



COUGHS, COLDS, PNEUMONIA (A.R.I.)

THE IDEA

Everyone gets coughs and colds. Most coughs and colds get better without special medicine. But sometimes colds turn to pneumonia. Millions of children die of pneumonia every year. The clearest sign of pneumonia that everyone can learn to recognise is FAST BREATHING and chest indrawing. Pneumonia needs immediate treatment with special medicine given only by a doctor or health worker. Breastfeeding, good food, a smoke-free home, and immunisation against whooping cough and measles, can help prevent pneumonia.

The respiratory tract is that part of the body into which the air we breathe enters. The air reaches the nose and throat, and goes through the windpipe to the lungs.

Infections are illnesses caused by germs (viruses and bacteria). Acute infections happen suddenly and last a short time.

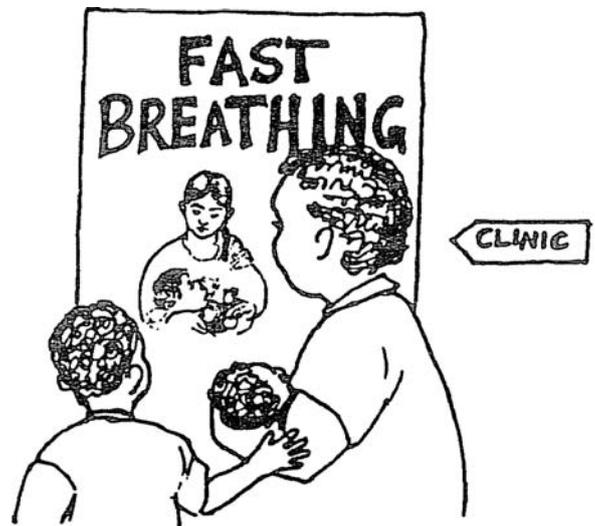
What is A.R.I.?

Coughs, colds and pneumonia are all Acute Respiratory Infections (A.R.I.).

Everyone gets coughs and colds.

Throughout the world people get coughs and colds. Young children get more than older children, between three and eight colds every year. In colds, the infection is only in the nose and throat. The signs and symptoms of a cold are:

- a runny nose.
- a blocked nose.
- a cough.
- sometimes a sore throat.



- sometimes children feel ill and tired and do not want to eat.

Coughs and colds are caused by viruses. They are made worse by smoke. Tobacco smoke and cooking smoke make a cold more likely to turn to pneumonia. Children and pregnant woman are particularly at risk when exposed to smoke from tobacco or cooking fires.

Where and how these activities have been used

Although this is a new Child-to-Child activity (1988) it is quickly becoming widely used because of the recognition of pneumonia as one of the greatest (sometimes the greatest) killer of young children. The Child-to-Child reader, **Not Just a Cold**, is used in English and Urdu and is being translated into many other languages.

The activity of recognising fast breathing and estimating the rate (50 breaths a minute) makes a useful link with mathematics and is fun to do. Many programmes now use a pendulum made from a string and stone to help count breaths (see sheet). Again it is important that the children know when a child needs to see a health worker.

Warning: Before passing on the messages in this sheet, check – do health posts in the communities have antibiotics to treat babies?

ACTIVITY SHEET 6.7

CHILD-TO-CHILD TRUST

Antibiotic medicines kill bacteria, but not viruses. So antibiotic medicine does not help to cure colds. Babies and children will usually get better in a few days. We can help them if we:

- keep them comfortable – keep them warm if they are cold, or cool if they are hot.
- give them plenty of soothing drinks.
- encourage them to eat, by giving small quantities of food often. When the illness is over, the child should be given an extra meal every day for at least a week.
- clean their noses (especially babies before eating or going to sleep).
- keep the air round the child clean and smoke-free.
- sponge or bathe them with cool but not cold water if they have fever.
- avoid spreading colds and coughs by not coughing, sneezing or spitting near children.
- encourage the child to breathe water vapour from a bowl of hot but not boiling water.

Pneumonia

Pneumonia is one of the major causes of illness for a young child. Pneumonia can:

- start on its own.
- follow from a cold.
- follow from measles or whooping cough.

All children can get pneumonia, but babies under one year are more likely to get it than older children.

