

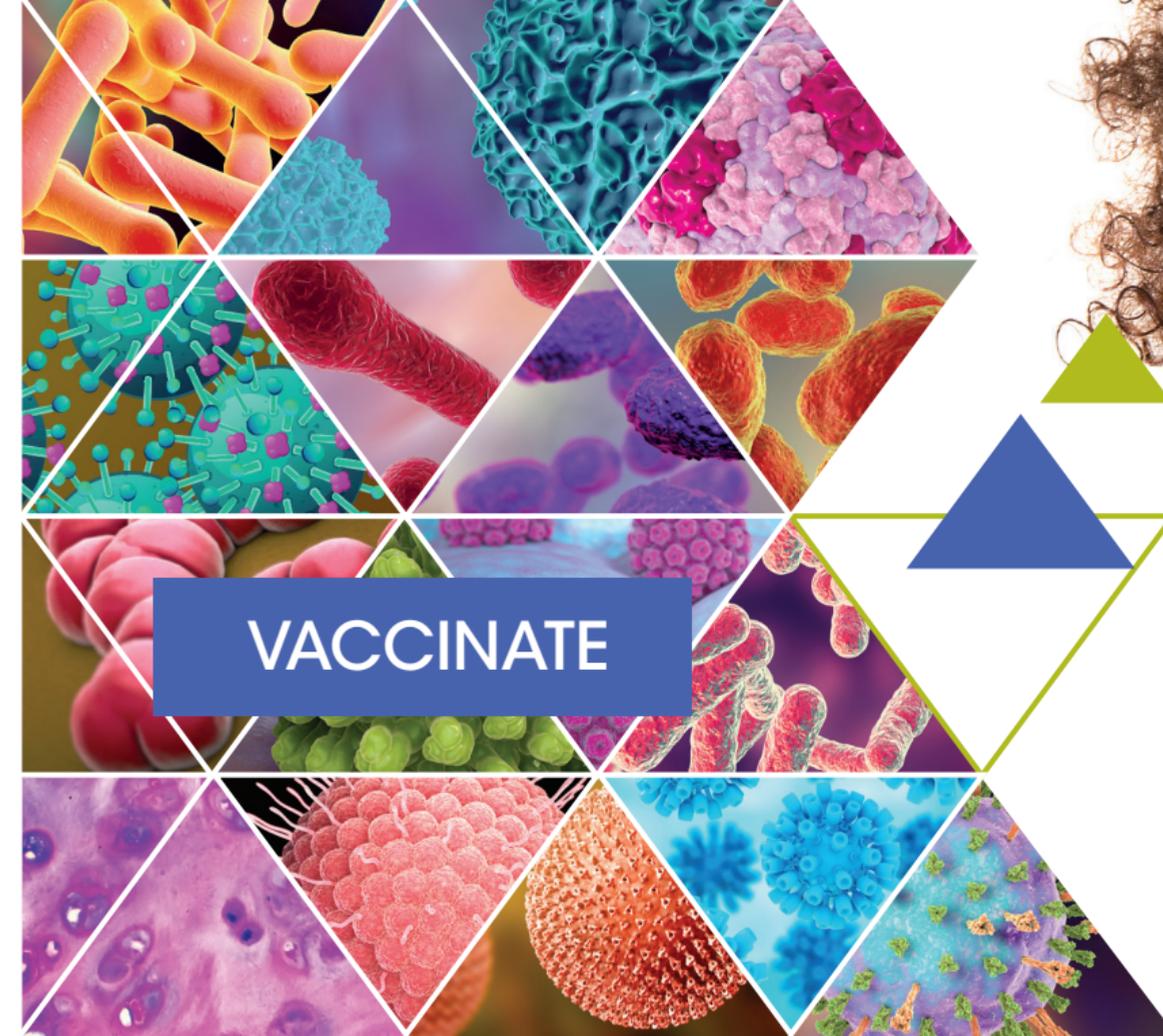


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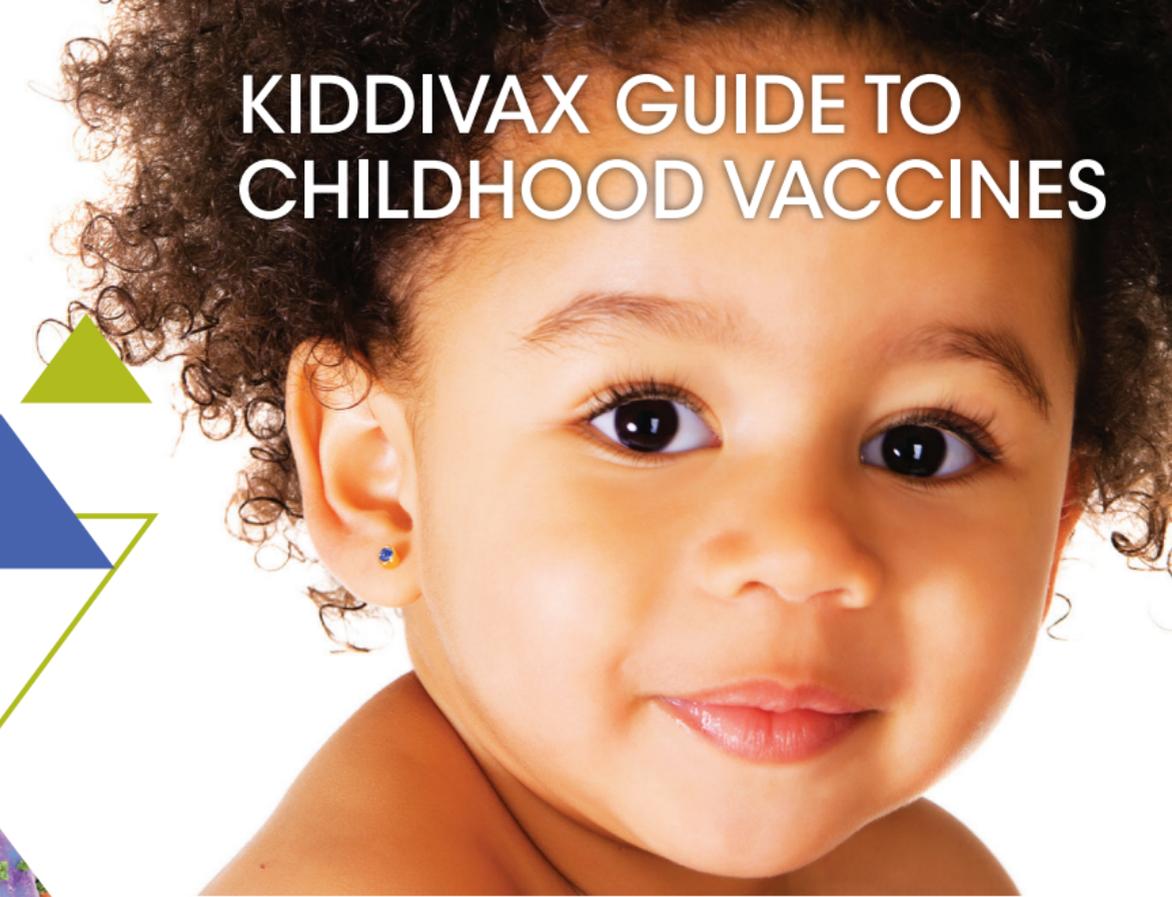
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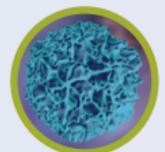


# KIDDIVAX GUIDE TO CHILDHOOD VACCINES



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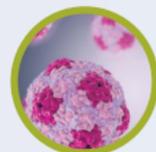
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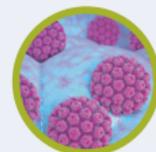
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Measles



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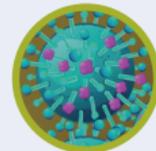
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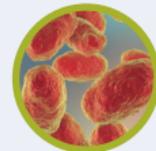
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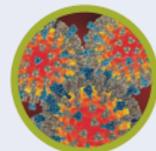
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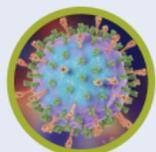
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Pneumococcal  
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Tuberculosis -  
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Mumps

**KIDDIVAX GUIDE TO CHILDHOOD VACCINES**

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Globally, immunisation **saves 3 million people** (of all age groups) every year from diphtheria, tetanus, pertussis and measles – but more than 1.5 million people still die due to lack of access to vaccines.<sup>1a,b,c</sup> pg 1

