

# UNIT 1: ROLE OF THE CRMA

## Table of Contents

	Page
UNIT 1: ROLE OF THE CRMA .....	1
Overview .....	3
<input type="checkbox"/> Objectives .....	3
<input type="checkbox"/> Other Notes .....	4
<input type="checkbox"/> Regulations .....	4
ICE BREAKER ACTIVITY LOCATED IN “ACTIVITY APPENDIX” .....	4
CRMA Role .....	5
<input type="checkbox"/> Certification Limitations.....	5
<input type="checkbox"/> Job Description .....	6
<input type="checkbox"/> Other Staff Roles .....	6
<input type="checkbox"/> Key Responsibilities .....	6
<input type="checkbox"/> Characteristics.....	7
PowerPoint Slides .....	8
Legal Implications.....	13
Scope of Practice .....	13
State of Maine Statutes .....	15
Resources Used By The CRMA .....	16
Professional Development By The CRMA.....	17
<input type="checkbox"/> Transmission Based Precautions .....	21
<input type="checkbox"/> Exposure control .....	22
<input type="checkbox"/> Vital Signs .....	23
<input type="checkbox"/> Temperature.....	23

## Table of Contents Continued

	Page
<input type="checkbox"/> Temperature Conversion Table Fahrenheit / Celsius.....	24
<input type="checkbox"/> Otic (Tympanic) .....	25
<input type="checkbox"/> Oral.....	26
<input type="checkbox"/> Axillary.....	26
<input type="checkbox"/> Rectal.....	26
<input type="checkbox"/> Skin.....	26
<input type="checkbox"/> Factors Affecting Body Temperature:.....	27
<input type="checkbox"/> Pulse .....	28
<input type="checkbox"/> Radial Pulse.....	28
<input type="checkbox"/> Apical Pulse.....	29
<input type="checkbox"/> Respirations .....	31
<input type="checkbox"/> Blood Pressure.....	31
<input type="checkbox"/> Interpretation of Blood Pressure Readings .....	33
<input type="checkbox"/> Vital Questions for Vital Signs .....	34

*A designated instructor or an employee of the State of Maine Department of Health and Human Services (DHHS) may reproduce this publication in whole or in part. All other reproduction is prohibited unless written permission is obtained from DHHS.*

Last Updated: 03/08/3010

## **Overview**

---

The role of a **Certified Residential Medication Aide (CRMA)** is very important in the lives of residents in Maine's licensed residential care facilities and programs.

It is important for the CRMA to understand exactly what the roles and responsibilities of this position include. The tasks a CRMA is expected and allowed to do as part of the job is called "*scope of practice.*"

### **◆ Objectives**

---

- Explain the Role of the CRMA.
- Define the Key Responsibilities of the CRMA.
- Define the Key Characteristics for a CRMA.
- Describe the roles of other staff members in a residential facility.
- Explain the Residents' Rights.
- Access resources utilized by a CRMA.
- Explain need for on-going professional development and certification.
- Demonstrate infection control measures.
- Perform vital signs.

◆ **Other Notes**

---

- A discussion of the purpose and the objectives for this Unit with the participants will be facilitated by the instructor.
- The class may contain participants from different licensed facilities/agencies, it is important to each participant to understand that this is a “common” and/or standardized CRMA curriculum regarding the topic of “Pharmacology/Medication Administration.”

The information in this unit does not replace specific facility standard operating procedures.

◆ **Regulations**

---

This curriculum is modeled on: State of Maine Regulations Governing the Licensing and Functioning of Assisted Housing Programs Level IV Residential Care Facilities and Level IV PNMI, Chapters 5, 7 and 11 (Be sure that you keep up-to-date with the most current regulations in effect. See Secretary of State’s website below).

Every person should have access to the most current regulations that are in place.

