

# Understanding premature **infant lungs**

If your baby was born early, you already know how fragile preemie lungs can be.

**Preterm lungs**



24–35 Weeks  
Gestational Age

**Term lungs**



36 Weeks Gestational  
Age to 3 Years of Age

Adapted from Moore and Persaud 2008.

***Babies born early have lungs that are smaller and less developed at birth than those of full-term babies.***



# Premature birth interrupts the final stages of normal lung development

## Estimates of lung volume at birth

Alveoli are not uniformly present until 36 weeks gestational age (GA)

### Lung Volume (mL)

Full term ( $\geq 40$  weeks GA)  
**180 mL**



34 weeks GA  
**93 mL**



**52%**  
of the lung volume  
seen in full-term infants

- A preemie's airways are smaller and more narrow than a full-term baby's airways
- Babies born early (before the 36th week of pregnancy) have not received the full transfer of maternal antibodies to protect them against severe RSV disease
- Even as your premature infant starts to look healthy and strong, babies born early are at high risk for severe RSV disease, in part due to underdeveloped lungs
- A lung infection from RSV can cause clogged airways and serious breathing problems that might lead to hospitalization