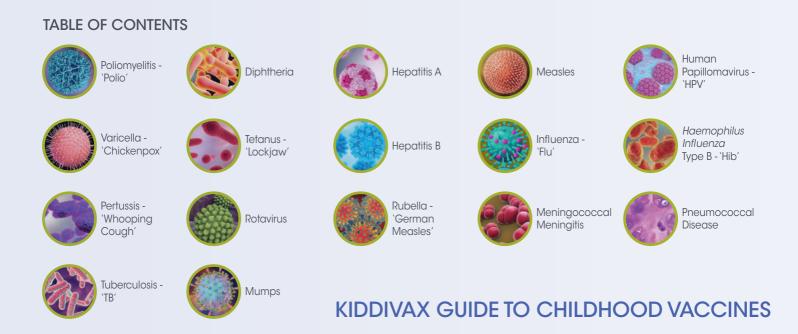
KIDDIVAX GUIDE TO CHILDHOOD VACCINES

VACCINATE

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Globally, immunisation **prevents 3 million people** (of all age groups) every year from diseases like diphtheria, tetanus, pertussis and measles – but more than 1.5 million people still die due to lack of access to vaccines¹.

We believe in a world in which no one suffers or dies from a vaccine-preventable disease.

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Poliomyelitis - 'Polio'

Viral infection affecting the central nervous system; usually leads to paralysis; caused by the polio virus²

How it spreads^{2,4}

The virus spreads from human faeces through improperly washed hands onto objects, food and water that come into contact with the mouth



Signs and Symptoms²

Asymptomatic Low grade fever Sore throat Stiffness of the neck, back and/or legs Severe muscle aches

Complications^{2,4}

Paralysis

Aseptic meningitis (infection and inflammation of the brain and spinal cord) Can lead to death

Varicella - 'Chickenpox'

Viral infection: highly contagious; caused by varicella-zoster virus⁵

How it spreads^{6,7}

Touching Breathing in the virus particles from chickenpox blisters Tiny droplets from air

Time between exposure to the virus and the development of signs and symptoms⁸: 10-21 days⁶

Signs and Symptoms⁹

Itchy, fluid-filled blisters all over body Fever Tiredness Loss of appetite Headache

Complications⁷

Infection of the lungs¹¹ Infection and inflammation of the brain and spinal cord⁴ Bleeding problems Infection of the blood¹² Dehydration

Pertussis - 'Whooping Cough'

Bacterial infection: highly contagious; caused by Bordetella pertussis¹³

How it spreads¹⁴

Only spreads from person to person, through sneezing or coughing

Time between exposure to the bacteria and the development of signs and symptoms⁸: 5-10 days¹⁵

Signs and Symptoms¹⁵

Slowed or stopped breathing (skin may turn blue)^{16,17} Coughing fits followed by a high-pitched "whoop" Vomiting after coughing¹⁸ Many rapid coughs¹⁹

Complications²⁰

Babies and Children¹¹: Infection of the lungs; slowed or stopped breathing, violent and uncontrolled shaking, brain disease^{11,16}

Teens and Adults¹¹:

Weight loss; loss of bladder control

Tuberculosis - 'TB'

Bacterial infection caused by Mycobacterium tuberculosis²¹

How it spreads²²

TB of the lungs: through the air (e.g., speaking or coughing) Can be infectious

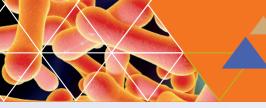
Signs and Symptoms²³

Cough

Reduced playfulness; weakness or lethargy; failure to thrive Weight loss Fever and/or night sweats

Complications^{23,24,25}

Can spread through the whole body, which can lead to other organs being infected,but mostly the lungs (70% - 80%)



Diphtheria

Bacterial infection caused by *Corynebacterium diphtheriae*; can cause a thick whitish covering at the back of the throat²⁶

How it spreads²⁶

Spreads via respiratory droplets through coughing or sneezing

Time between exposure to the bacteria and the development of signs and symptoms⁸: 2-5 days²⁷

Signs and Symptoms²⁸

Weakness Sore throat Fever Swollen glands in the neck

Complications²⁹

Blocking of the airway Damage to the heart muscle Nerve damage

Paralysis

Kidney failure Can lead to death



Tetanus - `Lockjaw'

