Understanding vital signs, height, and weight measurement skills.
There is intentional repeat of some HSII course content in Nursing Fundamentals.

Repeating course content distributes learning over time and increases long term memory.

Academic and skill competence must be maintained at a very high level for direct resident care.
Indicator 4.01 introduces skills the nurse aide will need to measure and record the resident’s vital signs, height and weight.
Vital Signs

provide information about changes in normal body function and the resident’s response to treatment.
Often the FIRST sign that there is a problem!
Vital Signs

TPR + BP = Vital Signs
TPR+BP = Vital Signs

• Reflect the function of three body processes that are essential for life.
  – Regulation of body temperature
  – Heart function
  – Breathing
TPR+BP = Vital Signs

• Abbreviations:
  – Temperature – T
  – Pulse – P
  – Respirations – R
  – Blood Pressure – BP
  – Vital signs - TPR and BP
TPR+BP = Vital Signs

- **Purpose**
  - Measured to detect any changes in normal body function
  - Used to determine response to treatment
TPR + BP = Vital Signs
Temperature
PR + BP = Vital Signs

Temperature

- Heat production
  - muscles
  - glands
  - oxidation of food

- Heat loss
  - respiration
  - perspiration
  - excretion
PR + BP = Vital Signs

Temperature

Balance between heat production and heat loss is body temperature
Factors Affecting Temperature

• Exercise
• Illness
• Age
• Time of day
• Medications

• Infection
• Emotions
• Hydration
• Clothing
• Environmental temperature/air movement
Equipment - Thermometer

• Instrument used to measure body temperature

• Types
  – Non-mercury glass
    • oral
    • rectal
Equipment - Thermometer

• Types (continued)
  – chemically treated paper – disposable
  – plastic – disposable
  – electronic - probe covered with disposable shield
  – tympanic - electronic probe used in the ear
Electronic Thermometers

Electronic

Can be used for oral, rectal, or axillary

Blue probe for oral
Red probe for rectal

Disposable probe covers prevent cross-contamination

An electronic thermometer registers the temperature in easy-to-read numbers on a viewer. (Photo courtesy of IVAC Corporation, San Diego, CA)
Aural/Tympanic Temperature

- taken in the ear
- measures the thermal infrared energy radiating from the blood vessels in the eardrum
- position and ear wax can affect readings
- left in until it beeps
- temperature is calculated into an equivalent by mode
Positioning the Patients Ear for Tympanic temperature

- Children under 2
  - Pull ear pinna down and back
- Adults and children over 2
  - Pull ear pinna up and back
- Positioning the pinna correctly straightens the auditory canal so the probe will point directly at the tympanic membrane
Types of clinical thermometers.
Placement of the Oral Thermometer

Put the bulb tip of the thermometer in the “hot pocket” under the tongue.
Normal Temperature Range For Adults

- **Oral** - 97.6° - 99.6° F (Fahrenheit) or 36.5° - 37.5° C (Celsius)
- **Rectal** - 98.6° - 100.6° F or 37.0° - 38.1° C
- **Axillary** - 96.6° - 98.6° F or 36.0° - 37.0° C
“Tic-Tac-Know”
Normal Range For Adult Temperature

98.6°F is the FREE SPACE
“Tic-Tac-Know”
Normal Range For Adult Temperature

<table>
<thead>
<tr>
<th>ORAL</th>
<th>98.6°F</th>
</tr>
</thead>
</table>

98.6°F is the average oral temperature for adults and it falls in the middle of the normal range.
### “Tic-Tac-Know”

Normal Range For Adult Temperature

| ORAL | 98.6°F | 99.6°F |

Add one degree to 98.6°F then place the results in the oral space to the right
“Tic-Tac-Know”
Normal Range For Adult Temperature

| ORAL | 97.6 | 98.6 | 99.6 |

Subtract one degree from 98.6 then place the results in the oral space to the left.
“Tic-Tac-Know”
Normal Range For Adult Temperature

<table>
<thead>
<tr>
<th>Oral</th>
<th>97.6°F</th>
<th>98.6°F</th>
<th>99.6°F</th>
</tr>
</thead>
</table>

The average adult temperature taken orally is 98.6°F and the RANGE is 97.6°F to 99.6°F.
**“Tic-Tac-Know”**

**Normal Range For Adult Temperature**

Body heat **REGISTERS** one degree warmer when the temperature is taken **RECTALLY** ®. Add one degree to 98.6°F, then place the results below.