Regulations can be found on the Secretary of State’s website:

**<http://www.maine.gov/sos/cec/rules/10/ch113.htm>**

**ICE BREAKER ACTIVITY LOCATED IN “ACTIVITY APPENDIX”**

---

**CRMA Role**

---

**◆ Certification Limitations**

---

It is important that you understand that your certification allows you to administer medication in Maine and only in facilities covered under the regulations that provided the authorization for your training. Even though your employer may have sponsored your training, you have earned the certification for yourself. If you leave your current employer and find employment elsewhere, your certification is part of the qualifications that you possess. It is not restricted only to the agency you are currently working with. You can serve as a CRMA in more than one agency at a time so long as you have met the requirements of each agency that expects you to perform as a CRMA.

Be sure that you understand your responsibility in relation to any medication policy within your facility. You need to be sure that policies are in place that clearly state what is expected of you, how you are to document your actions, and who is responsible for supervising your role as a CRMA.

**It is important that a CRMA always remember that s/he**

- A. Must understand the facility medication policy.
- B. Must have knowledge of and respect resident rights.
- C. Must have knowledge of what is necessary to ensure resident safety.
- D. Must have knowledge of how to approach the resident.
- E. Must have knowledge of the medications that residents are taking.
- F. Must administer the drug according to physician's orders.
- G. Must be able to administer non-injectable medications in a manner that is safe, proper, and accurate.
- H. Must have knowledge and documented additional training to administer injectable medication and assist a resident in using a breathing apparatus in a manner that is safe and accurate.

**KEYPOINT**

Your CRMA Certification **HAS** limitations.

**KEYPOINT**

Know your facility's policies and procedures.

**◆ Job Description**

---

You may serve as a CRMA in more than one licensed facility over the duration of your career.

Therefore, be sure that you understand your responsibility in relation to any standard operating procedures by your employer. You need to be sure that policies are in place that clearly state what is expected of you, how you are to document your actions, and who is responsible for supervising your role as a CRMA.

**◆ Other Staff Roles**

---

Since the CRMA may work in a variety of environments, s/he may also report to and/or work with a variety of other staff members. Clearly, each of these positions is important to the successful delivery of services. Typical positions may include:

(Depending on the licensed entity, some of these titles may be used and some may not be. Discuss those that are pertinent to your needs.)

- ◆ Administrator
- ◆ Directors (House Managers, Program Manager, Residential Care Manager)
- ◆ Care Staff (PSS, DSP-MR, MHRT, MHSS, BSI/BHP, PCA, RCS1, DCA, C.N.A., LPN)
- ◆ Facility Staff (Maintenance, Housekeeping, Laundry, Social Service, Activities, Dietary)
- ◆ Nurse Consultants (Registered Nurse)
- ◆ Pharmacist

**◆ Key Responsibilities**

---

It is important to recognize and define the “key” or “common” responsibilities performed by the CRMA regardless of the licensed facility these duties are being performed in.

◆ **Characteristics**

---

Equally important to the integrity of the CRMA profession as the job description and the key responsibilities is knowledge of the characteristics and values that are indicative of the “best” CRMA employee.

**PowerPoint Slides**

---

The following PowerPoint slides are provided to assist in the presentation of the unit material. Each slide includes a “notes” area for your own notes or additional comments.

## Other Staff Members

### *Administrator*

Usually oversees a facility from a business point of view, managing cash flow, personnel, reporting, payroll, admissions, physical plant, purchasing, and other similar functions.

One Administrator may oversee several facilities and some Administrators may have clinical training.

Key Responsibilities include:

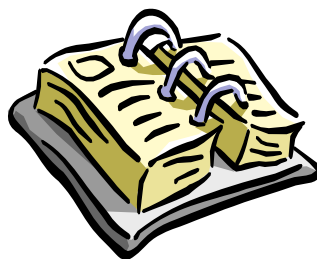
- Decision making.
- Approves changes in systems or procedures.
- Problem solving – Incident Reports, Medication Errors, Medication Refusals, and Safe Practices.



