

# PNEUMONIA

## THE FORGOTTEN KILLER

Pneumonia is the world's leading killer of children under the age of five. Each year, pneumonia takes the life of two million children before they reach their fifth birthday. One child dies from pneumonia every 15 seconds<sup>1</sup>. The tragedy is that pneumonia can be easily prevented and treated. EVERY ONE, Save the Children's new campaign, aims to stop children dying needlessly from pneumonia. Every one of them.

### What is pneumonia?

Pneumonia is an acute lower respiratory infection and inflammation of the lungs that can be caused by viruses, bacteria, or fungi. Children with pneumonia may experience a number of symptoms, including rapid or difficult breathing, cough, fever, chills, loss of appetite, wheezing, and – in severe cases - lower chest wall indrawing. Sometimes called the “forgotten killer”, pneumonia can masquerade as other illnesses.

### Where is pneumonia prevalent?

Some 155 million cases of childhood pneumonia occur every year throughout the world. An estimated 98 percent of children who die of pneumonia live in developing countries. It is most prevalent in sub-Saharan Africa and South Asia. Each year, some 150 million cases of pneumonia occur in young children in developing countries. Of these, 11 million children need to be hospitalized, causing a huge economic burden for families who must bear the cost of transport, hospital treatment, medication, and lost productivity.

### Who suffers?

Children with weakened immune systems are most at risk, particularly for malnourished children, and those who are not exclusively breastfed to six months. Symptomatic HIV infection and vaccine-preventable illnesses such as measles increase a child's risk of infection. Crowded living situations and indoor air pollution caused by cooking and heating with wood or dung also contribute to susceptibility for pneumonia.

### Why do children die from pneumonia?

Treatment for pneumonia during the first hours and days of onset can determine if a child lives or dies. Yet families living in remote under-served communities do not have access to quality health services and facilities with appropriate antibiotics. In addition, families are not aware of behaviours that help prevent pneumonia, such as exclusive breastfeeding or good hygiene. Typically it is the poorest children in the poorest communities who are at greatest risk from pneumonia.

<sup>1</sup> WHO Pneumonia Fact Sheet.  
<<http://www.who.int/mediacentre/factsheets/fs331/en/index.html>>

## Preventing Pneumonia

We know how to prevent pneumonia. It is remarkably simple and inexpensive:

**Immunisation** against Hib (*Haemophilus influenzae b*) and pneumococcus (*Streptococcus pneumoniae*) can protect against two of the main causes which cause over half of childhood pneumonia in the developing world<sup>2</sup>. Developing countries are often unable to provide these life-saving vaccines. Only 2 developing countries have added the pneumococcal vaccine to their immunisation programmes. Other vaccinations can prevent measles and whooping cough, dangerous diseases that can lead to pneumonia.

**Adequate nutrition**, especially breastfeeding exclusively to six months, is vital to building a strong immune system to decrease susceptibility. Exclusive breastfeeding can reduce the chances of young infants developing pneumonia by up to 23 percent<sup>3</sup>.

**Zinc supplements** for a child suffering from diarrhoea protect against subsequent pneumonia infection<sup>4</sup>.

**Clean cooking and heating** to reduce indoor air pollution, a known cause of pneumonia.

**Good hygiene and sanitation**, especially hand-washing with soap.

**Prophylactic antibiotic treatments** for children with HIV infection.

## Treating Pneumonia

Pneumonia is treated with low cost antibiotics and good case management (assessment and treatment by a skilled health worker). Because pneumonia can take a young life very quickly, treatment with *genuine* antibiotics must be accessible close to home and available seven days a week, 24 hours per day. Where families have limited access to care at health clinics or hospitals, trained community health workers can assess clinical symptoms and provide life-saving treatment with antibiotics. With adequate follow-up, most children with pneumonia can be cared for effectively at home. For severe cases, rapid referral for specialised treatment is necessary.



A doctor prepares a vaccine for a little girl in Rwanda. Immunisations can protect against two of the main causes of pneumonia

## Save the Children's EVERYONE campaign

We believe that there is nothing more important than the life of a child. Yet, across the world, 9 million children die before the fifth birthday, mostly from preventable causes such as pneumonia. If we keep ignoring this issue we won't reach Millennium Development Goal 4 (MDG4) – to cut by two-thirds, by 2015, the under five child mortality rate. Save the Children has launched a global campaign, EVERY ONE, to stop millions of children from dying from preventable causes and ensure MDG is met. Working with partners, Save the Children will:

- Save children's lives directly through our projects in the field, on a greater scale than ever;
- Challenge governments of rich and poor countries to spend more on basic healthcare for children and on combating malnutrition, particularly for children in the poorest communities;
- Build a global movement for change to hold governments accountable for their promise to achieve MDG4 and to make the death of a child from preventable causes as unacceptable as slavery.



## Saving children's lives, every one

The EVERY ONE Campaign aims to stop children dying needlessly from pneumonia by improving family's access to good quality maternal and child healthcare; by improving children's nutrition and by increasing families knowledge and demand for health and nutrition services and practices that will keep their sons and daughters alive. Making sure that this knowledge and care is available to poor and marginalized communities is the hallmark of Save the Children's work.

