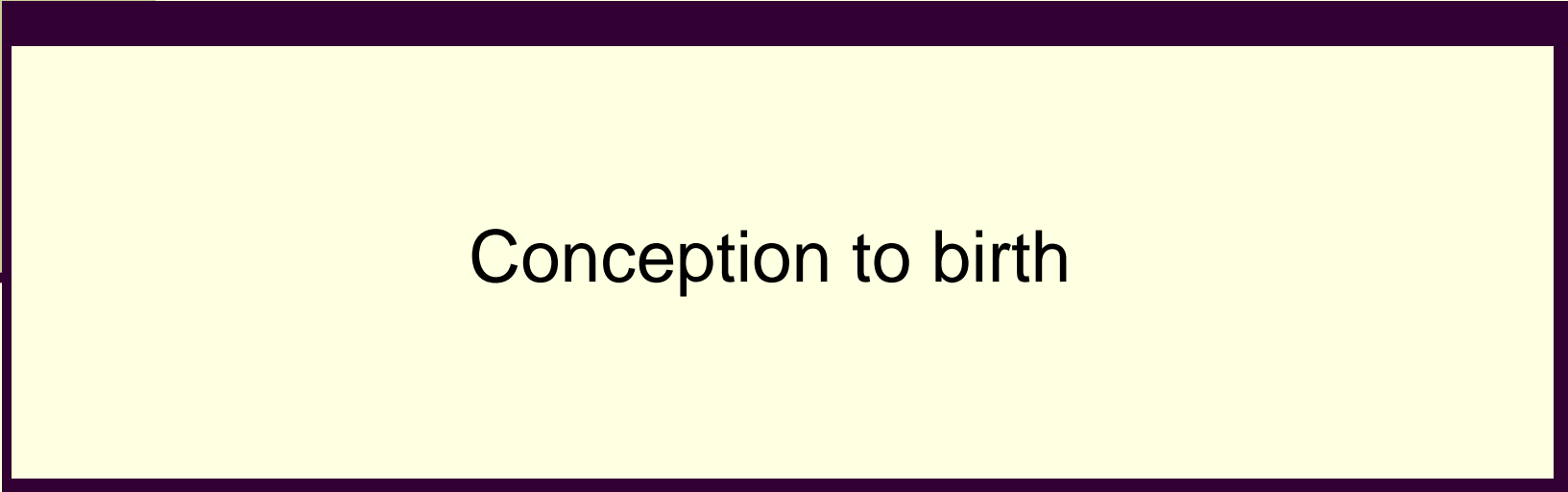




# Prenatal Development



Conception to birth

# Periods of Development

- Germinal period
  - Conception to 2 weeks
- Embryonic period
  - From 2 to 8 weeks
- Fetal period
  - From 8 weeks to birth

