Birth and the Newborn Baby
Birth: Signs of Labor

• Hormones initiate the process.

• **False labor** occurs when the uterus contracts for several weeks prior to birth.

• **Lightening** occurs 2 weeks before birth. The head drops low in the uterus, and the cervix softens.

• The **bloody show** occurs when the cervix begins to open and the mucus plug comes out.
First Stage of Labor

- Uterine contractions gradually become stronger and quicker. On average it can last 12-24 hours for first-born, 4-6 hours for later births.

- The cervix opens (**dilates**) and thins (**effaces**) so the baby can come out from the uterus through the birth canal (**vagina**).

- Climax of Stage 1: The cervix is completely open, and **Transition** occurs when the baby’s head moves into the vaginal opening.
Second Stage of Labor

• This is the **delivery of the baby**. On average, it lasts 50 minutes for first-born, and 20 minutes for later births.

• The mother squeezes and pushes with her abdominal muscles, the skin around the vagina stretches, and the baby’s skull bones overlap.

• An **episiotomy** (small incision) can be done to increase the size of the vaginal opening.
Third Stage of Labor

• This is when the mother has the birth of the placenta.

• Final contractions occur, the placenta is separated from the uterine wall, and the placenta, umbilical cord, and other membranes come out the vagina.

• It lasts about 5-10 minutes.
Birth Presentations and Deliveries: Vaginal Delivery

- Vertex Presentation—baby is born head first (85% are this way)

- Breech Presentation—baby is born bottom first

- Transverse Presentation—baby is crossways and must be turned before birth
Instrument Delivery

Used in about 5% of births when pushing isn’t effective in a reasonable amount of time

- **Forceps**—metal clamps placed around the baby’s head to pull the baby out of the vagina

- **Vacuum extractor**—suction tube attached to plastic cup placed on baby’s head to move baby out
Cesarean Delivery

- Surgical birth where doctor lifts baby out from incision made in abdomen
- Used for medical emergencies, some breech presentations, and previous history of such births
- In 2009, 31% of American births were cesarean—the highest rate in the world.
- Use of fetal monitor may contribute to higher rate
Additional Birth details

- **Birth Positioning**….when mothers are upright, labor is slightly shorter (contractions are stronger & pushing more effective)

- Reduced chances of ‘episiotomy’

- Less likely for pain medications or have instrument-assisted deliveries
Birth Complications

• Oxygen Deprivation
  • Anoxia is inadequate supply of oxygen. It can be caused by squeezing the umbilical cord, premature separation of the placenta, or failure to breath after birth.
  • Can cause cerebral palsy.
  • Many children remain behind their peers intellectually and in motor development through early childhood, but can catch up in the school years.
## Premature Infants

*Birth weight is best predictor of infant survival*

### Preterm Infants
- Born several weeks before due date
- Small, but weight is proportionate to when they are born
- Cared for in isolette, use “kangaroo care”, train parents

### Low Birth-Weight Infants
- Below expected weight considering length of pregnancy
- Can be full-term or preterm, but if preterm they are especially small
- Have more problems i.e., more likely to die in first year, get infections, show brain damage
Predictors for preterm babies

- Warm, sensitive parenting
- Stable life circumstances
- Social supports

Supports are recommended for both baby and parents to increase healthy development and later success