# Common Respiratory Illnesses: Reducing the Risk





# Common Respiratory Illnesses: Reducing the Risk

This parent handbook was carefully developed by healthcare experts in the field of neonatal care.

The information is thoughtfully presented in consultation with parents of preemie babies.



## **Contents**

#### Introduction

Bronchopulmonary Dysplasia (BPD)				
Why premature babies are at higher risk				
Simple ways to reduce risk	4			
Knowing when to call your baby's doctor or nurse, or 911	5			
Ways to comfort your baby through a cold	6			
About Common Respiratory Illnesses				
Colds and Viruses	7			
Bronchiolitis	7			
Croup	8			
Pneumonia	8			
Respiratory Syncytial Virus (RSV)	9			
Influenza (Flu)	1C			
Other Important Considerations				
Immunizations	10			
Norwalk virus	11			
Rotavirus	11			
Notes page	12			
Resources	13			

#### Good to know...

Taking a basic first aid course, including CPR, can help you feel more confident in the care of your baby.

Information contained in this booklet is not intended to replace the advice of a medical professional. Always consult your baby's doctor or nurse if you have concerns about the health and well-being of your baby. Never hesitate to call 911.

### Introduction

We are all familiar with the symptoms of a cold. Respiratory viruses bring us runny noses, coughs, sneezing, red eyes, loss of appetite and feeling irritable. While these symptoms can last a few days to a week for most people, these same viruses may cause more serious illness in babies.

#### Premature babies are at higher risk of becoming very sick.

This booklet was developed to help you to understand common respiratory illnesses, the risks, and what you can do to reduce these risks to your baby.

#### Good to know...

Viruses that cause coughs and colds are more common during the winter months. This may be because viruses survive better in colder temperatures and drier air, or because we spend more time indoors sharing the same air.

#### Important Information

## Bronchopulmonary Dysplasia (BPD)



Extremely premature babies who received a lot of breathing support (mechanical ventilation), or high oxygen concentration, can have BPD (commonly known as chronic lung disease). If a baby with BPD gets a cold they can become very sick and are more likely to be readmitted to hospital, have their

breathing monitored, receive extra oxygen, or have breathing assistance (mechanical ventilation).

It is important to understand these risks if your baby has BPD.

# Why premature babies are at higher risk

# 1) Immature lungs

**Immature lungs** put premature babies at greater risk of respiratory infections. The lungs are among the last organs to develop before birth.



#### **Premature Babies**

(born less than 37 weeks)

Normal lung development is **interrupted** by birth.

This makes breathing more difficult, and increases the risk of respiratory infections.



#### **Full Term Babies**

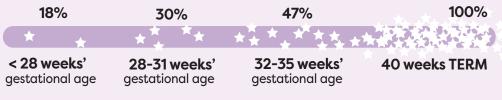
Lungs fully develop in the womb without interruption.

There is **less risk** for complications from respiratory infections.

# 2) Less antibodies

**Protective antibodies** that fight infection are passed from the mother across the placenta, mostly in the last few months of pregnancy. The premature baby misses out on the full amount of these antibodies and may also have difficulty producing their own.

#### Antibody levels at gestational ages and term:



Antibodies are proteins made in the body by a special type of white blood cell. They protect against viruses and bacteria that can make us sick, and help us to fight infections.



# Simple ways to reduce risk

Clean hands are safe hands. Proper handwashing can protect your baby.



Use soap and warm water.
This method is most effective



Wash for 15 seconds, rubbing all parts of your hands



Dry your hands on a clean towel or paper towel



No soap and warm water? Use alcohol-based hand sanitizer

#### Protect your baby from secondhand smoke

Babies exposed to secondhand smoke are at greater risk for respiratory illnesses, and have a higher risk of becoming sick. To protect your baby, avoid any cigarette, vape or other secondhand smoke near your baby.

Reduce your baby's exposure by:

- not allowing smoking inside your home or car
- asking smokers to wash hands and change their top or jacket before touching or holding your baby
- avoiding visits to the home of anyone who smokes inside

# If you have a cold or fever

Until you feel better, you can try gently hugging instead of kissing your baby.