Bacterial infection caused by *Clostridium tetani* and can cause painful muscle contractions³⁰

How it spreads³¹

Bacteria are found in soil, dust and manure and enter the body through cuts or puncture wounds

Time between exposure to the bacteria and the development of signs and symptoms⁸: 3-21 days³¹

Signs and Symptoms^{30,32}

Headache Jaw cramping Muscle spasms - often in the stomach Muscle stiffness/pain Trouble swallowing Seizures (jerking or staring) Fever and sweating High Blood Pressure Fast heart rate

Complications³²

Uncontrolled/involuntary tightening of the vocal cords Broken bones Infection of the lungs Breathing difficulty Can lead to death



Viral infection: contagious and can cause gastroenteritis³³

How it spreads³⁴⁻³⁶

Children can spread it before and after they have diarrhoea

The virus spreads from human faeces through improperly washed hands onto objects, food and water that come into contact with the mouth^{2.3}

Time between exposure to the virus and the development of signs and symptoms⁸: 2 days³⁶

Signs and Symptoms³⁶

Severe watery diarrhoea; vomiting, fever; abdominal pain; loss of appetite; dehydration

Signs of dehydration: decrease in urine; dry mouth and throat; dizziness when standing up. A child may cry, with few or no tears, be unusually fussy or sleepy

Complications³⁷

Severe diarrhoea Dehydration Kidney and liver abnormalities





Viral infection of the salivary glands that is contagious³⁸

How it spreads³⁹

Infection spreads through saliva or mucus from the mouth, nose or throat

Can spread through: coughing; sneezing; sharing eating utensils or items with infected person

Time between exposure to the virus and the development of signs and symptoms⁸: 12-25 days⁴⁰

Signs and Symptoms⁴⁰

Fever Headache Muscle aches Tiredness Loss of appetite Swollen and tender salivary glands

Complications⁴¹

Infection and inflammation of the brain and spinal cord⁴ Inflammation of the ovaries and/or inflammation of the breast tissue

Deafness

Hepatitis A

Viral infection of the liver caused by Hepatitis A⁴²

How it spreads⁴³

The virus spreads from human faeces through improperly washed hands onto objects, food and water that come into contact with the mouth^{2.3} or through contaminated food or water³³

Time between exposure to the virus and the development of signs and symptoms³: 15-50 days⁴³

Signs and Symptoms^{42,43}

Fever; fatigue; loss of appetite; nausea; vomiting; abdominal pain; dark urine; clay-coloured stools; joint pain; jaundice (yellowing of the skin and eyes)⁴⁴

Complications⁴³

In rare cases, can cause: Liver failure Death



Hepatitis B

Viral infection of the liver caused by Hepatitis B virus⁴⁵

How it spreads⁴⁵

Transmitted from person to person through body fluids

From infected mother to baby during birth

Through blood, blood products or contaminated materials

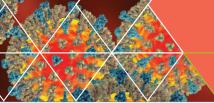
Time between exposure to the virus and the development of signs and symptoms⁸: An average of 120 days⁴⁵

Signs and Symptoms⁴⁵

Fever; fatigue; loss of appetite; nausea; vomiting; abdominal pain; dark urine; clay-coloured stools; joint pain; jaundice (yellowing of the skin and eyes)⁴⁴

Complications⁴⁵

Permanent liver damage Cancer of the liver



Rubella - 'German Measles'

Viral infection that is contagious⁴⁶

How it spreads⁴⁷

Coughing or sneezing

Time between exposure to the virus and the development of signs and symptoms⁸: 12-23 days⁴⁶

Signs and Symptoms⁴⁸

Low grade fever Headache Mild pink eye General discomfort Swollen and enlarged lymph nodes Cough Runny nose

Complications⁴⁹

Brain infections

Bleeding problems

Serious birth defects can occur if a woman is infected during the first trimester of pregnancy

Measles

Viral infection: acute and can cause respiratory illness⁵⁰

How it spreads⁵⁰

Spreads by means of droplets or airborne (coughing, breathing or sneezing) from infected person Remains infectious in the air for up to 2 hours after an infected person leaves the area