<table>
<thead>
<tr>
<th>ORAL</th>
<th>97.6°F</th>
<th>98.6°F</th>
<th>99.6°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECTAL</td>
<td>99.6°F</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### “Tic-Tac-Know”

Normal Range For Adult Temperature

<table>
<thead>
<tr>
<th></th>
<th>ORAL</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>97.6°F</td>
<td>98.6°F</td>
<td>99.6°F</td>
</tr>
<tr>
<td>RECTAL</td>
<td>99.6°F</td>
<td>100.6°F</td>
<td></td>
</tr>
</tbody>
</table>

Add one degree to 99.6°F then place the results in the rectal space to the right.
"Tic-Tac-Know"
Normal Range For Adult Temperature

<table>
<thead>
<tr>
<th></th>
<th>ORAL</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>97.6°F</td>
<td>98.6°F</td>
<td>99.6°F</td>
</tr>
<tr>
<td>RECTAL</td>
<td>98.6°</td>
<td>99.6°F</td>
<td>100.6°F</td>
</tr>
</tbody>
</table>

Subtract one degree from 99.6°F, then place the results in the rectal space to the left.
“Tic-Tac-Know”
Normal Range For Adult Temperature

<table>
<thead>
<tr>
<th></th>
<th>ORAL</th>
<th>RECTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temp.</td>
<td>97.6°F</td>
<td>98.6°F</td>
</tr>
<tr>
<td></td>
<td>98.6°F</td>
<td>99.6°F</td>
</tr>
<tr>
<td>RANGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>98.6°F</td>
<td>100.6°F</td>
</tr>
</tbody>
</table>

The average adult temperature taken **RECTALLY** is 99.6°F and the RANGE is 98.6°F to 100.6°F.
"Tic-Tac-Know"

Normal Range For Adult Temperature

Body heat **REGISTERS** one degree **COOLER** when the temperature is taken **AXILLARY (Ax)** or in the **GROIN**. Subtract one degree from 98.6°F then place the results in the space **above** 98.6°F.

<table>
<thead>
<tr>
<th>AXILLARY or GROIN</th>
<th>97.6°F</th>
<th>98.6°F</th>
<th>99.6°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORAL</td>
<td>97.6°F</td>
<td>98.6°F</td>
<td>99.6°F</td>
</tr>
<tr>
<td>RECTAL</td>
<td>98.6°F</td>
<td>99.6°F</td>
<td>100.6°F</td>
</tr>
</tbody>
</table>
“Tic-Tac-Know”
Normal Range For Adult Temperature

<table>
<thead>
<tr>
<th>Method</th>
<th>Normal Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axillary or Groin</td>
<td>97.6°F to 98.6°F</td>
</tr>
<tr>
<td>Oral</td>
<td>97.6°F to 99.6°F</td>
</tr>
<tr>
<td>Rectal</td>
<td>98.6°F to 100.6°F</td>
</tr>
</tbody>
</table>

Add one degree to 97.6°F, then place the result to the right of 97.6°F.
“Tic-Tac-Know”
Normal Range For Adult Temperature

<table>
<thead>
<tr>
<th></th>
<th>AXILLARY or GROIN</th>
<th>ORAL</th>
<th>RECTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Range</td>
<td>96.7°F</td>
<td>97.6°F</td>
<td>98.6°F</td>
</tr>
<tr>
<td>Normal Range</td>
<td>97.6°F</td>
<td>98.6°F</td>
<td>99.6°F</td>
</tr>
<tr>
<td>Normal Range</td>
<td></td>
<td></td>
<td>100.6°F</td>
</tr>
</tbody>
</table>

Subtract one degree from 97.6°F then place the result to the left of 97.6°F.
“Tic-Tac-Know”
Normal Range For Adult Temperature