Keep anyone with cold symptoms, cough or fever away from your baby. Ask visitors who feel unwell to come another day.

#### **Avoid crowds**

Try to keep your baby away from crowded places such as daycare, malls, and large family gatherings.

Being around a lot of people increases the risk that your baby may be exposed to a virus.

#### Stay protected

Keep your baby's immunizations up-to-date for best protection.

#### Clean often

Clean toys, cell phones, highchairs and work surfaces often.

# Knowing when to call your baby's doctor or nurse, or 911

Important to remember! Always call your baby's doctor or nurse whenever you have any concerns about your baby's health and well-being.

For babies younger than 3 months of age (corrected), call your baby's doctor or nurse when your baby starts to become unwell. This is especially important to make sure that newborn, premature and young babies do not get a more serious illness, especially if there is fever and coughing.

Always remember to inform any doctor, pharmacist, paramedic, or other healthcare professional that your baby was born prematurely. This information may make a difference to your baby's care.

#### Good idea!

Keeping important information such as your baby's discharge summary handy (the diaper bag is a good spot!) can be helpful.

#### Use F-A-C-T-S to remember important signs and symptoms to watch for.

This information is not intended to replace the advice of a medical professional. Always consult your baby's doctor or nurse if you have concerns about the health and well-being of your baby. Never hesitate to call 911.

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#### Call Doctor

#### **Call 911**

Crying more than usual, hard to comfort

Struggling to breathe, limp, unresponsive, difficult to wake, lips or skin turning blue

Appetite |

Feeding less, refusing several feedings in a row, dry diapers, dry mouth or lips

Difficult to wake, limp, unresponsive

Cough

Raspy (noisy) breathing, barking or wheezing cough, or one that doesn't go away

Struggling to breathe, rapid shallow breathing, lips or skin turning blue, limp, unresponsive

**Temperature** 

Sudden or continuing fever (temperature of 38° C or more) Fever over 39° C, difficult to wake, limp, unresponsive, unconscious

Sleep

Sleepier than usual, not waking up for feedings

Will not wake, limp, unresponsive, unconscious

Keep emergency numbers handy. Remember to NEVER give any medication to your baby without speaking to the doctor.

# Ways to comfort your baby through a cold

Give your baby lots of love!

By far the best way to help your baby feel better is to offer lots of loving attention. Your baby wants to be close to you.

Hold your baby in your arms, against your chest, or in a soft baby carrier. Read or sing to your baby, the sound of your voice is soothing. If you are breastfeeding, and your baby is able to feed, this can also be soothing and comforting.

# If your baby has a fever

It is important to keep up your baby's fluids. Offer your baby plenty of breast milk or formula.

Remember, only babies over four months (corrected age) can be offered water.

"Watching my baby battle a cold for the first time was miserable. With experience, I became more confident in comforting and looking after him."

~ Preemie Dad

# Dress your baby lightly

Do not overdress your baby! It is important keep your baby cool but comfortable.

# Try a humidifier (but keep it clean and safe!)

A humidifier or cool-mist vaporizer adds moisture to the air. This helps baby's nasal passages stay moist and can reduce nighttime cough and stuffiness.

Always clean humidifiers regularly or dangerous mould can form inside!

# If your baby has a stuffy nose

A stuffy nose can make feeding hard for your baby.

Try softening the mucus in your baby's nose with saline water, and then use a nasal aspirator (simple suction device) to remove it.

You can buy both of these items at most pharmacies.
Ask your pharmacist.

### If your baby has difficulty feeding

It is important that your baby has enough liquids and does not become dehydrated so offer breast milk or formula as often as your baby will take it. Offering small amounts can make it easier for your baby to drink. Never force your baby to feed. Remember, only babies over four months (corrected age) can be offered water.

