

Chapter 9- Life Span Development I

CLASS OBJECTIVE:
What factors influence prenatal development?

Test Your Knowledge!
True or False?

- Most babies are born healthy and most hazards can be avoided.
- There are very few prenatal factors that can harm a developing person.
- Prenatal exposure to a dangerous substance is only harmful in the first trimester of the pregnancy.
- Research has proven that drinking alcohol (in any amount) during pregnancy is safe. ²

Is the prenatal environment that important??

Teratogens are substances that can lead to _____

_____ during the prenatal period.

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What are some factors that would influence prenatal development?

_____ can impact a developing fetus

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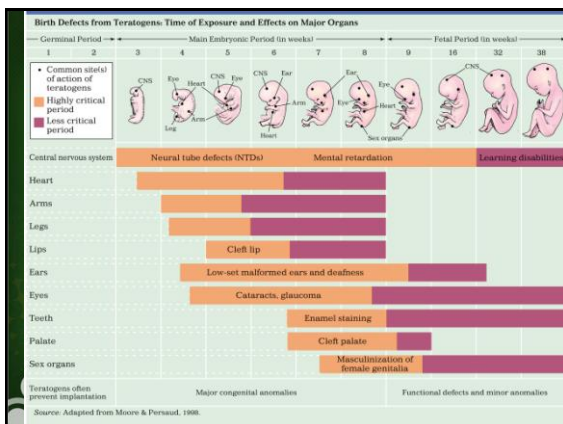
It's all about timing...

The effect of a *teratogen* is very personal because the impact depends on the _____

Critical period is the time when a particular organ or _____

Different *teratogens* can cause damage at different times during development and each _____

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Fetal Alcohol Syndrome (FAS)

- This syndrome is caused by

during pregnancy.

- Particularly weeks 10-20



What does FAS look like?



A child with Fetal Alcohol Syndrome
(O'Rahilly 1996).

Facial Characteristics

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Facial abnormalities are an obvious indicator of FAS



- Small head circumference
- Small, widely-spaced eyes
- Prolongation of the fold of the upper eyelid
- A short, upturned nose
- Flat mid-face, lowered nasal bridge
- Thin upper lip

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Approximately 10,000 infants are born each year with physical or cognitive disabilities associated with maternal drinking (Jacobson, 1997).

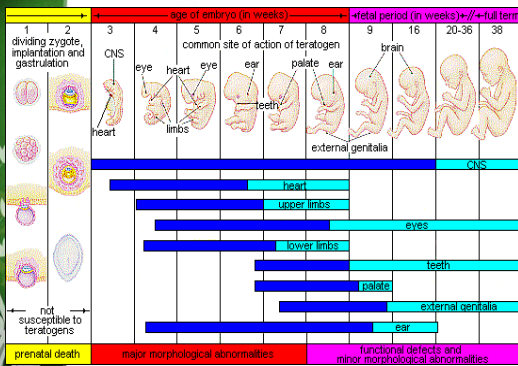
The presence of alcohol in the fetus's bloodstream triggers widespread cell death in the fetal brain.

Normal brain of 6-week-old baby

Brain of 6-week-old baby with FAS



When is the CNS most vulnerable?



Some Environmental Hazards (to a Fetus or Newborn)

• Maternal Diseases

- AIDS
- Chicken Pox
- Chlamydia
- Gonorrhea
- Genital Herpes
- Mumps
- Rubella (German Measles)
- Syphilis

Drugs:

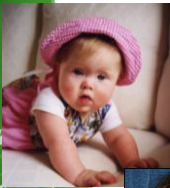
- Alcohol
- Birth Control Pills
- Caffeine
- Cocaine
- Heroin
- Marijuana
- Methadone
- Nicotine

• Environmental Pollutants

- Lead
- Mercury
- PCBs

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Down Syndrome (Trisomy-21)



• Characteristics:

- Almond-shaped eyes
- A fold over the eyelid
- Smaller heads, neck, and noses
- Flat facial profile
- Small ears

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Next Class

How does our thinking develop?

- Cognitive development

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