# Other Staff Members

## *Directors*

Coordinates day-to-day direct services, schedules staff, coordinates access to outside services (dentist, doctor, etc.), arranges transportation and services from other agencies, as well as assigns duties to staff members.



# Other Staff Members

## *Care Staff*

These employees provide the majority of the daily interactions with the individuals receiving care. Their duties may include skills teaching, problem-solving, motivating, working with individuals to achieve goals of choice, developing goal-directed supports, assisting with activities, managing outside activities, and offering general support.

## Other Staff Members

### *Facility Staff*

If you work in a resident or a facility environment, some of the other facility staff may include catering and maintenance employees. As the job titles indicate, these individuals either manage the food service needs of the facility or the general facility maintenance needs.

## Other Staff Members

### *Nurse Consultants*

These individuals are Registered Nurses, who serve as on-call medical experts and in an advisory capacity when necessary. Their roles are governed by the “*Regulations Governing the Licensing and Functioning of Assisted Housing Programs*” publication.

**“WHO AM I” ACTIVITY LOCATED IN “ACTIVITY  
APPENDIX”**

## **Legal Implications**

There are laws that determine who can prescribe drugs, have drugs in their possession, administer drugs, explain how drugs are to be controlled, and how drugs are to be disposed of in the State of Maine.

The purpose of this section is to familiarize you with the regulations that impact directly on your practice as a CRMA. It is important that you understand that the regulations have extended the privilege to administer medications to individuals such as yourself. In the past, this role was limited to physicians, physician extenders, nurses, and a few other occupations. Your **authority** to work with medications is limited and may differ from other professionals in your facility.

The State of Maine regulations are the basis for your training and practice. It is very important that you understand how they impact on your agency and you as an individual direct care provider administering medications. You should be certain that you do not undertake tasks that you are not authorized to carry out. You should bring any concerns about your role and the regulations to your immediate supervisor **before** accepting any function you are not familiar with.

## **Scope of Practice**

CRMAs are allowed to administer medications to persons served by DHHS Licensed Assisted Housing Programs and other licensed facilities only after they have successfully taken a minimal 24 - 45 hour class, passed a written test, and demonstrated medication administration competence to an RN in the classroom or to an RN or CRMA (with at least 1 years experience) in the Clinical Setting. Med passes with a CRMA only allow the CRMA to work in a Level III RCF/home serving individuals under the Office of Adults with Cognitive and Physical Disabilities and Autism.

CRMAs practice under the supervision of the administrator of the setting according to regulations established by the State of Maine and procedures established by particular agencies for who they work. You will have access to written information maintained at your work site and will be required to participate in regularly scheduled reviews in order to maintain your certification.

A CRMA may make decisions in a limited set of circumstances. Those circumstances, your “*scope of practice*,” are spelled out in the following sections. If you make decisions or take actions that are beyond your scope of practice you may be subject to disciplinary action.

**Legal and Ethical Responsibilities of a CRMA include the following:**

- A. Be prepared to administer medications in a safe, proper and accurate manner.
- B. Record administration of medications: The administration of medications is not complete until it has been documented.
- C. Report incidents.
- D. Be aware and knowledgeable of Resident Rights.
- E. Maintain resident confidentiality.
- F. Administer drugs according to duly authorized, licensed practitioner’s orders.