<table>
<thead>
<tr>
<th></th>
<th>AXILLARY or GROIN</th>
<th>ORAL</th>
<th>RECTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>96.7°F</td>
<td>97.6°F</td>
<td>98.6°F</td>
</tr>
<tr>
<td></td>
<td>98.6°F</td>
<td>99.6°F</td>
<td>100.6°F</td>
</tr>
</tbody>
</table>

YOU MUST RECORD THE LOCATION WHERE THE TEMPERATURE WAS TAKEN IN ORDER TO INTERPRET NORMAL FROM ABNORMAL!
“Tic-Tac-Know”
Normal Range For Adult Temperature

<table>
<thead>
<tr>
<th>Method</th>
<th>Location</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>AXILLARY (Ax)</td>
<td>or GROIN</td>
<td>If no location is indicated, the oral route is assumed</td>
</tr>
<tr>
<td>ORAL</td>
<td>O</td>
<td>If no location is indicated, the oral route is assumed</td>
</tr>
<tr>
<td>RECTAL (R)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

YOU MUST RECORD THE LOCATION WHERE THE TEMPERATURE WAS TAKEN IN ORDER TO INTERPRET NORMAL FROM ABNORMAL!
To Read A Non-mercury Glass Thermometer

- Hold eye level
- Locate solid column of liquid in the glass
- Observe lines on scale at upper side of column of liquid in the glass
To Read A Non-mercury Glass Thermometer
(continued)

• Read at point where liquid ends
• If liquid falls between two lines, read it to closest line
  – long line represents degree
  – short line represents 0.2 of a degree Fahrenheit
Each line on a thermometer equals two-tenths of a degree, so the thermometer shown reads 98.6°F.
A reading of 98.6°F is the average “normal” Fahrenheit temperature.

A reading of 37°C is the average “normal” Celsius temperature.

Normal oral body temperature on Fahrenheit and Celsius thermometers.
Sites To Take A Temperature

- Oral – most common
- Rectal – registers one degree Fahrenheit higher than oral
- Axillary – least accurate; registers one degree Fahrenheit lower than oral
- Tympanic – probe inserted into the ear canal
Sites To Take A Temperature
(continued)

Condition of resident determines which is the best site for measuring body temperature
Temperature: Safety Precautions

• Hold rectal and axillary thermometers in place
• Stay with resident when taking temperature
• Check glass thermometers for chips
• Prior to use, shake liquid in glass down
• Shake thermometer away from resident and hard objects
Temperature: Safety Precautions
(continued)

• Wipe from “handle” end toward bulb tip of thermometer prior to reading
• Delay taking oral temperature for 10 - 15 minutes if resident has been smoking, eating or drinking hot/cold liquids.
Temperature Conditions

• **Hyperthermia**
  - Increased body temp
  - Body temp >104°F
  - >106 °F will cause convulsions and death

• **Fever**
  - temp over 101 °F R
  - Due to illness or injury
Temperature Conditions

- **Hypothermia**
  - Body temp below
  - 96 °F
  - due to exposure to cold temperatures
  - Depends on core temperature, age and length of exposure
Training Lab Assignment
Engage in the Skill Acquisition Process for:

SKILL 4.01A
Oral temperature using a non-mercury glass thermometer
SKILL 4.01B

Axillary temperature using a non-mercury glass thermometer
Training Lab Assignment
Engage in the Skill Acquisition Process for:

SKILL 4.01C
Rectal Temperature using a non-mercury glass thermometer
Training Lab Assignment
Engage in the Skill Acquisition Process for:

**SKILL 4.01Dto**
Measure Temperature with Electronic Thermometer
Training Lab Assignment
Engage in the Skill Acquisition Process for:

SKILL 4.01E
Measure Temperature with Tympanic Thermometer
T\textcolor{red}{P}R+BP = Vital Signs

\textcolor{red}{P}ULSE
PULSE

Measuring the pulse is one way of checking on the circulatory system.
Circulatory System
Circulatory System

• Circulation is continuous movement of blood throughout the body
Circulatory System
(continued)

• Functions of circulatory system
  – Arteries carry blood with oxygen and nutrients away from heart and to cells
  – Veins carry waste products away from cells and to heart
Blood

