



Measuring Waist Circumference for Comprehensive Health Assessment:

A Quick Guide for Healthcare Professionals

Measuring waist circumference helps assess health risks related to weight distribution.

Abdominal obesity, as determined by waist circumference, is a cardiovascular disease risk marker independent of body mass index (BMI).

Use of measurements beyond BMI to evaluate obesity provides a more accurate representation of excess adiposity at the individual level! Waist circumference should be measured and documented in the electronic health record (EHR) as a routine standard practice at medical visits to improve the clinical picture of obesity diagnosis and classification.

Preparing for Waist Circumference Measurement:

- **Explain the purpose**, describe the process, and ask for permission:



“Measuring waist circumference helps us understand overall health risk related to weight distribution. Would you be comfortable if I took this measurement today? I’ll place a soft measuring tape around your waist, making sure it’s snug but not tight. The measurement is most accurate when taken against bare skin, and I can provide privacy or a gown if that helps you feel more comfortable.”

- **Ensure comfort** and privacy by offering a private, calm space for the measurement and ask if the patient is able to stand.
- **If possible, ask the patient to wear loose clothing** to the appointment or ask to remove bulky clothing. Provide gown option if appropriate.
- **Ensure a non-stretch tape measure** long enough to accommodate higher waist circumferences is available to support inclusivity for all body sizes.
- **Be prepared to repeat** the measurement 2–3 times for accuracy. To support consistency over time, it is also advised to have a formalized waist circumference measurement protocol, staff training at regular intervals and/or skills checks.



Position the Patient:



- Have the patient **stand upright**.
- If possible, gather shirt above waist and clip in place to make **measurement against bare skin**.

Locate the Landmarks:²



- **Feel for the top of the hip bone** (superior border of the iliac crest).
- **If it's difficult** to palpate the iliac crest, start a little toward the front of the patient's body. Then slide your fingers upward along the ilium until you reach the highest point of the bone at the midaxillary line.
- **If a cosmetic pencil is available**, use it to draw a horizontal line just above this point for reference (photo of measurement point)³

Position the Tape:



- **Fully pull apart** the tape measure.
- **Wrap the tape measure around the abdomen** at the identified measurement point. If appropriate, ask the patient to help by holding the tape measure and pulling it around their waist.
- **Keep the tape in a horizontal plane**, parallel to the floor, ensuring the tape is not twisted.
- **Ensure the tape is snug** but not compressing the skin.

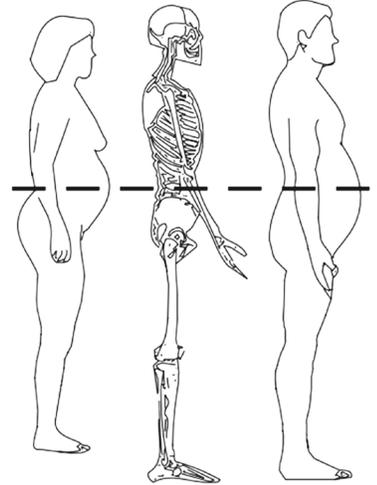
Take the Measurement:



- **Ask the patient** to breathe out normally and take the reading at the end of exhalation.
- **Record accurately:**
 - **Note the measurement** to the nearest 1/8 inch or 0.1 cm
 - **Ensure documentation** in the patient's EHR. Sample methods may include a free text entry in the vitals field, the clinician progress note, or in the patient's after-visit summary.
- **Share the measurement with the patient** and explain what it may mean for treatment options or decisions, if appropriate.
- **Reassure** and thank the patient:

"Thank you for letting me take this measurement. It's an important part of your overall health assessment."

Positioning for Waist Circumference Measurement



Measuring-Tape Position for Waist (Abdominal) Circumference in Adults³

Source: National Heart, Lung, and Blood Institute; National Institutes of Health; U.S. Department of Health and Human Services.

Key Considerations:

- ✓ **RISK ASSESSMENT:** Abdominal obesity, defined by a waist circumference ≥ 88 cm (≥ 35 in) in women or ≥ 102 cm (≥ 40 in) in men (though ethnicity-specific differences should be considered), has been associated with cardiometabolic disease and cardiovascular disease and is predictive of mortality⁴.
- ✓ **CONTEXT:** Use waist circumference along with BMI for a better picture of cardiovascular-kidney-metabolic (CKM) risk, especially for certain populations, including Asians or Asian Americans, where BMI might underestimate risk⁴.
- ✓ **MEASUREMENT SITE:** While several evidence-based methods of measuring waist circumference exist, the American Heart Association aligns with the methodology outlined by the National Institutes of Health (at the level of the superior border of the iliac crest) to maintain consistency with data collected by NHANES and used in the CDC national surveillance. This method is further endorsed by The Obesity Society.



REFERENCE:

¹ Ross R, Neeland IJ, Yamashita S, et al. Waist circumference as a vital sign in clinical practice: a Consensus Statement from the IAS and ICCR Working Group on Visceral Obesity. *Nat Rev Endocrinol.* 2020;16(3):177-189. doi:10.1038/s41574-019-0310-7

² National Health and Nutrition Examination Survey: 2021 anthropometry procedures manual. (2021, May). Cdc.gov. <https://stacks.cdc.gov/view/cdc/127207>

³ The Practical Guide Identification, Evaluation, and Treatment of Overweight and Obesity in Adults NHLBI Obesity Education Initiative; 2000. https://www.nhlbi.nih.gov/files/docs/guidelines/prctgd_c.pdf

⁴ Piché ME, Poirier P, Lemieux I, Després JP. Overview of epidemiology and contribution of obesity and body fat distribution to cardiovascular disease: an update. *Prog Cardiovasc Dis.* 2018;61:103-113. doi: 10.1016/j.pcad.2018.06.004



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