**KEYPOINT**

Medication administration *is not complete until it has been documented!*

**State of Maine Statutes**

---

Recently, Maine’s “Regulations Governing the Licensing and Functioning of Assisted Housing Programs Level IV Residential Care Facilities and Level IV PNMI’s” were updated and the sections pertaining to “Medications and Treatments” and “Incident Reports” is provided below:

SECTION 5 **RESIDENT’S RIGHTS**

SECTION 7 **MEDICATIONS AND TREATMENTS**

SECTION 11 **INCIDENT REPORTING**

**MAKE SURE THAT YOU HAVE THE MOST CURRENT VERSION OF THE RULES AND REGULATIONS GOVERNING THE FUNCTIONING OF ASSISTED HOUSING FACILITIES.**

The most current version of rules may be located at:  
<http://www.maine.gov/sos/cec/rules/10/ch113.htm>

**ACTIVITY FOR “REG, WHAT REGS” LOCATED IN THE “ACTIVITY APPENDIX”**

## **Resources Used By The CRMA**

In the “scope of practice” of the CRMA, it is vitally important to know and utilize a variety of resources when necessary. There are a variety of people resources available to the CRMA listed below:

- Administrator
- Supervisor
- Pharmacist
- Licensed Nurses
- Physician

Additional, non-people resources available to the CRMA include the following:

- Physician Desk Reference (PDR)
- The PDR Pocket Guide to Prescription Drugs
- Drug Handbook such as the Nursing Drug Handbook
- Poison Control Center (for emergencies)
- Websites such as rxlist.com, webMD.com, etc.
- Drug Companies
- Drug inserts from the Pharmacy (Each medication your facility orders may come with a package insert and the information on that insert is very useful and often very important.)

An indication of a truly professional CRMA is the individual willing to ask questions, look up information, and double-check his/her work prior to performing any duties.



**Professional Development By The CRMA**

- In order to pass medications you must have a current CRMA certificate issued by the Division of Licensing and Regulatory Services.
- CRMA certification is valid for two full years from the date of issuance.
- The CRMA must obtain education in the form of an 8-hour CRMA recertification prior to or within 30 days of expiration.
- **Should the CRMA certificate expire prior to recertification, the CRMA must not administer any medications until the CRMA receives a new certificate. If more than 30 days has passed since the expiration of the CRMA certificate, and the CRMA has not passed the 8-hour recertification then the entire CRMA Curriculum must be retaken.**

**IMPORTANT  
NOTE**

Participants should set up a 90-day tickler regarding their CRMA certification expiration and scheduling the 8-hour Re-certification. (60 days prior to and 30 days after.)



**◆ Infection Control Practices**

Employees are responsible for preventing the spread of infections. One way to reduce the spread of germs is to practice infection control.

There are four links in the infection chain that must be present before infection can be spread.

These four links are:

- A germ, such as a virus, bacterium, fungus, or parasite.
- A place for the germ to live and multiply, such as a person, animal, plant, food, soil, or water.
- A susceptible host – a person who does not have resistance (immunity) to the germ.
- A way for the germ to enter the host. Different germs may require different routes. For example:
  - Direct contact – when people touch each other
  - Indirect contact – when food, water, feces, bandages or other substances contaminated by the germ enter the host
  - Droplets – such as those produced by a sneeze or cough
  - Other particles in the air

Removing any one of these links breaks the “chain of infection.”

Some ways to break the chain are:

- Good hand washing
- Good housekeeping
- Using protective barriers (gloves, masks, gowns, etc.)
- Immunizations
- Store food carefully
- Wash fruits and vegetables
- Use separate cutting boards
- Use hot soapy water to wash dishes
- Not sharing personal items (razor, toothbrush, etc.)

One of the most important of these measures is handwashing.

### **Proper hand washing with soap and water**

*MayoClinic.com*

Follow these instructions for washing with soap and water:

- Wet your hands with warm, running water. Apply liquid or clean bar soap and lather well.
- Rub your hands vigorously together for at least 15 seconds.
- Scrub all surfaces, including the backs of your hands, wrists, between your fingers and under your fingernails.
- Rinse well.
- Dry your hands with a clean or disposable towel.
- Use a towel to turn off the faucet.

Hand sanitizers are not a replacement for actual handwashing. Hand sanitizers should be used no more than 10 times before rewashing your hands with soap and water (CDC).