In developing countries, pneumonia is usually caused by bacteria. *Therefore antibiotic medicine cures pneumonia and helps save lives.*

If antibiotic medicine is prescribed to treat pneumonia, it is important to follow instructions and give the child all the medicine. Do not stop giving antibiotics even if the child is feeling better.

Recognising pneumonia

The clearest and surest sign of pneumonia is quick breathing. A baby (2–12 months old) with pneumonia, lying quietly, takes more than 50, sometimes 70 or 80, breaths a minute. For a child of 12 months to 5 years old, 40 breaths a minute or more is a sure sign of pneumonia. *Quick breathing, more than 40–50 breaths a minute in a child with a cough, and chest in-drawing, could mean pneumonia.*

Children could have pneumonia if:

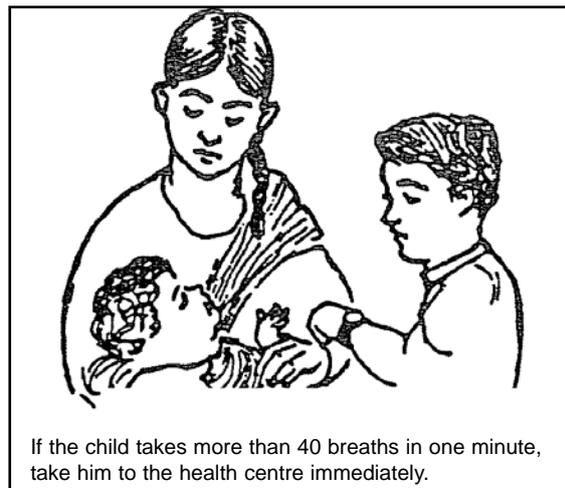
- they have breathing problems or are gasping for air
- the lower part of the chest sucks in when the child breathes in
- they have had a cough for more than two weeks
- the child cannot drink or breastfeed
- the child vomits frequently.

If the child shows any of these signs, they should be taken to a health clinic or trained health worker immediately.

How to count breaths

We all breathe quickly sometimes, especially when we run, cry, or move about a lot. This quick breathing is not pneumonia.

We must not count the breaths of a child with a cough when he has been restless, crying or struggling. Count the breaths of a child who is sleeping or resting quietly. Without disturbing the child, watch its chest.



If the child takes more than 40 breaths in one minute, take him to the health centre immediately.

Count the number of breathing movements for one minute. 40–50 breaths or more can mean pneumonia.

Mothers usually know when their babies are breathing too fast, even without a watch. If you have no watch look carefully and decide whether the breathing is too quick.

What to do

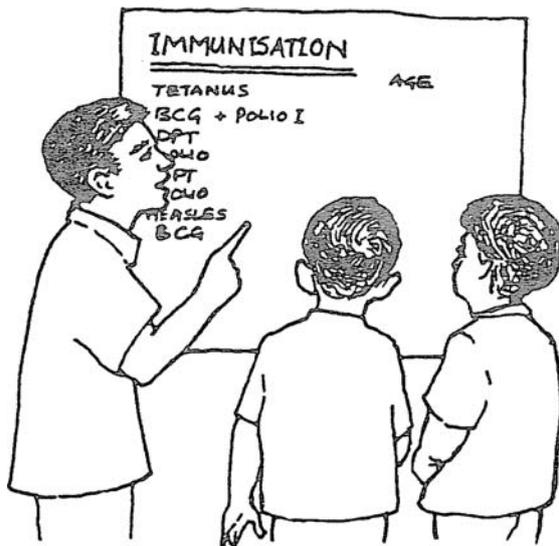
If you are sure the breathing is too quick (40–50 or more), or if you think it may be, the child must be seen immediately by a doctor or health worker. Very young babies die easily from pneumonia. If possible, take any baby under 3 months old to a health

worker if they are coughing, even if they are not breathing fast. Antibiotic medicine can cure pneumonia if started early and given by a doctor or health worker. Their instructions must be followed carefully and correctly.

Can pneumonia be prevented?

Children who are well fed (see Activity Sheets 2.1 and 2.2 **Feeding Young Children**) are less likely to get pneumonia. Vitamin A found in food like fish, dairy products, eggs, green leafy vegetables and orange and yellow fruits and vegetables, helps protect against severe respiratory disease and speeds recovery. Babies who are breastfed exclusively for at least the first six months are less likely to get pneumonia.

