

# ELECTRONIC FETAL MONITORING



## Electronic Fetal Monitoring

- Use of instruments to monitor fetal heart rate and, with some devices, uterine contractions
- Done to assess fetal health and fetal response to the intrauterine environment

## Types of Electronic Fetal Monitoring

### External fetal monitoring

Device	Supplies	Type of auscultation	Pros & cons
<p>1. Tocodynamometer 2. Transducer 3. Gel 4. Maternal belts 5. Monitor and cables</p>	<p>1. Doppler 2. Gel</p>	<p>Continuous</p>	<p><b>Pros:</b></p> <ul style="list-style-type: none"> <li>• Allows continuous visual depiction of FHR and uterine contractions</li> <li>• Required when certain medications are given</li> </ul> <p><b>Cons:</b></p> <ul style="list-style-type: none"> <li>• Restricts maternal movement; belts can be uncomfortable</li> <li>• Can be affected by maternal movement and body habitus</li> <li>• Displays contraction frequency, but not strength</li> </ul>
	<p>1. Doppler 2. Gel</p>	<p>Intermittent</p>	<p><b>Pros:</b></p> <ul style="list-style-type: none"> <li>• Allows freedom of maternal movement</li> <li>• Can be used underwater and in multiple positions</li> </ul> <p><b>Cons:</b></p> <ul style="list-style-type: none"> <li>• Usually only available for low-risk mothers</li> <li>• Not for use w/ epidural anesthesia or labor stimulating medications</li> <li>• Does not assess contractions (which can be done manually)</li> </ul>

### Internal fetal monitoring

<p>1. Fetal scalp electrode 2. Intrauterine pressure catheter 3. Monitor and cables</p> <p>(Additional supplies for placement: sterile gloves, gel, syringe to flush, tape)</p>	<p>1. Fetal scalp electrode 2. Intrauterine pressure catheter 3. Monitor and cables</p> <p>(Additional supplies for placement: sterile gloves, gel, syringe to flush, tape)</p>	<p>Continuous</p>	<p><b>Pros:</b></p> <p>Most accurate form of fetal monitoring, provides continuous visual depiction of FHR and uterine contractions. Only method that can objectively assess contraction strength. Not affected by maternal habitus or movement. Can be used to provide amnioinfusion.</p> <p><b>Cons:</b></p> <p>Placed by a provider. Requires cervix is dilated and membranes are ruptured. Increases risk of infection. Possibility of fetal or maternal injury. Contraindicated w/ certain maternal conditions and infections. Restricts maternal movement.</p>
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## NOTES

