Good Samaritan Health & Wellness Center
Policies and Procedures

Subject: OBTAINING VITAL SIGNS	Policy #: 5.25
Prepared by:	Revision #:
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5.25 Obtaining Vital Signs

OBJECTIVE:
To ensure consistent, accurate vital signs are obtained during initial work up of patients.

PROCESS/PROCEDURE:
The following equipment is needed to perform basic vital signs and should be readily available in all clinical areas:

- Vital Signs Monitor
- Stethoscope
- Blood pressure cuffs of various sizes
- Watch displaying seconds
- Thermometer (digital)

Nursing considerations:

- ❖ The patient should not have had alcohol, tobacco, caffeine or performed vigorous exercise within 30 minutes of the exam.
- ❖ The patient should be sitting with feet on the floor or over edge of exam table with their back supported. The exam room should be quiet and the patient comfortable.
- ❖ Any history of hypertension, slow or rapid pulse, and current medications should always be obtained.

Temperature can be measured in several different ways:

- Oral with a digital thermometer (normal 98.6F)
- Axillary with a digital thermometer (normal 97.6F)
- Rectal or "core" with a digital thermometer (normal 99.6F)
- Aural (the ear) with an electronic thermometer (normal 99.6F)

Nursing considerations:

- ❖ Of these, axillary is the least accurate and rectal is the most accurate.
- ❖ Do not obtain oral temperature if the patient is eating or drinking at the time of the exam.

- ❖ Do not obtain aural temperature immediately after removing a hearing aid or other device such as a blue tooth or ear buds.

Pulse should be obtained in the following manner:

- Sit or stand facing the patient.
- Using **Vital Signs monitor**, apply BP cuff, O2 monitor onto finger on opposite hand from arm where BP cuff was applied. Or if Vital Sign Monitor is not available, proceed manually as described below.
- Grasp the patient's wrist with your non-watch bearing hand. The patient's arm should not be in an awkward position.
- Compress the radial artery with your index and middle fingers.
- Note whether the pulse is regular or irregular:
  - Regular-evenly spaced beats, may vary slightly with respiration
  - Regularly Irregular-regular pattern overall with "skipped beats"
  - Irregular- chaotic, no pattern, very difficult to measure accurately
- Count the pulse for 15 seconds and multiply by 4.
- Count for a full minute if the pulse is irregular.
- Record the rate and rhythm.

Nursing Considerations:

- ❖ Pulse rates should **NEVER be obtained with a pulse ox**.
- ❖ A normal adult heart rate is between 60 and 100 beats per minute. A rate greater than 100 beats per minute is defined as tachycardia. Rates less than 60 beats per minute are defined as bradycardia. Tachycardia and bradycardia are not necessarily abnormal. Athletes tend to be bradycardic at rest. Tachycardia is a normal response to stress or exercise.
- ❖ Pediatric heart rates vary by age. See table below for expected rates.

Respirations are best done immediately after taking the patient's pulse. Do not announce that you are measuring the patient's respirations.

- Without letting go of the patient's wrist, note if the patient's breathing is normal or labored.
- Count breaths for 15 seconds and multiply by 4.
- Normal resting, adult respiration rate is between 14-20 breaths per minute.

Nursing Considerations:

- ❖ Unlike pulse, respirations are very much under voluntary control. If you tell the patient you are counting their breaths, they may change their breathing pattern. You cannot tell someone to "breathe normally," normal breathing is involuntary.

Blood Pressures should be measured manually following the guidelines below:

- Position the patients arm so that the anticubital fold is level with the heart. The patient's arm should be supported, relaxed and slightly flexed at the elbow.
- Center the bladder of the cuff over the brachial artery approximately 2 cm above the anticubital fold. **Proper cuff size is essential** to obtain an accurate reading. Be sure the index line falls between the size marks when applying the cuff.

- Palpate the radial pulse and inflate the cuff until the pulse disappears. This is a rough estimate of the systolic pressure.
- Place the stethoscope over the brachial artery.
- Inflate the cuff to 30mmHg above the estimated systolic pressure.
- Release the pressure slowly, no greater than 5 mmHg per second.
- The level at which you consistently hear the beat is the systolic pressure.
- Continue to slowly lower the pressure until the sounds muffle and disappear. This is the diastolic pressure.
- Record the blood pressure as systolic over diastolic.

Nursing considerations:

- Higher blood pressures are normal during exertion or other stress. Systolic blood pressures below 80 may be a sign of serious illness or shock.
- Blood pressure should be taken in both arms on the first encounter. If there is more than 10 mmHg difference between the two arms, use the arm with the higher reading for subsequent measurements.
- It is frequently helpful to retake the blood pressure near the end of the visit. Earlier pressures may be higher due to the "white coat" effect.
- Always recheck "unexpected" blood pressures (hypertensive or hypotensive).
- **Do not rely** on pressures obtained using a cuff that is too small or too large. This is frequently a problem with obese or muscular adults where the regular cuff is too small. The pressure recorded will most often be 10, 20, even 50 mmHg too high. Finding a large cuff may be inconvenient, but you will also "cure" a lot of high blood pressure.
- Maximum Cuff Pressure - When the baseline blood pressure is already known or hypertension is not suspected, it is acceptable in adults to inflate the cuff to 200 mmHg and go directly to auscultation of the blood pressure.
- See the chart below for classifications of adult blood pressure readings. **All moderate to crisis level blood pressure readings must be verbally reported to a provider. If the patient complains of headache or chest pain the provider must be notified immediately (i.e. interrupt the provider if he/she is in with another patient.) If the patient is asymptomatic, the provider can be notified as soon as they become available.**

Classifications of adult blood pressure readings:

Category	**Systolic**	**Diastolic**
Normal	<140	<90
Isolated Systolic Hypertension	>140	<90
Mild Hypertension	140-159	90-99
Moderate Hypertension	160-179	100-109

Severe Hypertension	180-209	110-119
Crisis Hypertension	>210	>120

In children, pulse and blood pressure vary with the age. The following table should serve as a rough guide:

Average Pulse and Blood Pressure in Normal Children							
Age	Birth	6mo	1yr	2yr	6yr	8yr	10yr
Pulse	140	130	115	110	103	100	95
Systolic BP	70	90	90	92	95	100	105