



## CLINICAL PRACTICE GUIDELINE

# Fundal height: Measuring with a tape measure

This document should be read in conjunction with the [Disclaimer](#)

### Aims

- To determine the gestation and growth of the fetus.
- To identify multiple pregnancies and complications of pregnancy e.g. amniotic fluid disorders, and fetal growth disturbances.

### Background information

Refer to the Australian Government Department of Health Pregnancy Care Guidelines ([Section 22: Fetal Growth Restriction and Well-being](#): 22.1.3: Assessing Fetal Growth) for background information.

### Key points

1. At each antenatal visit from 24 weeks, measure fundal height in centimetres.<sup>1</sup>
2. Refer women after 24 weeks gestation with a fundal height  $\geq 3$ cm less than expected, a single fundal height which plots below the 10th centile or serial measurements that demonstrate slow or static growth by crossing centiles for ultrasound measurement of fetal size.<sup>1</sup>
  - For ultrasound requests for midwifery clinics / MGP patients: Refer to KEMH Guideline, O&G: [Pathology and Ultrasound Ordering by Midwife/Nurse/Nurse Practitioner](#): Ultrasound: Midwifery Clinics & Midwifery Group Practice Requests.
3. Refer women in whom measurement of fundal height is inaccurate (for example: BMI>35, large fibroids, polyhydramnios) for serial assessment of fetal size using ultrasound.<sup>1</sup>

## Procedure

1. Obtain maternal consent.
2. Encourage the woman to empty her bladder if she has not done so in the last 30 minutes.
3. Position the woman in a supine position with her legs extended.

Consider placing a wedge under the right buttock if the gravid uterus is of a size likely to compromise maternal and/or fetal circulation.

4. Ensure hands are clean and warm.
5. Place the zero mark of the tape measure at the uppermost border of the uterine fundus.

Run the tape measure along the midline of the woman's abdomen to the uppermost border of the symphysis pubis.

To locate the fundus the hand is moved down the abdomen below the xiphisternum until the curved upper border of the fundus is felt.<sup>4</sup>

6. Document the distance in centimetres and compare with the calculated gestation.

It has been demonstrated the fundal height can be 3 cm higher at 17-20 weeks gestation if the woman has a full bladder.<sup>2</sup>

While not the preferred position for most women, a supine position has been found to yield least variation in measurements.<sup>3</sup>

An enlarged uterus can compress the inferior vena cava and the lower aorta leading to maternal supine hypotension and reduced utero-placental blood flow which can cause fetal compromise.<sup>4</sup>

Warm hands minimise maternal discomfort and potential for inducing contraction of the uterus.<sup>4</sup>



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## References

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2. Cunningham FG, Hauth JC, Leveno KJ, et al, editors. Williams Obstetrics. New York: McGraw-Hill; 2005.
3. Engstrom J. Techniques for measuring fundal height. **Journal of Nurse Midwifery**. 1993;38(1):5-14.
4. Murray I, Hassall J. Change and adaptation in pregnancy. In: Fraser DF, Cooper MA, editors. Myles Textbook for Midwives. 15th ed. London: Churchill Livingstone; 2009. p. 189-225.

## Related WNHS policies, procedures and guidelines

KEMH Clinical Guideline: Obstetrics & Gynaecology:

- [Abdominal Examination/Palpation](#)
- [Pathology and Ultrasound Ordering by Midwife/Nurse/Nurse Practitioner](#)

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