Time between exposure to the virus and the development of signs and symptoms⁸: 14 days⁵⁰

Signs and Symptoms⁵⁰

Fever

General feeling of being ill

Cough

Rash spreading from the head to abdomen and to lower extremities Tiny white spots inside the mouth⁵¹

Complications⁴⁰

Brain damage Ear infections Seizures (jerking or staring) Infection of the lungs¹¹ May lead to death

Influenza - 'Flu'

Viral infection that is contagious; caused by influenza virus⁵³

How it spreads⁵³

Coughing Sneezing Talking

Time between exposure to the virus and the development of signs and symptoms⁸: 1-4 days⁵³

Signs and Symptoms⁵³

Feeling feverish/chills; cough; runny or stuffy nose; muscle or body aches; headache; tiredness

Common in children: Vomiting; diarrhoea

Complications54

Infection of the lungs¹¹ Inflammation of the heart Inflammation of the brain Ear infections

Meningococcal Meningitis

Bacterial infection: caused by Neisseria meningitidis⁵⁵

How it spreads⁵⁵

Spreads through exchanging saliva during close contact (kissing or coughing), or lengthy contact like living in the same space (family or roommates)

Time between exposure to the bacteria and the development of signs and symptoms⁸: 3-4 days⁵⁶

Signs and Symptoms⁵⁷

Sudden onset of fever; headache; stiff neck; nausea; vomiting; increased sensitivity to light; altered mental status (confusion)

Newborns and infants:

May appear to be slow or inactive; irritable; vomiting; feeding poorly

Complications58,59

Nervous system problems Seizures Brain damage Learning disabilities Amputation of limbs Hearing loss

Human Papillomavirus - `HPV'

Viral infection caused by the Human papillomavirus⁶⁰

How it spreads⁶⁰

Sexual contact

Time between exposure to the virus and the development of signs and symptoms⁸: Variable⁶¹

Signs and Symptoms⁶¹

No specific symptoms of disease⁶²

Complications 60,61

Genital warts Cervical cancer Anal cancer Penile cancer Vaginal cancer

Haemophilus Influenzae Type B - 'Hib'

Severe bacterial infection caused by *Haemophilus influenzae* type B. The Infection is common in infants⁶³

How it spreads⁶³

Passed through the area between the nose and throat

Time between exposure to the bacteria and the development of signs and symptoms⁸: Variable^{63,64}

Signs and Symptoms⁶³

Infection and inflammation of the brain and spinal cord⁴ Infection of the lungs¹¹ Swelling in the throat that can block airflow⁶⁵ Swollen, sore joints⁶⁶ Bacterial skin infection (red, painful swelling)⁶⁷

Complications⁶³

May lead to fatality despite antimicrobial administration

Pneumococcal Disease

Bacterial infection caused by the Streptococcus pneumoniae⁶⁸

How it spreads⁶⁹

Person to person through contact with bodily fluid/ secretions (e.g., saliva and mucus)



Signs and Symptoms⁷⁰

Infection of the lungs

Fast breathing; cough; chest pain; fever and chills

Infection and inflammation of the brain and spinal \mbox{cord}^4

Stiff neck; headache; confusion; pain when looking into bright light. In babies, it may cause poor eating or drinking; low alertness and vomiting

Infection of the middle ear

Ear pain; red; swollen ear drums; fever; sleepiness

Complications⁷⁰

Infection and inflammation of the brain and spinal cord⁴ Sinus and ear infections Infection of the lungs Infection of the blood

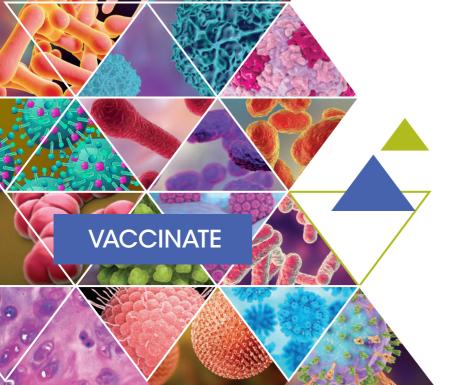
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