### Our life saving projects

Save the Children has significant global experience addressing the primary causes of child deaths. Building upon our evidence base, we will help governments and communities take what works to greater scale. Our focus is on bringing the diagnosis and treatment of pneumonia as closer to people's homes, beyond clinic walls and to under-served and often remote communities. Working with Governments and other local partners, we will:

**Train community health workers:** Treatment for pneumonia during the first hours and days of onset can determine if a child lives or dies. Yet for those living in poor and remote areas a journey to the nearest hospital or health clinic can take hours, sometimes days. For people in these communities Community Health Workers hold the key to saving children's lives. They are often unpaid volunteers in their local community, and can cost as little as \$150 to train, but to a child with pneumonia they can be the difference between life and death. Community health workers help families recognise the early warning signs of pneumonia, diagnose pneumonia and supply basic antibiotics to treat the condition.

**Promote healthy behaviours:** We promote behaviours that will protect children against pneumonia, including improved hand washing and proper infant and young child feeding. This informal education is delivered to families through trained community health workers or through initiatives that mobilize entire communities. For example, we announce visits of immunization teams to increase attendance at immunization sessions.

**Encourage effective monitoring:** We design, and provide training in, monitoring systems such as

community-held registers that are used to record a child's immunizations against pneumonia and their nutritional status. The registers are also used to identify community members who may not know of the importance of vaccination so that health workers can encourage them to get their children immunized.

**Strengthen health systems:** Everything we do is with the intention of building sustainable systems that can provide healthcare to people for the long term. Depending on the particular needs of the country, we train health workers (community health workers, midwives, and nurses), advise health managers, rehabilitate health facilities, provide equipment and transport and improve facility and data management.

### Creating political change

Our projects will save many children's lives from pneumonia. But saving lives on a much larger scale requires action from Governments in both rich and poor countries. EVERY ONE will create the political will required for this to happen by:

**Mobilising people:** We aim to make the high numbers of children dying from pneumonia and other preventable conditions known and unacceptable to people. We will mobilize people in rich and poor countries to pressure their governments so they can no longer ignore the issue of child mortality.

**Generating evidence:** We identify simple, low cost solutions to stop children dying and use the evidence to inform and influence policy makers; e.g. the use of antibiotics by community health workers is not widely accepted as a national policy, yet our experience has shown it can have a significant impact on reducing deaths from pneumonia..

**Global leadership:** We are a respected global leader on pneumonia. Working with other global players we inform and influence the agenda and debate, in turn influencing national government policies in favour of poor children.

<sup>2</sup> O'Brien KL, Wolfson LJ, Watt JP, Henkle E, Deloria-Knoll M, McCall N, Lee E, Mulholland K, Levine O, Cherian T. Burden of Disease caused by Streptococcus Pneumoniae in children younger than 5 years: global estimates. Lancet. 2009; 374:893-902.

<sup>3</sup> Roth DE, Caulfield LE, Ezzati M, Black RE. Acute lower respiratory tract infections in childhood: opportunities for reducing the global burden through nutritional interventions. Bull WHO 2008; 86:356-64.

<sup>4</sup> Niessen LW, Hove ten AC, Hilderink HH, Weber M, Mulholland K, Ezzati M. Comparative impact assessment of child pneumonia interventions. Bull WHO. 2009;87(6):472-8.

## Sweety's Story



Sweety (2) was treated for pneumonia by a community health worker in Bangladesh.

When 3 yr old Rashed fell ill with a fever and had difficulty breathing, his parents thought it was nothing more than a cold. "We didn't understand that he was ill at first," recalls Kamrul, a 35 yr old farmer living in Koira, a tiny community in western Bangladesh. "Finally, we took him to the hospital. But two days later, he died."

Years later, when his 2 year old daughter Sweety became ill with similar symptoms Kamrul was able to turn to Momtaj, a trained volunteer community health worker, for help. "Sweety had rapid breathing, and she didn't want to eat or drink anything," said Momtaj, 36, sitting outside her home, which sometimes serves as a clinic. "I used my timer to count her breathing rate, which was too rapid, diagnosed her with pneumonia and treated her with an antibiotic called Cotrimoxazole."

Momtaj is one of nearly 7,000 volunteer health workers living in some of the most remote areas of Bangladesh bringing life saving healthcare to the poorest people. Over the last five years, Save the Children, in partnership with the Bangladesh Government and local organisations, has trained the volunteers to diagnose and treat childhood pneumonia and other conditions. The project is a pioneering effort to bring treatment closer to family's homes to reduce the country's 312,000 deaths of children under 5 each year.

Momtaj says she feels empowered by her new knowledge and skills. But, she knows that if parents do not understand the difference between a common cold and pneumonia, they would not bring their children to her for treatment in time. She has travelled throughout her village, educating parents on the danger signs of pneumonia. "Before, the people in my village were not aware of pneumonia," said Momtaj. "They thought it was a normal cough. But once I was trained, I told them to look for some of the signs like rapid breathing."

The morning after he sought treatment for his daughter, Kamal walked the dirt paths of his village to reach Momtaj's home to deliver the good news: Sweety's health had improved dramatically. "Now I feel that if Momtaj had been trained earlier, my son's life could have been saved," said Kamrul.

His sleepy daughter, curled up on her father's lap, showed no sign of ever having been near the brink of death.



Momtaj shows the low-cost medicines that are saving young children's lives in Bangladesh.

## EVERY ONE of us can save children's lives:

- \$12 could diagnose and treat a case of pneumonia
- \$14 could promote exclusive breastfeeding to protect children from contacting pneumonia
- \$150 could train a Community Health Worker to deliver life saving life care

**Join our campaign by visiting [www.everyone.org](http://www.everyone.org)**