- Adult has 5 to 6 quarts (liters)
- Consists of
  - water - 90% (plasma)
  - blood cells
  - carbon dioxide and oxygen
  - nutrients, hormones and enzymes
  - waste products
Blood
(continued)

• Types of blood cells
  – Red blood cells - erythrocytes
    • carry oxygen from blood to cells
  – White blood cells - leukocytes
    • fight infection
  – Platelets - thrombocytes
    • required for clotting to stop bleeding
Blood Vessels

• **Arteries** - carry blood away from heart
• **Veins** – carry blood to heart
Heart

• Tissue (three layers)
  – endocardium - smooth, inner layer
  – myocardium – thick, muscular middle layer
  – pericardium – double-walled membrane that covers outside of heart
Heart Chambers

• Heart divided into right and left side

• Atria – upper chambers – receive blood

• Ventricles – lower chambers – pump blood to lungs and body
Heart Chambers

• Four chambers
  – right atrium (1) - receives blood from two large veins:
    • superior vena cava
    • inferior vena cava
  – right ventricle (2) - receives blood from right atrium and pumps it to lungs through pulmonary artery
Heart Chambers
(continued)

• Four chambers
  – left atrium (3) - receives oxygenated blood from left and right pulmonary veins
  – left ventricle (4) - pumps blood to aorta, which delivers blood to all body parts (except lungs)
Heart Valves

• Located at entrance and exit of each ventricle
• Four heart valves
Heartbeat

- Systole - contraction of heart muscle
- Diastole - relaxation of heart muscle
- Blood pressure – highest and lowest pressure against walls of blood vessels as heart contracts and relaxes
- Pulse - expansion and contraction of artery
Common Disorders of the Circulatory System

- **Arteriosclerosis** - walls of arteries become thick and harden
- **Hypertension** - high blood pressure
- **Peripheral vascular disease** - decrease in flow of blood to extremities and brain
- **Angina pectoris** - chest pain
Common Disorders of the Circulatory System (continued)

- **Varicose veins** - enlarged, twisted veins usually in legs
- **Congestive heart failure** - circulatory congestion caused by weak pumping of heart muscle
- **Myocardial infarction (MI)** - heart attack due to blockage in coronary arteries
Common Disorders of the Circulatory System (continued)

- Anemia – low red blood cell counts
- Thrombus – blood clot
- Phlebitis – inflammation of vein
- Atherosclerosis - fatty deposits on walls of arteries that reduce blood flow
Changes of the Circulatory System Due To Aging

- Heart muscle less efficient
- Blood pumped with less force
- Arteries lose elasticity and become narrow
- Blood pressure increases
- Blood chemistry less efficient
- Capillaries become more fragile
Observations of the Circulatory System

- Changes in pulse rate and blood pressure
- Changes in skin color
- Changes in skin temperature – coldness
Observations of the Circulatory System (continued)

- Complaint of dizziness and headaches
- Complaint of pain in chest and/or indigestion
- Edema in feet and legs
- Shortness of breath
Observations of the Circulatory System
(continued)

- Sweating
- Blue color to lips and/or nail beds
- Complaint of tingling sensations
- Memory lapses
- Lack of energy
- Irregular respirations
- Anxiety
- Staring and lack of responsiveness
T P R+BP = Vital Signs

PULSE

- Pulse is pressure of blood pushing against wall of artery as heart beats and rests.
- Pulse easier to locate in arteries close to skin that can be pressed against bone.
Sites For Taking Pulse

• Radial – base of thumb
• Temporal – side of forehead
• Carotid – side of neck
• Brachial – inner aspect of elbow
• Femoral – inner aspect of upper thigh
Sites For Taking Pulse  
(continued)

- Popliteal - behind knee
- Dorsalis pedis – top of foot
- Apical pulse – over apex of heart
  – taken with stethoscope
  – left side of chest
Factors Affecting Pulse

- Age
- Sex
- Position
- Drugs
- Illness
- Emotions
- Activity level
- Temperature
- Physical training
Measurement of Pulse

- Normal pulse range/characteristics: 60 - 100 beats per minute and regular
- Documenting pulse rate
  - Noted as number of beats per minute
  - Rhythm - regular or irregular
  - Volume - strong, weak, thready, bounding
Training Lab Assignment
Engage in the Skill Acquisition Process for:

SKILL 4.01F
Count and Record Radial Pulse
Training Lab Assignment
Engage in the Skill Acquisition Process for:

SKILL 4.01G
Measure and Record
Apical Pulse
TPR + BP = Vital Signs

RESPIRATIONS
RESPIRATIONS

Measuring respirations is one way of checking on the respiratory system.
Respiratory System
The Respiratory System

• Respiration means to breathe in oxygen and breathe out carbon dioxide
• Exchange of oxygen and carbon dioxide necessary for life
The Respiratory System
(continued)

- Process
  - External respiration - oxygen and carbon dioxide exchanged between lungs and blood
  - Internal respiration - oxygen and carbon dioxide exchanged between blood stream and cells
The Respiratory System
Structure

- Oral cavity – mouth
- Pharynx – throat
- Larynx - voice box
- Trachea – windpipe
- Bronchi - right and left
- Bronchioles - smallest branches of bronchi
- Alveoli - air sacs covered with capillaries
The Respiratory System
Structure
(continued)

• **Nose** - lined with mucous membrane
  – air filtered by cilia
  – mucous membrane warms and moistens air
The Respiratory System
Structure
(continued)

- Lungs
  - right - 3 lobes
  - left - 2 lobes
The Respiratory System
Structure (continued)

• Pleura – membrane that encloses lungs

• Diaphragm - muscle that separates the chest and abdomen
  – contraction - draws air into lungs
  – relaxation - forces air out of lungs
Common Disorders of Respiratory System

• **URI** – *Upper Respiratory Infection* - infection of nose, throat, larynx, trachea

• **Pneumonia** - inflammation or infection of the lungs
Common Disorders of Respiratory System (continued)

- **Emphysema (Chronic Obstructive Pulmonary Disease – COPD)** – alveoli become stretched and stiff, preventing adequate exchange of oxygen and carbon dioxide.

- **Asthma** – spasms of bronchial tube walls causing narrowing of air passages usually due to allergies.
Common Disorders of Respiratory System
(continued)

• **Allergy** – reaction to substances that leads to slight or severe response by body.

• **Influenza** – highly contagious URI

• **Pleurisy** – inflammation of the pleura surrounding the lungs
Common Disorders of Respiratory System
(continued)

• **Bronchitis** - inflammation of the bronchi

• **Lung cancer** - malignant tumors in the lungs that destroy tissue
Changes in Respiratory System Due To Aging

- Lung tissue becomes less elastic
- Respiratory muscles weaken
- Number of alveoli decrease
- Respirations increase
- Voice pitched higher and weaker due to changes in larynx
- Chest wall and structures become more rigid
Observations Of Respiratory System

- Rate and rhythm of respirations
- Respiratory secretions – character
- Character of cough
- Changes in skin color - pale or bluish gray
- Temperature changes
- Difficulty breathing
Observations Of Respiratory System
(continued)

• Color of sputum
• Complaint of pain in chest, back, sides
• Shortness of breath
• Noisy respirations
• Sneezeing
• Gasping for breath
• Anxiety
Measuring Respirations

- Respiration – process of taking in oxygen and expelling carbon dioxide from lungs and respiratory tract
Measuring Respirations
(continued)

Factors Affecting Rate

• Age
• Activity level
• Position
• Drugs

• Sex
• Illness
• Emotions
• Temperature
Measuring Respirations
(continued)

• Qualities of normal respirations
  – 12-20 respirations per minute
  – Quiet
  – Effortless
  – Regular
Measuring Respirations
(continued)

• Documenting respiratory rate
  – Noted as number of inhalations and exhalations per minute (one inhalation and one exhalation equals one respiration)
  – Rhythm – regular or irregular
  – Character: shallow, deep, labored
Training Lab Assignment
Engage in the Skill Acquisition Process for:

SKILL 4.01H
Count and Record
Respiration
TPR+BP = Vital Signs

BLOOD PRESSURE
Blood Pressure

Measuring the pulse is one way of checking on the circulatory system.
Measuring Blood Pressure