Signs and symptoms of infection may include the following:

- Inflamed skin (red, hot, swollen or a rash)
- Fever or chills
- Pus (green or yellow drainage from a wound)
- Nausea or vomiting
- Persistent diarrhea
- Sore throat or a cough
- Painful urination

Principles of Standard Precautions:

1. All body fluids should be considered infected. For example:
  - Blood
  - Semen
  - Vomit
  - Saliva
  - Feces
  - Urine
  
2. All materials, instruments and surfaces should be treated as if they are infected. For example:
  - Thermometers
  - Needles
  - Incontinent pads and/or briefs
  - Bathroom counters and tubs/showers
  - Dirty water
  
3. Methods to be used for safeguarding the staff and the resident are as follows:
  - Hand washing
    - a. Use a hand soap that cleans (not necessary to have an antimicrobial soap) and gets rid of germs
    - b. Wash hands before and after working with a consumer
    - c. Wash hands after removing gloves or any other PPE
    - d. Wash hands after handling blood or any other body fluids
  
  - Sharps containers
    - a. Be sure sharps container is leak proof, has non-removal lid and is not overfilled
    - b. Never recap used needles
    - c. Drop the needles, lancets, razors and any other sharp in sharps container
    - d. Never reach into sharp container

- PPE (personal protective equipment)
- Preventing infection may also involve the use of personal protective equipment (PPE). Caregivers must know what PPE consists of and how to use it.
  - a. Single use gloves – cover for hands when having direct contact with consumer
  - b. Utility gloves – cover for hands when using disinfectants or chemicals for cleaning surfaces
  - c. Gown/apron – cover for the skin and clothing when there a chance of being splattered with potentially infective fluid
  - d. Mask – cover to prevent blood or body fluids from splashing in the face, and/or mouth
  - e. Mouthpiece or plastic airway – prevent the need for direct contact when providing mouth-to-mouth resuscitation

### **◆ Transmission Based Precautions**

In addition to standard precautions, transmission based precautions should be used when caring for consumers who are known or suspected to have a particular infection that can be spread through airborne, droplet or contact transmission. (MRSA and C-difficile are examples of such infections). Your supervisor or nurse consultant will instruct you regarding what precautions should be used. Different types of precautions you may be instructed to use are:

Contact

Respiratory

Skin and Linen

Blood borne

Enteric

**◆ Exposure control**

---

The potential for exposure to HIV and HBV exists in every health care setting. In the assisted housing arena the incidence of this type of exposure could happen by:

- Deep tissue injury
- Needle stick
- Direct contact with blood

OSHA regulations and federal law mandate legal requirements for exposure control plans.

Occupational accidents that result in injury or illness must be reported within 24 hours. Report immediately to your supervisor.

Procedure for needle stick:

- Report injury immediately to supervisor
- Allow wound to bleed freely
- Obtain medical evaluation and first aide immediately
- Complete facility incident report
- Remember – you will be offered a test for HIV and other infectious diseases when you have been exposed

## ◆ Vital Signs

---

Resident observation and reporting is a very important skill associated with medication administration. You need to be able to monitor the effects of the medications you have given, and in some situations you must know the resident's physical status *before* you give certain medications.

The human body is capable of maintaining a balance of physical and general health, but when a change from physical or emotional stress takes its toll, the body will react. The four vital signs that alert us to change are:

1. **Temperature (T)**
2. **Pulse (P)**
3. **Respiration (R)**
4. **Blood Pressure (BP)**

The techniques for obtaining vital signs are not difficult and are an essential part of medication administration. The equipment required may vary depending on where you work, but the knowledge and skills you need are the same.

## ◆ Temperature

---

There are several methods by which you can take a person's temperature -- orally, rectally, axillary, otic (tympanic) and on the skin. These methods will be discussed and all participants will need to demonstrate an understanding of all five techniques.

The method used for taking the temperature will depend upon the skills and abilities of the consumer to follow directions as well as the consumer's medical condition(s). The exact temperature and the method used to obtain it should be documented.