**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 virus<sup>2a</sup> pg 297**

## How it spreads<sup>2b</sup> pg 300 and 4a pg 3

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



## Signs and Symptoms<sup>2c,d,e,f</sup> pg 298

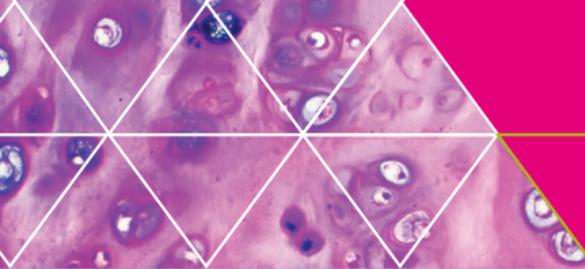
- Asymptomatic
- Low grade fever
- Sore throat
- Stiffness of the neck, back and/or legs
- Severe muscle aches

## Complications<sup>2g,h</sup> pg 298 & i pg 299 and 4a pg 1

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

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# Pneumococcal Disease

**Bacterial infection;** caused by the *Streptococcus pneumoniae*<sup>68a pg 1</sup>

## How it spreads<sup>69a pg 1</sup>

Person to person through contact with bodily secretions (saliva and mucus)



## Signs and Symptoms<sup>70a,b,c pg 1 & d pg 2</sup>

### Infection of the lungs

Fast breathing, cough, chest pain, fever and chills

### Infection and inflammation of the brain and spinal cord<sup>4a pg 1</sup>

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 drum, fever, sleepiness

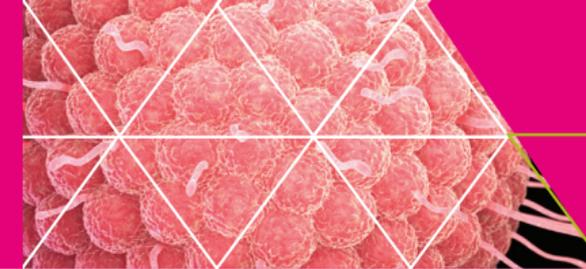
## Complications<sup>70e pg 2</sup>

Infection and inflammation of the brain and spinal cord<sup>4a pg 1</sup>

Sinus and ear infections

Infection of the lungs

Infection of the blood



# Varicella - 'Chickenpox'

**Viral infection;** highly contagious; caused by varicella-zoster virus<sup>5a pg 1</sup>

## How it spreads<sup>6a pg 1 and 7a pg 358</sup>

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 symptoms:<sup>8a pg 1</sup> 10 - 21 days<sup>6b pg 1</sup>

## Signs and Symptoms<sup>9a pg 1</sup>

Itchy, fluid-filled blisters all over body

Fever

Tiredness

Loss of appetite

Headache

## Complications<sup>7</sup>

Infection of the lungs<sup>11a pg 1</sup>

Infection and inflammation of the brain and spinal cord<sup>4a pg 1</sup>

Bleeding problems

Infection of the blood<sup>12a pg 1</sup>

Dehydration





## Pertussis - 'Whooping Cough'

**Bacterial infection;** highly contagious; caused by *Bordetella pertussis*<sup>13a pg 1</sup>

### How it spreads<sup>14a pg 1</sup>

Only spread from person to person, through sneezing or coughing

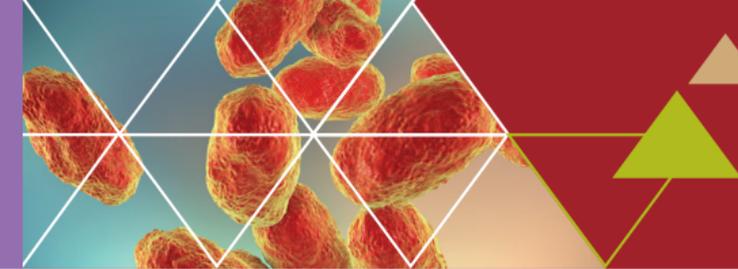
Time between exposure to the bacteria and the development of signs and symptoms:<sup>8a pg 1</sup> 5 - 10 days<sup>15a pg 1</sup>

### Signs and Symptoms<sup>15b,c pg 1</sup>

Slowed or stopped breathing (skin may turn blue)<sup>16a pg 1 and 17a pg 1 & b pg 2</sup>  
Coughing fits followed by a high-pitched "whoop"  
Vomiting after coughing<sup>18a pg 1</sup>  
Many, rapid coughs<sup>19a pg 1</sup>