# **Colds and Viruses**

Colds are caused by viruses and cannot be treated with antibiotics. Viruses usually spread in one of three ways:



**Direct Person-to-Person Contact** such as touching, kissing, or holding hands



**Droplets** from coughs or sneezing that travel through air



Indirect Contact with objects such as toys, doorknobs, cell phones, or work surfaces

Colds usually involve the nose, throat and sinuses. Common symptoms include a runny or stuffy nose, cough, sneezing, red eyes, loss of appetite, feeling irritable, and sometimes a mild fever. A cold can become more serious, causing bronchiolitis, croup and pneumonia.

#### Important to remember

Do not give over-the-counter cough and cold medicines to children under age 6 without talking to a healthcare professional, such as the pharmacist or your baby's doctor.

# **Bronchiolitis**

#### What is it?

Bronchiolitis is the inflammation of the small airways in the lungs. This leads to a build up of mucus, causing breathing problems.

It is a common illness that affects babies and young children. An RSV infection or other cold viruses often cause bronchiolitis.

Bronchiolitis is most common during the first two years of life.

#### What are the symptoms?

rapid shallow breathing wheezing or breathing difficulties

cough that won't go away

fever

5

See the F-A-C-T-S Infographic on page 5 of this booklet for important signs and symptoms to watch for.

Premature babies
(and babies that have
lung or heart problems)
can be at higher risk and
may need to receive extra oxygen.

# Croup

#### What is it?

A viral infection that causes swelling in the upper airways, making it difficult to breathe.

Symptoms begin as a typical cold with stuffy nose and dry cough. Usually by day 2 or 3 the cough becomes barky and your baby could have breathing difficulty.

The symptoms of croup are often worse at night, and with more crying and coughing.

#### What are the symptoms?

noisy, whistling breathing

barking cough

dry cough that won't go away

hoarse voice

See the F-A-C-T-S Infographic on page 5 of this booklet for important signs and symptoms to watch for.

Premature babies
(and babies that have lung or heart problems)
can be at higher risk and may need to receive extra oxygen.

# Pneumonia

#### What is it?

Pneumonia is an infection of the lungs. It can happen spontaneously or after a cold, flu or other illness.

Babies need extra care if they have pneumonia, and may have to be treated with antibiotics.

#### What are the symptoms?

rapid shallow breathing wheezing or breathing difficulties

cough that won't go away

fever

bloating, abdominal (belly) pain

difficulty feeding

See the F-A-C-T-S Infographic on page 5 of this booklet for important signs and symptoms to watch for.

Premature babies are at greater risk of developing lung infections such a pneumonia, and sometimes may need to receive extra oxygen.

# Respiratory Syncytial Virus (RSV)

#### What is it?

For most babies RSV causes mild cold-like symptoms, but RSV can also cause infections of the lungs and respiratory tract.

Bronchiolitis and/or pneumonia can develop from having an RSV cold. These are the leading causes of hospitalization in children under 1 year.

RSV infections can occur anytime, but tend to happen from Fall to Spring. Nearly all children will have their first RSV infection by the time they are two years old.

RSV has similar symptoms to a common cold (stuffy nose, cough, sneezing and mild fever) and usually lasts between one to three weeks.

Babies can get RSV more than once.

#### What are the symptoms?

severe cough

fever

stuffy nose

unusual tiredness

rapid shallow breathing

poor feeding

bluish colour to skin (cyanosis)

wheezing or breathing difficulties

See the F-A-C-T-S Infographic on page 5 of this booklet for important signs and symptoms to watch for.

Visit **canadianpreemies.org** for more information on RSV

Premature babies that have BPD, breathing problems, and babies that have lung or heart problems can become very sick.

Some babies with RSV bronchiolitis may need oxygen or breathing assistance (mechanical ventilation).

#### **RSV: Long-term effects**

Sometimes there are complications from an RSV chest infection. Some babies can continue to be wheezy and have asthma like symptoms when they have other colds.

#### **RSV Antibody Injection**

Approved in Canada in 2002 for decreasing the risk of serious lower respiratory disease caused by RSV. It has been shown to reduce hospitalizations due to RSV infection. Babies that are born extremely premature or have

specific medical conditions may be eligible for this injection. Talk to your baby's doctor, your baby may qualify\*.

