

## Development Across the Lifespan

Developmental psychology: The scientific study of how humans change over the lifespan, from conception through infancy, childhood, adolescence, and adulthood ([page 136](#)).



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## Interaction Between Three Areas of Development



**FIGURE 4.1**

Tony Garcia/Getty Images, Ellen Senisi, and Fat Camera/Getty Images  
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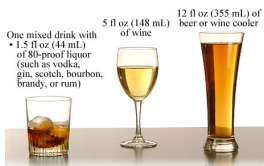
Together, nature and nurture influence growth in three developmental areas:

- physical
- socio-emotional, and
- cognitive ([page 136](#))

## Teratogens

Teratogen: Environmental substances that can harm prenatal development (page 140). The impact of each teratogen depends on when exposure occurs, the amount of exposure, and how long it lasts during prenatal development (page 140).

Known teratogens include:



- Exposure to radiation
- Heavy metals such as lead and mercury
- Drugs taken by the mother, such as alcohol, cocaine, and heroin.
- Nicotine
- Toxic industrial chemicals, such as PCBs
- Diseases, such as rubella, syphilis, genital herpes, and AIDS

If we don't know the causes of development problems,

- We won't take the appropriate action
- We might take the wrong action that is not likely to be effective

The placenta prevents many (but not all) dangerous substances from reaching the fetus.

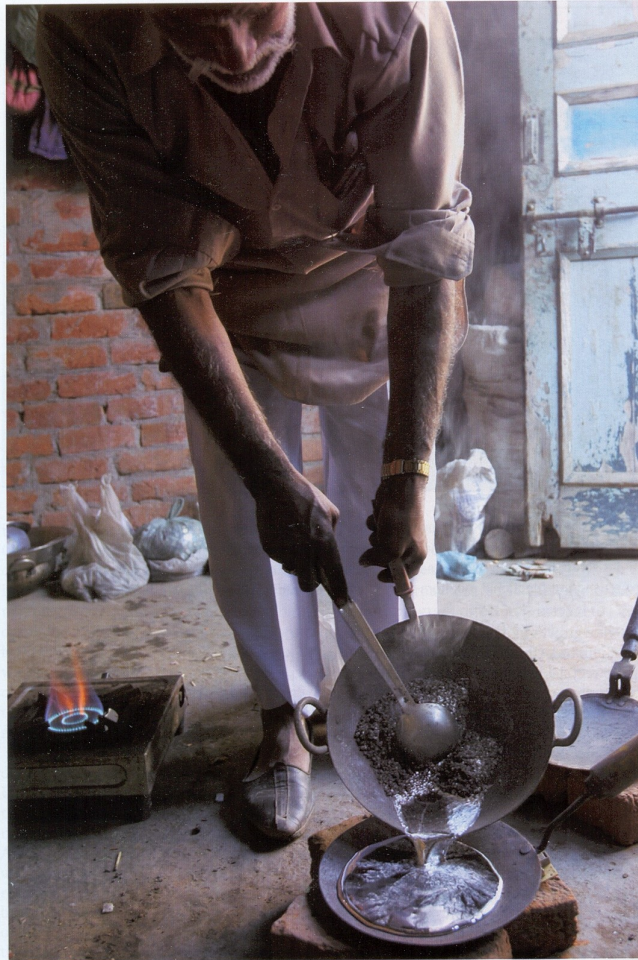


<http://ngm.nationalgeographic.com/2008/01/high-tech-trash/essick-photography>



**DUMPED** A farmer in rural Taizhou, China, readies sweet potatoes for market beside circuit boards burned so metals could be extracted. The region has long been a major dump site for e-waste, but a crackdown by authorities has reduced illegal trade.

<http://ngm.nationalgeographic.com/2008/01/high-tech-trash/essick-photography>



**TOXIC MELT** In a poor suburb of New Delhi, India, where informal e-waste processing is a common household business, a man pours molten lead smelted from circuit boards. His family uses the same pots for cooking—a potentially deadly practice.

<http://ngm.nationalgeographic.com/2008/01/high-tech-trash/essick-photography>