Measles and whooping cough can cause pneumonia. Both can be prevented by immunisation (see Activity Sheet 6.4 **Immunisation**).



Children in homes where people smoke are more likely to get pneumonia. If people cannot stop the smoking habit, they should never smoke in the presence of babies and children.

Activities

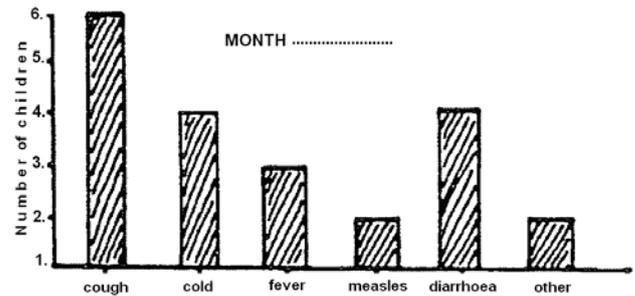
Finding out

The children can interview each other and find out:

- How many of them were ill in the last six months?
- How many had coughs and/or colds?
- What were the symptoms? What did they feel like?

- Did the colds get better soon? Or did they get worse and lead to fever? How many children developed fever? How many did not?
- What did they do to make themselves better?
- What helped to make them better?

Share the information and write a survey report. Make charts showing the information and display them.



Extend the survey to the children's families, to other families in the area. This time, also find out:

- how many people (if any) had pneumonia
- for how long
- did it get better
- what helped?

Compare this information with that on coughs and colds. Did the children notice anything interesting about their information, for example:

- Who had more colds in the community – babies or old people?
- Who had pneumonia? During which months?
- Was the medicine made at home or did it come from the doctor or health worker?
- Was there anything else that they noticed?

If a child or an adult remembers having pneumonia, they can talk to the children about it. (How did it start? How did they feel? What did they do to get better?)

Learning the signs

Children can test each other to make sure that they know the signs or symptoms of pneumonia. They can ask each other questions:

ACTIVITY SHEET 6.7

CHILD-TO-CHILD TRUST

Question: I am lying quietly. I have a runny nose. I am breathing very quickly, about 50 breaths a minute. Do I have pneumonia?

Answer: You could have. You should see a health worker as soon as soon as possible.

Question: I have a runny nose. I have a cough. I have fever. Do I have pneumonia?

Answer: No! Your breathing is normal so you do not have pneumonia.

If the children have a watch or clock, they can learn to recognise the quick breathing (40–50 breaths each minute) which is a sign of pneumonia. Working in pairs, start by counting each other's breaths for one minute. Write down the number of breaths. Then one child does one of the activities in List A below, the other an activity from List B. Let them count each other's breaths after each activity, then change over and continue. Each time write down the result.

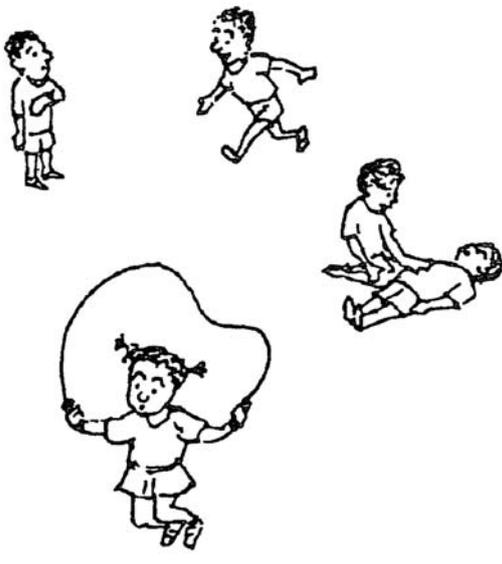
If they do not have a watch, a third child can act as time-keeper, counting up to 100 at a steady speed, or walking up and down at the same pace. Children can compare the rate of breathing for different activities even if they cannot measure accurately.

