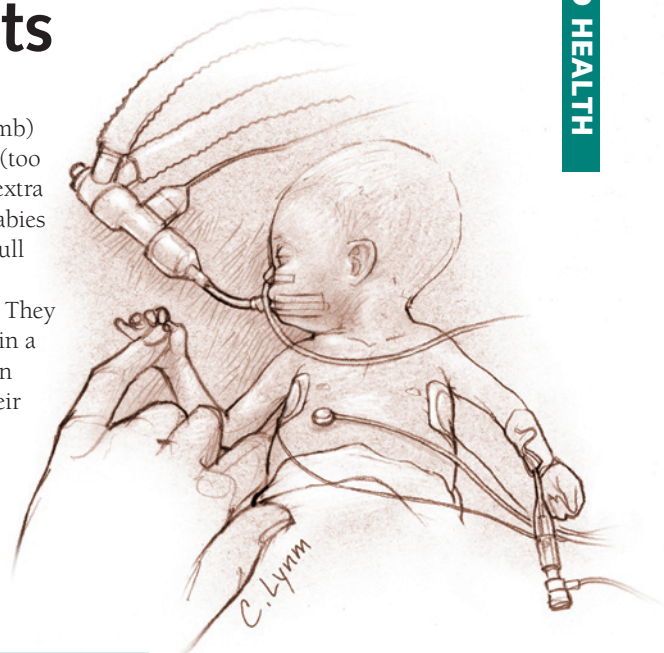


# Care of Premature Infants

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

Babies 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 education to care for premature infants and their problems. Equipment in a NICU, such as incubators and ventilators, is made especially for premature infants and their special needs. Health problems for babies who are born prematurely may not end when the baby goes home from the hospital. They may need special medical care as they grow older.

The February 12, 2003, issue of *JAMA* includes an article about children who were born prematurely.



## EARLY PROBLEMS FOR PREMATURE INFANTS

- Inability to breathe or breathe regularly on their own, possibly requiring oxygen and a ventilator
- **Bradycardia** (low heart rate)
- Body temperature regulation (the baby 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)
- Infections

## PROBLEMS PREMATURE INFANTS 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 babies can be very ill, especially extremely premature infants, 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 baby will recover from being born too early.

Preventing premature birth is important. Regular **prenatal** (before birth) medical care, avoiding any exposure to tobacco smoke, avoiding alcohol and illegal substances, and control of chronic medical problems are all ways that women can help maintain a healthy pregnancy to the full term.

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## FOR MORE INFORMATION

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- National Institute of Child Health and Human Development  
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[www.nichd.nih.gov](http://www.nichd.nih.gov)
- Nemours Foundation's Center for Children's Health Media  
[www.kidshealth.org](http://www.kidshealth.org)

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To find this and previous *JAMA* Patient Pages, go to the Patient Page Index on *JAMA*'s Web site at [www.jama.com](http://www.jama.com). They are available in English and Spanish. A Patient Page on high-risk infants was published in the October 25, 2000, issue; one on low birth weight was published in the January 9, 2002, issue; and one on delivering a healthy infant was published in the March 27, 2002, issue.

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

