Height and Weight Measurement Training
Table of Contents

- Introduction
- Terminology
- Measurement Systems
- Height Measurement
- Weight Measurement
- Quality Control
Introduction

- This presentation will train you on how to take accurate height and weight measurements.
- Everyone assisting with measurements should receive training, as well as the opportunity to practice taking measurements.
Height Measurement

Equipment needed:
- Stadiometer
- Pencil
- Recording form (or tablet)
**Step 1:** Have client stand with heels, buttocks, and upper back against stadiometer. Weight should be evenly distributed on feet, with shoulders relaxed, legs straight, and arms at sides.

**Step 2:** Ask client to look straight ahead.
Important Notes

- Make sure the client is standing flat on their feet.
- Make sure the client’s hands are not in his pockets or resting against the stadiometer.
Step 3: Orient client’s head to achieve a Frankfort plane. This ensures the highest point on the skull is measured.

O-T = Frankfort plane
V = Vertex
O = Orbitale
T = Tragion
Height Measurement: Step 4

Step 4: Ask client to stand up straight. Rest the L board on top of client’s head, making sure that it forms a right angle with the measurement rod.
Step 5: At eye level, record the measurement to the nearest ½ in. The measurement should always be taken from the side of the stadiometer.
Summary of Height Measurement Steps

1. Assemble the stadiometer.
2. Have client stand up straight on the stadiometer.
3. Ask client to look straight ahead.
4. Orient client’s head to achieve a Frankfort plane.
5. Slide the L board so it is gently resting on top of client’s head.
6. Record the measurement at eye level.
Weight Measurement

Equipment needed:

- Digital scale
- Pencil
- Recording form
Verify Scale Calibration

Before weighing clients, verify scale calibration to ensure accurate measurements. Scale calibration should include the range of possible weights for the subjects being measured.

1. Turn on the scale; make sure it reads 0
2. Place 50 lbs (25 kg) on the scale and verify and record the reading.
3. Remove the weights from the scale
4. When the reading is at 0, place 100 lbs (or 50 kg) on the scale and verify and record the reading.
5. Remove the weights from the scale
6. When the reading is at 0, place 150 lbs (or 75 kg) on the scale and verify and record the reading.
7. Remove the weights from the scale
8. When the reading is at 0, place 200 lbs (or 100 kg) on the scale and verify the reading.

Note: Only use a scale if it accurately reads the different weights. The allowable variance is no more (or less) than 0.5 lbs or 0.2 kg. Consult the manufacturer for directions to reset scale.
Important Notes

- Be sure that the scale is placed on a hard, level floor surface without carpet or rugs of any kind. If hard floor is unavailable, place the scale on a board.

- The scale should be set up in a private place, away from objects such as walls or tables so people will not be able to lean on them.

- Program the scale to pound mode.
Weight Measurement: Step 1

**Step 1:** Before each measurement, make sure the scale reads zero. If it doesn’t, press the clear button. If you cannot get the scale to read zero, do not use it.
Step 2: Ask client to remove heavy outer clothing such as hooded sweatshirts or jackets, heavy belt buckles, shoes, and anything in pockets.
Step 3: Have client stand motionless in the middle of the scale platform. Weight should be evenly distributed on both feet, with feet slightly apart, arms relaxed and hanging down loosely at the sides of the body.
Step 4: Record the weight to the nearest tenth (0.1) of a pound.

Step 5: Tell client to step off of the scale.

Note: Digital scales usually have a maximum weight limit (~350 lbs). If a client weighs over the limit, the scale will usually register an “error.” If this happens or if the reading is compromised due to a cast or other device, please make a note on the recording form.
Summary of Weight Measurement Steps

1. Check the scale to make sure it reads zero.
2. Have client remove heavy outer clothing and items from pockets.
3. Before the client steps on the scale platform make sure the scale reads zero.
4. Ask client to stand on the scale without moving.
5. Record the weight measurement.
6. Tell student to step off of the scale.
**Terminology**

- **Calibration** – The process of checking, adjusting, or determining by comparison with a standard
- **Stadiometer** - A device for measuring height that consists of a vertical ruler with a sliding horizontal L board which is adjusted to rest on the top of the head
- **Body Mass Index (BMI)** - A calculated ratio of a person’s height to weight which provides general information about a person’s body composition
- **Frankfort Plane** - The horizontal line between the lower edge of the eye socket (orbitale) and the flap at the opening of the ear (tragus); the line should be level (slide 12 has a picture)
- **Quality Control** - Additional steps or repeated measures taken to ensure accuracy
The tablet will only record height measurements for three visits (this is to get a height average).

Weight will be collected every time (as weight can change over time).

Should a client have difficulties with mobility, weight/height can be self-reported.