A

Sitting quietly
Reading
Standing still
Humming
Writing
Counting

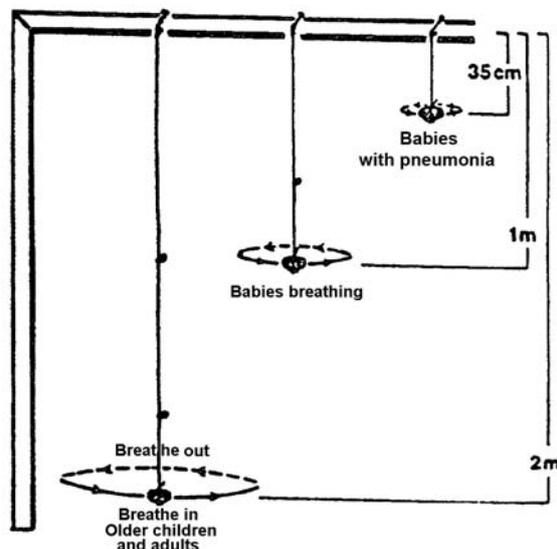
B

Running on the spot very fast
Skipping 30 times
Jumping as high as possible 30 times
Digging
Lifting something heavy



By comparing different rates of breathing, children will soon begin to understand what is normal, what is a little fast, and what is very fast (the danger sign).

Children can make three pendulums from string which does not stretch, and stones. With the stones attached, the strings should be two metres, one metre and 35 centimetres long. They can then swing them to see how fast they go from side to side. They should notice that the shortest pendulum takes the least time to swing from side to side, and that the longest pendulum takes the most time to swing from side to side. In fact the longest pendulum swings from one side to the other and returns to its original position in the same length of time as a normal adult takes to breathe in and out again. A normal baby breathes in and out again in the same time as the middle pendulum takes to swing from one side to the other and return to its original position. If the baby is breathing at the same rate as the short pendulum, it is breathing very fast and should see a health worker straight away.



Preventing pneumonia

Children can find out how many children in the school or community:

- have been immunised
- need immunisation
- have brothers and sisters under three who have not been immunised.

Children can make cards to remind parents about immunisation (see Activity Sheet 6.4 **Immunisation**).

Children can make posters which show how pneumonia can be prevented. They can help each other or their families can help. If families help, they may also learn. Display the posters in class, the children's homes, public places.

They can discuss what foods will help prevent pneumonia. Can they make up a menu for the week which contains such food? Is it expensive to get the right kind of food?

They can keep a list of all they eat at home, and see if the right food is included and how frequently (see Activity Sheets 2.1 and 2.2 **Feeding Young Children**). They can help their parents to plan the meals well.

They can draw a plan of their houses. With the help of their parents, can they identify the smokiest areas? (Cooking area? Fire corner?) Can they identify the least smoky area? (Near the door? A window? In a cross-current?) How can they make sure that babies are kept away from smoke? How can they clear the house of smoke quickly?

Passing the message

Children can:

- display their posters showing the signs of pneumonia and colds at parent days, at home, or in public places like the market and clinic.
- teach their families the signs of pneumonia.
- find two other people in the neighbourhood to whom they can teach the signs.
- make up a story or play about someone who knew the signs of pneumonia and helped to save a life.
- make up a play using the following characters:
 - the patient (a child with a cold which becomes pneumonia)
 - an anxious family
 - someone who knows the signs
 - a health worker.
- make a puppet show to tell the story of someone who had pneumonia, and share it with other children and families. The

play should ask the following questions:

- What started it (cough, cold, no immunisation, measles)?
- What were the signs?
- What did the patient feel?
- How was the pneumonia cured?
- How could it have been prevented?
- make up a song with the chorus:

*Do not worry, do not fret,
This is not pneumonia yet.*

The final chorus might be:

*Pneumonia is setting in.
Ask the doctor for medicine.*
- teach the song to families, other children, other people in the community.

Follow-up

Find out:

- how many children and families remember the signs of pneumonia.
- if they remember what to do when a child gets pneumonia.
- if they can tell how to prevent pneumonia.
- how many have taken action as a result of what they learned.

USING THIS SHEET

Teachers can include these activities in science and health lessons, and can later follow-up to make sure that children have been properly immunised. They may be able to get advice and help from health workers and community leaders, so that the children really know the signs of pneumonia, what treatment is best, and the importance of immunisation.

Children can help by passing on the message to friends and families. They can carry out projects with the help of adults which will help to reduce the danger of pneumonia to their families and the community.