\*Eligibility criteria based on recommendations by the Canadian Pediatric Society and the Public Health Agency of Canada's Canadian Immunization Guide. There are individual provincial criteria for injections eligibility.

## Influenza

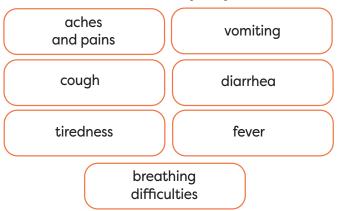
#### What is it?

Influenza (commonly known as the 'flu') is a viral infection of the lungs and upper airways. Several types of influenza can cause pneumonia.

Unlike the common cold, the flu is more likely to cause aches and pains, stomach aches, vomiting and diarrhea. Babies may also experience breathing symptoms, pneumonia or bronchiolitis. Flu usually lasts only two to four days, but some symptoms can continue for two weeks or more.

To protect yourself and your baby, it is recommended that all family members and children who are over six months of age get their seasonal flu vaccine.

#### What are the symptoms?



See the F-A-C-T-S Infographic on page 5 of this booklet for important signs and symptoms to watch for.

Premature babies are at greater risk of flu-related complications.



#### **Immunizations**

It is important that your baby (and other children in your household) receive their immunizations on time, according to your provincial guidelines. These guidelines recommend that your baby receive their first immunization at eight weeks of age (counting from their birth date, not their due date).

Parents should also review their own immunization status to reduce the risk of bringing infections into the home. Ask your doctor or nurse if you

have any concerns, or for more information. Follow your provincial public health guidelines to protect your baby and your family from COVID-19.

Visit the Caring for Kids CPS website for more information:

caringforkids.cps.ca/handouts/immunization

# Norwalk (Winter Vomiting Bug)

#### What is it?

Norwalk virus (commonly known as vomiting bug, or stomach bug) is inflammation of the stomach lining and intestines often leading to vomiting and diarrhea.

Highly contagious, it is more common in the winter, but it can occur any time of the year. There is no specific treatment and lasts several days.

Norwalk virus illness is not related to the flu.

The best way to prevent Norwalk virus is to always wash your hands after changing your baby's diaper.

#### What are the symptoms?

vomiting diarrhea

abdominal (belly) pain

dry diapers, dry lips and mouth

See the F-A-C-T-S Infographic on page 5 of this booklet for important signs and symptoms to watch for.

Premature babies are at high risk for getting sick because of their immature immune system.



# Rotavirus

#### What is it?

Rotavirus is the most common cause of serious diarrhea in babies between 6 months and 2 years of age (corrected age). The contagious period last 24 hours after symptoms end.

Ask your baby's doctor about the Rotavirus vaccine.

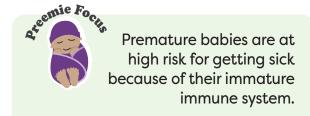
Almost all children will have Rotavirus diarrhea before the age of 5. The virus is spread directly (eg. touching someone) or indirectly (eg. touching toys).

#### What are the symptoms?

vomiting watery diarrhea

abdominal (belly) pain fever

See the F-A-C-T-S Infographic on page 5 of this booklet for important signs and symptoms to watch for.



## Did you know?

Some viruses can stay on surfaces for many hours.

The best way to avoid becoming sick with a virus is to wash your hands frequently with soap and water (or use alcohol-based sanitizer), and to avoid touching your face.



You can find proper handwashing technique reminders on page 4 of this booklet.

Notes		

### Resources

Visit these Canadian websites that offer reliable information for parents of preemie babies.



**About Kids Health** 

aboutkidshealth.ca

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Visit us at Canadian Premature Babies Foundation (CPBF) for more resources and programs focused on preemie babies and their families.



Empowering families of premature babies through support and education. By creating programs and engaging in research, we support best standards of care and give premature babies and their families a voice across Canada.

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