**REMEMBER:** temperatures may be in Fahrenheit (F) or Celsius (C). You should have a conversion chart readily available to you.

**• Temperature Conversion Table      Fahrenheit / Celsius**

Fahrenheit t	Celsius	Fahrenheit t	Celsius
32	0	71.6	22
33.8	1	73.4	23
35.6	2	75.2	24
37.4	3	77	25
39.2	4	78.8	26
41	5	80.6	27
42.8	6	82.4	28
44.6	7	84.2	29
46.4	8	86	30
48.2	9	87.8	31
50	10	89.6	32
51.8	11	91.4	33
53.6	12	93.2	34
55.4	13	95	35
57.2	14	96.8	36
59	15	98.6	37
60.8	16	100.4	38
62.6	17	102.2	39
64.4	18	104	40
66.2	19	105.8	41
68	20	107.6	42
69.8	21	109.4	43

Formulas:  $C = (F - 32) * 5 / 9$ ,  $F = (C * 9 / 5) + 32$

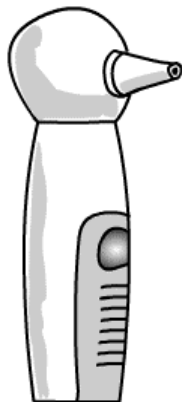


- **Otic (Tympanic)**

---

Temperature is obtained by utilizing an ear scan thermometer. This is done by placing the protective covering over the earpiece and then inserting this into the outer ear canal. The ear should be pulled up and back for adults and down and back for children. Similar to the digital thermometer, the ear scan will signal when complete. This is usually complete within 30 seconds. Normal Otic temperature is 99.5 degrees (per *Fundamentals of Nursing, 5<sup>th</sup> edition, Taylor, Lillis, LeMone, 2005*).

## Otic Thermometer



- **Oral**

---

Temperature is obtained by utilizing a digital thermometer, which is placed under the tongue with lips pursed tightly around the instrument. Breathing through the nose is necessary during this procedure. The reading is complete after 3 minutes or when the digital thermometer signals. Normal oral temperature is 98.6 degrees F.

- **Axillary**

---

Temperature is obtained by utilizing an oral or digital thermometer. Wipe the axilla dry and place the tip of the thermometer into the center of the axilla. Ask the person to hold their arm against their body for 10 minutes or until the digital thermometer signals. Normal axillary temperature is 97.6 degrees F.

- **Rectal**

---

Temperature is obtained by utilizing either a rectal or digital thermometer, placed into the rectum. This is done while the person is lying down on his/her left side. Insert the thermometer no more than 1 and ½ inches into the rectum, holding onto the instrument throughout the procedure. Never leave the person unattended while rectal temperature is being taken. Leave the thermometer in the rectum for 3-5 minutes or until the digital thermometer signals. Normal rectal temperature is 99.5 degrees F (per *Fundamentals of Nursing, 5<sup>th</sup> edition, Taylor, Lillis, LeMone, 2005*).

- **Skin/Transdermal**

---

There are a variety of transdermal thermometers on the market. If they are being used in your facility/agency, you need to be sure to read and follow the instructions given with the thermometer. Normal skin/transdermal temperature is 94 degrees F (per

*Fundamentals of Nursing, 5<sup>th</sup> edition, Taylor, Lillis, LeMone, 2005).*

**◆ Factors Affecting Body Temperature:**

---

Age	Older persons may have less heat to loose. This may be caused by the following: Inadequate diet, loss of fat for insulation, lack of activity.
Time of Day	Temperature may vary 2 – 3 <sup>0</sup> F between early morning and late afternoon; highest temperature is usually between 4 – 8 pm and the lowest between 4 – 6 am.
Gender	Women are usually warmer than men because of having more fatty tissue. Changes in hormonal levels may also raise temperature.
Emotions	Excitement increases temperature, depression lowers heat production.
Exercise	Temperature increases with muscular activity. For example chewing of gum can raise temperature 1 <sup>0</sup> F orally.
Infection	Persons with an infection may have an elevated temperature.
Food, fluid, smoking	Oral temperature should not be taken within thirty minutes of intake of food and fluids or smoking.