### Complications<sup>20a,b pg 1</sup>

**Babies and Children:**<sup>11</sup> Infection of the lungs, slowed or stopped breathing, violent and uncontrolled shaking, brain disease<sup>11a pg 1 and 16a,b,c pg 1</sup>  
**Teens and Adults:**<sup>11</sup>  
Weight loss, loss of bladder control



## Haemophilus Influenzae Type B - 'Hib'

**Severe bacterial infection;** caused by *Haemophilus influenzae* type B. The Infection is common in infants<sup>63a,b pg 119</sup>

### How it spreads<sup>63c pg 120</sup>

Passed through the area between the nose and throat

Time between exposure to the bacteria and the development of signs and symptoms:<sup>8a pg 1</sup> Variable<sup>63d pg 120 and 64a pg 1</sup>

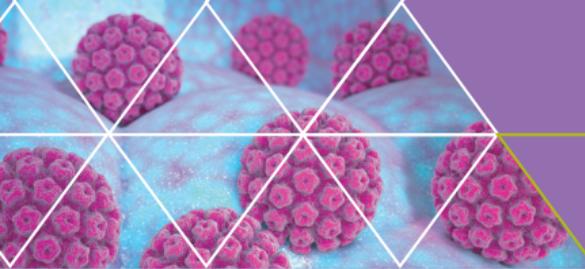
### Signs and Symptoms<sup>63e pg 121</sup>

Infection and inflammation of the brain and spinal cord<sup>4a pg 1</sup>  
Infection of the lungs<sup>11a pg 1</sup>  
Swelling in the throat that can block airflow<sup>65a pg 1</sup>  
Swollen, sore joints<sup>66a pg 1</sup>  
Bacterial skin infection (red, painful swelling)<sup>67a pg 1</sup>

### Complications<sup>63f pg 121</sup>

May lead to death





# Human Papillomavirus - 'HPV'

**Viral infection;** caused by the Human papillomavirus<sup>60a pg 1</sup>

## How it spreads<sup>60b pg 1</sup>

Sexual contact

## Signs and Symptoms<sup>61b pg 1</sup>

No specific symptoms of disease<sup>62a pg 1</sup>

## Complications<sup>60c pg 1 and 61c pg 1</sup>

- Genital warts
- Cervical cancer
- Anal cancer
- Penile cancer
- Vaginal cancer

Time between exposure to the virus and the development of signs and symptoms:<sup>8a pg 1</sup> Variable<sup>61a pg 1</sup>



# Tuberculosis - 'TB'

**Bacterial infection;** caused by *Mycobacterium tuberculosis*<sup>21a pg 1</sup>

## How it spreads<sup>22a,b pg 1</sup>

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

## Signs and Symptoms<sup>23a pg 2</sup>

- Cough
- Reduced playfulness, weakness or lethargy, failure to thrive
- Weight loss
- Fever and/or night sweats

## Complications<sup>23b pg 2 and 24a pg 3</sup>

Can spread through the whole body, which can lead to other organs being infected<sup>25a pg 1</sup>





# Diphtheria

**Bacterial infection;** caused by *Corynebacterium diphtheriae*; can cause a thick whitish covering at the back of the throat<sup>26a pg 1 & b pg 2</sup>

## How it spreads<sup>26c pg 2</sup>

Spread via respiratory droplets through coughing, sneezing

## Signs and Symptoms<sup>28a pg 1</sup>

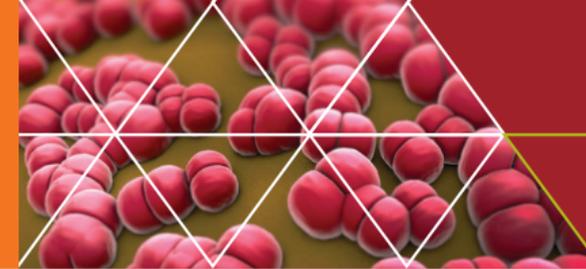
Weakness  
Sore throat  
Fever  
Swollen glands in the neck

## Complications<sup>29a pg 1</sup>

Blocking of the airway  
Damage to the heart muscle  
Nerve damage  
Paralysis  
Kidney failure  
Can lead to death