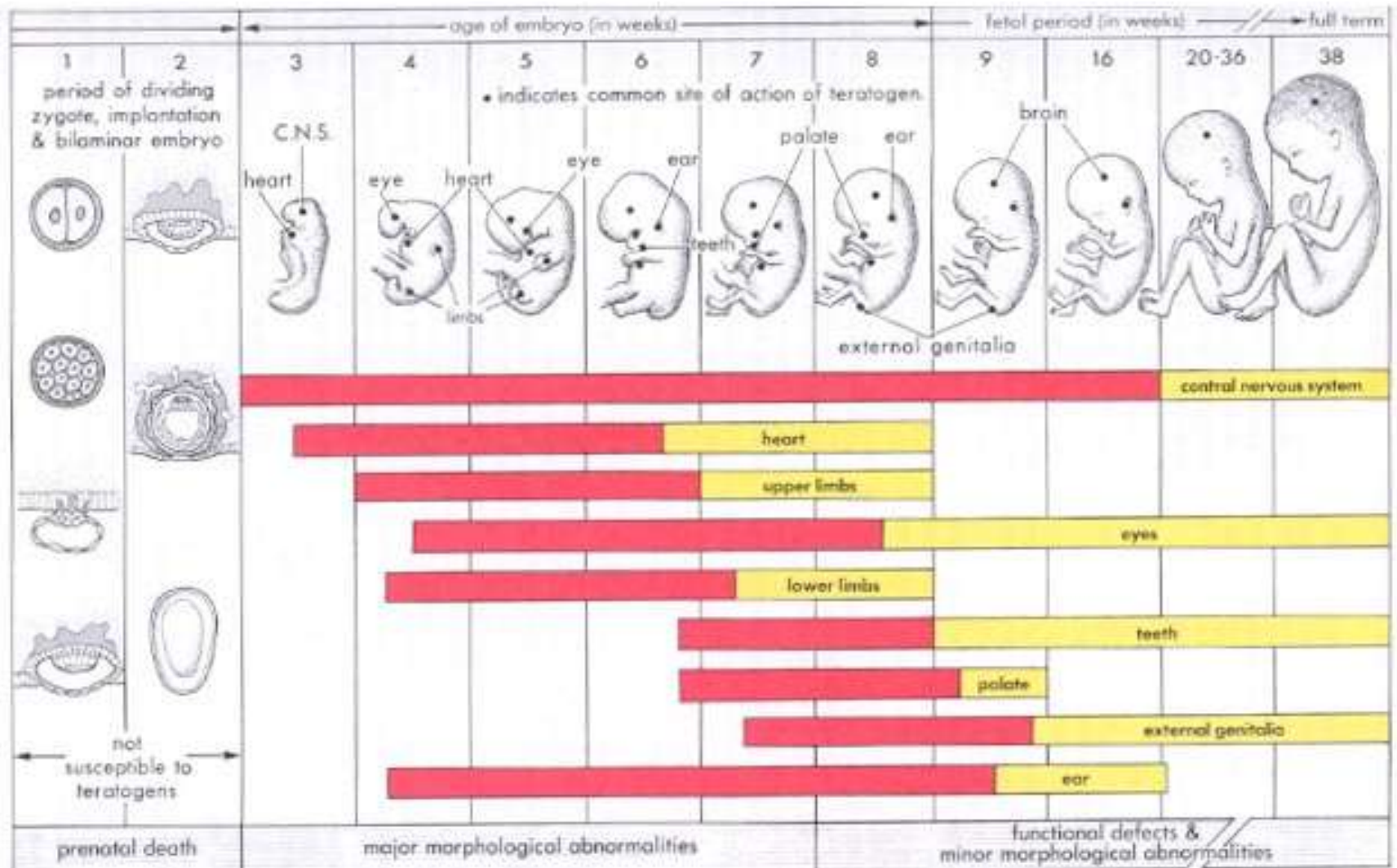


# Teratogens

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- Dose
- Time of exposure
  - Critical (sensitive) period
- Genetic susceptibility
- No drug is completely safe for pregnancy. Most prescription and over-the-counter drugs won't really ever have any ill-effects, but why risk it?
- Caffeine – leads to low birthweight, preterm deliveries, increased risk of spontaneous abortion.

# Sensitive Periods



# Teratogens

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- Alcohol
  - FAS – facial/limb/heart deformities, below average intelligence
- Nicotine
  - Lower language and cognitive abilities at age 4
  - SIDS
  - Respiratory problems

# Teratogens cont.

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- Environmental
  - Lead – slower mental development
  - Saunas/hot tubs – increases mother's body temperature, which can cause cellular or other problems in a fetus
- Diseases
  - AIDS
    - Across placenta, during delivery, breast-feeding

# Other factors

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- Nutrition
- Stress
  - High stress leads to increased rates of preterm birth
- Maternal age
  - Harder to get pregnant after age 30
    - Only 54% of women in one study over the age of 35 were able to conceive, compared to >75% of younger women
  - Down syndrome risk increases with age

# Birth Process

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- Stage 1
  - Cervical dilation
  - Late: transition stage, amniotic sac ruptures
- Stage 2
  - Birth
- Stage 3
  - Delivery of the placenta
- Average length for first labor is 14 hours. Subsequent deliveries usually are faster.



# Childbirth preparation

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- Epidural or not?
- Natural childbirth
  - Decrease fear through education and preparation
  - Relaxing and breathing techniques
  - Lamaze
  - Bradley
- C-section

# After Delivery

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- Apgar scale
  - 5 subscales
  - Total score of 10
  - Higher is better
- Emotional aspects
  - Relief
  - Exhaustion
  - Depression