**Pulse**

---

The pulse is the measurement of the number of heart beats per minute. There are numerous pulse sites on a person's body. For the purpose of this course, the discussion will be about radial and apical pulses.

- **Radial Pulse**

---

It is obtained by utilizing two fingers over the thumb side of the person's wrist, pressing lightly over the radial artery. (Your thumb should never be used). Be cautious not to obliterate the pulse by pressing too hard on the artery. The beats are counted for one minute, noting not only rate but also rhythm.

The normal radial pulse for adults is 60-100 beats per minute with an average of 80 beats per minute (per *Fundamentals of Nursing, 5<sup>th</sup> edition, Taylor, Lillis, LeMone, 2005*)

- **Brachial Pulse**

---

This pulse is obtained by placing the index and second finger on the inside of the elbow with the palm of the hand facing up. Lightly press to palpate the pulse for a beating, tapping, or pulsing pressure in the artery of the arm.

- **Carotid Pulse**

---

This pulse is obtained by placing the index and second finger on either side of the neck running them along side of the outer edge of the trachea (windpipe.)

## Checking the Radial Pulse



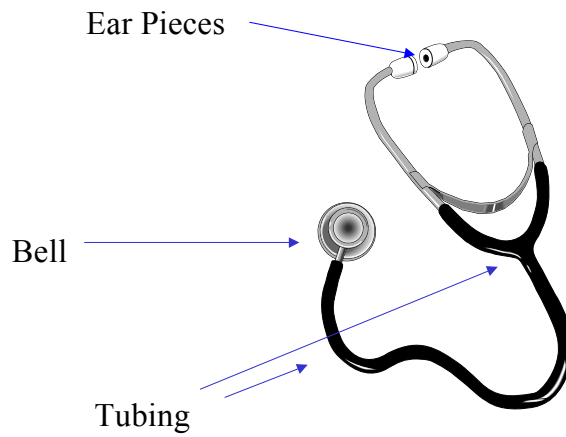
- **Apical Pulse**

It is obtained by utilizing a stethoscope. The diaphragm of the stethoscope is placed approximately mid-nipple line on the left side of the chest. The beats of the heart are counted for one full minute, noting both rate and rhythm. This will give you beats per minute.

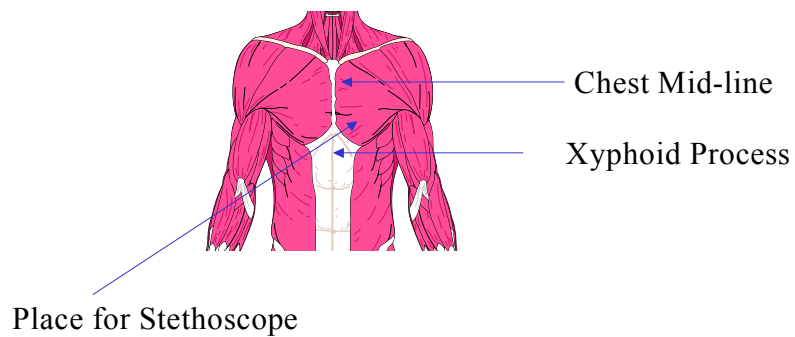
The normal apical pulse rate for adults is between 60-100 beats per minute (per *Fundamentals of Nursing, 5<sup>th</sup> edition, Taylor, Lillis, LeMone, 2005*).

Rates outside these parameters should be reported to your supervisor immediately.

