will damage latex gloves
- Don't store gloves at extreme temperatures which can cause latex to breakdown
- **Never** re-use examination gloves!