• Blood pressure is the force of blood pushing against walls of arteries
  – Systolic pressure: greatest force exerted when heart contracting
  – Diastolic pressure: least force exerted as heart relaxes
Factors Influencing Blood Pressure

- Weight
- Sleep
- Age
- Emotions
- Sex
- Heredity
- Viscosity of blood
- Illness/Disease
Blood Pressure: Equipment

- Sphygmomanometer (manual)
  - cuff - different sizes
  - pressure control bulb
  - pressure gauge – marked with numbers
- aneroid
- mercury
Blood Pressure: Equipment
(continued)

• Stethoscope
  – magnifies sound
  – has diaphragm
# Measuring Blood Pressure

<table>
<thead>
<tr>
<th>Blood Pressure</th>
<th>Systolic (top #)</th>
<th>Diastolic (bottom #)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>$\leq 120$</td>
<td>$&lt;80$</td>
</tr>
<tr>
<td>Pre Hypertension</td>
<td>120-139</td>
<td>80-89</td>
</tr>
<tr>
<td>Hypertension Stage (1)</td>
<td>140-159</td>
<td>90-99</td>
</tr>
<tr>
<td>Hypertension Stage (2)</td>
<td>$\geq 160$</td>
<td>$\geq 100$</td>
</tr>
</tbody>
</table>
Guidelines for Blood Pressure Measurements

- Measure on upper arm
- Have correct size cuff
- Identify brachial artery for correct placement of stethoscope
Positioning of stethoscope diaphragm

directly over the brachial artery increases ability to hear the systolic and diastolic sounds
Positioning of stethoscope diaphragm directly over the brachial artery increases ability to hear the systolic and diastolic
Guidelines for Blood Pressure Measurements (continued)

• First sound heard – systolic pressure
• Last sound heard or change - diastolic pressure
Systolic – Start hearing a Sound – Heart Muscle is Squeezing

Diastolic – Don’t hear sound anymore – Heart muscle does not work during diastolic. This number is written down under the systolic number.
Guidelines for Blood Pressure Measurements (continued)

- Record - systolic/diastolic
- Resident in relaxed position, sitting or lying down
- Blood pressure usually taken in left arm
Guidelines for Blood Pressure Measurements
(continued)

Do not measure blood pressure in arm with IV, A-V shunt (dialysis), cast, wound, or sore
Guidelines for Blood Pressure Measurements (continued)

• Apply cuff to bare upper arm, not over clothing
• Room quiet so blood pressure can be heard
• Sphygmomanometer must be clearly visible
Blood Pressure: Reading Gauge

- Large lines are at increments of 10 mmHg
- Shorter lines at 2 mm intervals
- Take reading at closest line
Training Lab Assignment
Engage in the Skill Acquisition Process for:

**SKILL 4.01**
Measure Blood Pressure

Manual
Training Lab Assignment
Engage in the Skill Acquisition Process for:

SKILL 4.01J
Combined Vital Signs
Measuring Height and Weight
The resident’s weight, compared with the height, gives information about his/her nutritional status and changes in the medical condition.
Measuring Height And Weight

- Baseline measurement obtained on admission and must be accurate.
- Other measurements obtained as ordered.
Measuring Height And Weight
(continued)

• Height measurements
  – Feet
  – Inches
  – Centimeters
• Weight measurements
  – Pounds
  – Ounces
  – Kilograms
Measuring Height and Weight
(continued)

• Reasons for obtaining height and weight
  – Indicator of nutritional status
  – Indicator of change in medical condition
  – Used by doctor to order medications
Special Case for Height Measurement

- Residents who are contractured or
- Residents who cannot stand
- Must be measured using a tape measure
Measuring Height and Weight
(continued)

• Guidelines for weighing residents
  – Use same scale each time
  – Have resident void, remove shoes and outer clothing
  – Weigh at same time each day
Measuring Height and Weight
(continued)

• Scales
  – Remain more accurate if moved as little as possible.
  – Various types of scales
    • bathroom scale
    • standing scale
    • scales attached to hydraulic lifts
    • wheelchair scales
    • bed scales
Training Lab Assignment
Engage in the Skill Acquisition Process for:

SKILL 4.01K
Measure Height & Weight
Understand **vital signs**, **height**, and **weight** measurement skills.