

Bronchopulmonary Dysplasia

What is Bronchopulmonary Dysplasia?

Bronchopulmonary dysplasia (BPD) is a lung condition that occurs in babies born prematurely (too soon) who need oxygen or ventilators to help them breathe. Babies are not born with BPD, it is a complication of oxygen and ventilator use.

Newborn lungs are very fragile. Although it is needed, the pressure from the ventilator and high amount of oxygen can damage a baby's airways (bronchi). This can cause tissue destruction (dysplasia) in the tiny air sacs of the lungs (alveoli). Damaged lung tissue is not as stretchy as healthy tissue, so air cannot move in and out as easily. The lining of the air sac gets thickened, making the movement of oxygen and carbon dioxide more difficult.

What are the symptoms of BPD?

Your baby may have some or all of the following symptoms:

- Fast breathing
- Working hard to breathe (retractions)
- Wheezing or rough breathing sounds
- Difficulty or inability to eat by mouth
- Poor weight gain
- Frequent lung infections

How is BPD treated?

Your baby may be treated with any of the following therapies:

- Ventilator
- Extra oxygen
- Inhaled mediations such as:

Pediatric Home Ventilator Program

- bronchodilators (to relax and widen airways)
- inhaled steroids (to reduce or prevent irritation/swelling in the lungs)
- medicines to thin mucus
- Diuretics (drugs that help the body remove extra fluid)
- Routine childhood immunization to prevent disease and keep your child heathy
- Good nutrition

Are there any complications of BPD?

Yes, although not all babies with BPD will have these problems:

- Pulmonary hypertension (high pressure in the pulmonary artery)
- Airway reactivity (sometimes called asthma)

Where can I learn more?

- American Lung Association: <u>www.lung.org/lung-health-diseases/lung-</u> <u>disease-lookup/bronchopulmonary-dysplasia</u>
- National Organization for Rare Diseases: <u>https://rarediseases.org/rare-diseases/bronchopulmonary-dysplasia-bpd/</u>
- The Chest Foundation: <u>https://foundation.chestnet.org/lung-health-a-</u> z/bronchopulmonary-dysplasia-bpd/
- The American Thoracic Society: <u>https://www.thoracic.org/patients/patient-</u> <u>resources/resources/bpd-intro.pdf</u>

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