## Stethoscope



## Listening for the Apical Pulse



◆ **Respirations**

---

The respirations are obtained by observing the rise and fall of the chest for one full minute. One respiration is equal to one rise and fall of the consumer's chest. Since respiratory movements are partly voluntary, and can be altered by the consumer, it is important that the consumer be unaware you are taking the respiratory rate. A good way of do this is by prolonging the pulse taking, but instead of continuing to count the beats, count the rise and fall of the person's chest. Normal rate for respiration is 12-20 per minute. (per *Fundamentals of Nursing, 5<sup>th</sup> edition, Taylor, Lillis, LeMone, 2005*)

◆ **Blood Pressure**

---

The blood pressure is a measure of the force of the blood against the walls of the arteries. This tells you how hard the heart is working.

The blood pressure is obtained by using a blood pressure cuff and stethoscope. The B/P cuff, (*Sphygmomanometer*) is placed around the person's bare upper arm, approximately one to two inches above the crease of the inner arm.

Close the air valve of the cuff. Palpate the brachial or radial pulse. While taking the brachial or radial pulse, pump the bulb until you no longer feel a pulse. Note the reading on the dial and pump another 30 mm/Hg (per *Fundamentals of Nursing, 5<sup>th</sup> edition, Taylor, Lillis, LeMone, 2005*). Place the stethoscope diaphragm on the inner aspect of elbow where the brachial pulse was felt or where the elbow bends. Slowly open the air valve to release pressure in the cuff.

Watch the indicator and note the first clear pulse sound. Continue to watch the indicator and note when the sound stops or drops off significantly.

This will give two numbers. The higher number is the **Systolic pressure**, and the lower number is the **Diastolic pressure**.

There is a great variance among blood pressure, so it is important to know the person's normal blood pressure range.

- ◆ Generally the individual should be sitting and should not have any tight clothing on his/her arm.
- ◆ To ensure consistent blood pressure readings it is important to use the same limb, the same position and the same time of day, and the same cuff if possible.
- ◆ Cuff placement should be on level with the heart.
- ◆ Cuff should be fitted snugly onto the arm.
- ◆ Use measure markers to determine if the cuff is too small or too large. Cuff size needs to match the individual.
- ◆ If unable to obtain a reading, wait for several minutes before reattempting on the same arm.
- ◆ If the person is tense, blood pressure will be affected. This is why educating the person about what you are doing is helpful.
- ◆ Do not take blood pressure on the side of the body that a mastectomy has been performed on unless you have a duly authorized licensed practitioner's order.



**• Interpretation of Blood Pressure Readings**

---

- Higher blood pressures are normal during exertion or other stress. Systolic blood pressures below 80 may be a sign of serious illness or shock.
- Normal blood pressure for adults is 120/80 (per *Fundamentals of Nursing, 5<sup>th</sup> edition, Taylor, Lillis, LeMone, 2005*).
- Blood pressure should be taken in both arms on the first encounter. If there are more than 10 mmHg differences between the two arms, use the arm with the higher reading for subsequent measurements.
- Take sitting and standing if low blood pressure with light headedness or dizziness exists.
- Always recheck "unexpected" blood pressures or ask another staff person to check your readings.

**Oxygen Saturations**

This measures the level of oxygen in the blood stream. It is an important measurement for people with respiratory problems.

CRMAs may be taught this procedure in a number of facilities. If this becomes a requirement, training will be provided at a later date at your facility.

## ◆ Vital Questions for Vital Signs

---

**Directions:** Answer the following questions individually or in small groups:

1. List the four methods for taking a person's temperature?
  - a.
  - b.
  - c.
  - d.
  
2. What is needed to measure a blood pressure?
  
  
  
  
  
  
  
  
  
  
3. List and describe the two (2) locations for taking a pulse:
  - a.
  - b.
  
  
  
  
  
  
  
  
  
  
4. When is a good time to monitor a person's respirations? Be sure to explain your answer.
  
  
  
  
  
  
  
  
  
  
5. What two pressures are measured with the taking of a B/P?
  - a.
  - b.