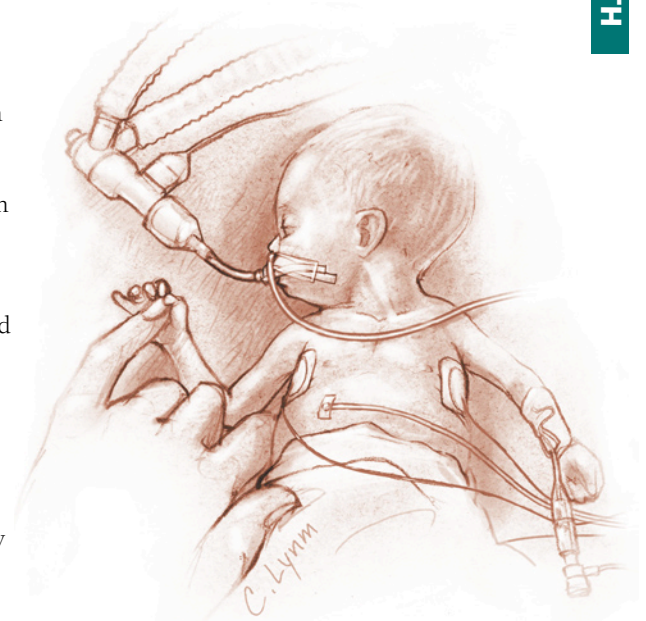


Premature Infants

During pregnancy, the infant grows in the mother's **uterus** (womb) usually for 38 to 40 weeks. When an infant is born **prematurely** (too early), the infant may require special medical care. The level of extra care needed often depends on how early the birth occurs. Premature (also called **preterm**) infants weigh much less than full-term infants because they have not had the full amount of time for growth inside the uterus.

Infants born very early in pregnancy are extremely small and fragile. They may weigh less than 2 pounds. They require specialized intensive care in a **neonatal intensive care unit (NICU)**. Doctors and nurses who work in NICUs have specialized training to care for premature infants and their problems. Health problems for premature infants may not end when they go home from the hospital. They may need special medical care as they grow older.

The June 3, 2009, issue of *JAMA* is a theme issue on child and adolescent health and includes an article about survival of extremely preterm infants in Sweden. This Patient Page is adapted from one published in the March 26, 2008, issue.



EARLY PROBLEMS FOR PREMATURE INFANTS

- Inability to breathe or breathe regularly on their own because of underdeveloped lungs
- Body temperature regulation (the infant cannot maintain his or her own body heat)
- Feeding and growth problems because of an immature digestive system
- **Jaundice** (yellowing of skin and possible brain damage due to buildup of **bilirubin**, a blood breakdown product)
- **Anemia** (not enough red blood cells to carry oxygen to tissues)
- **Intracranial hemorrhage** (bleeding into the brain)

PROBLEMS PREMATURE INFANTS MIGHT FACE AS THEY GROW OLDER

- **Apnea** (episodes of stopping breathing), which may require special monitoring, even at home
- **Bronchopulmonary dysplasia**, a chronic lung disease that may or may not improve as the child grows
- Hearing or vision problems related to immature nerves or treatment side effects
- Developmental delay and learning disabilities from brain damage related to immaturity

Because premature infants, especially extremely premature infants, can be very ill, decisions about treatments can be difficult for parents, doctors, and nurses. Medical research studies provide information about treatments and the likely course of an illness, but they cannot predict how each infant will recover from being born too early.

Regular **prenatal** (before birth) medical care, avoiding any exposure to tobacco smoke, avoiding alcohol and illegal substances, and controlling chronic medical problems are important during every pregnancy.

FOR MORE INFORMATION

- American Academy of Pediatrics
www.aap.org
- Eunice Kennedy Shriver National Institute of Child Health and Human Development
www.nichd.nih.gov
- Nemours Foundation's Center for Children's Health Media
www.kidshealth.org

INFORM YOURSELF

To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA's Web site at www.jama.com. Many are available in English and Spanish.

Sources: American Academy of Pediatrics, Eunice Kennedy Shriver National Institute of Child Health and Human Development, Nemours Foundation (KidsHealth)

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