Time between exposure to the bacteria and the development of signs and symptoms:<sup>8a pg 1</sup> 2 - 5 days<sup>27a pg 108</sup>



# Meningococcal Meningitis

**Bacterial infection;** caused by *Neisseria meningitidis*<sup>55a pg 1</sup>

## How it spreads<sup>55b pg 1</sup>

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

## Signs and Symptoms<sup>57a,b,c pg 1</sup>

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

### Newborns and infants:

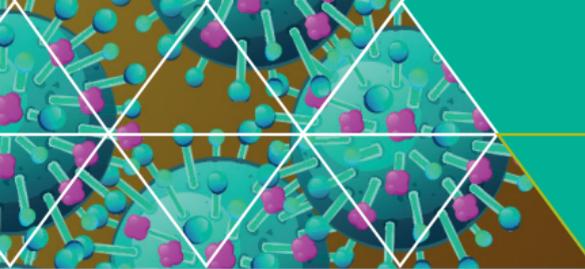
May appear to be slow or inactive, irritable, vomiting, feeding poorly

## Complications<sup>58a pg 1 and 59a pg 3</sup>

Nervous system problems, seizures, brain damage, learning disabilities, amputation of limbs, hearing loss

Time between exposure to the bacteria and the development of signs and symptoms:<sup>8a pg 1</sup> 3 - 4 days<sup>56a pg 232</sup>





## Influenza – ‘Flu’

**Viral infection** that is contagious; caused by influenza virus<sup>53a pg 1</sup>

### How it spreads<sup>53b pg 1</sup>

Coughing  
Sneezing  
Talking

### Signs and Symptoms<sup>53d pg 1</sup>

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

**Common in children:**  
Vomiting, diarrhoea

### Complications<sup>54a pg 1</sup>

Infection of the lungs<sup>11a pg 1</sup>  
Inflammation of the heart  
Inflammation of the brain  
Ear infections

Time between exposure to the virus and the development of signs and symptoms:<sup>8a pg 1</sup> 1 - 4 days<sup>53c pg 1</sup>



## Tetanus – ‘Lockjaw’

**Bacterial infection;** caused by *Clostridium tetani* and can cause painful muscle contractions<sup>30a pg 1</sup>

### How it spreads<sup>31a,b pg 1</sup>

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

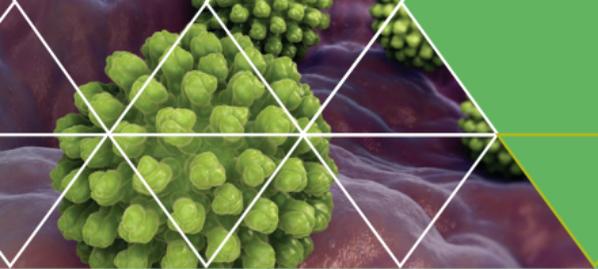
Time between exposure to the bacteria and the development of signs and symptoms:<sup>8a pg 1</sup> 3 - 21 days<sup>31c pg 1</sup>

### Signs and Symptoms<sup>30b pg 1 & 32a pg 1</sup>

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

### Complications<sup>32a,b pg 1</sup>

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



# Rotavirus

**Viral infection;** contagious and can cause gastroenteritis<sup>33a pg 2 & b pg 1</sup>

## How it spreads<sup>34 a,b pg 1 and 35a pg 1 and 36 a,b pg 1</sup>

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<sup>2b pg 300 and 3a pg 3</sup>

**Time between exposure to the virus and the development of signs and symptoms:**<sup>8a pg 1</sup> 2 days<sup>36c pg 1</sup>

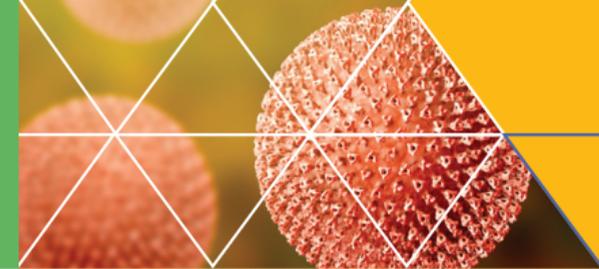
## Signs and Symptoms<sup>36d,e,f pg 1</sup>

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

## Complications<sup>37a pg 2 & b pg 3</sup>

Severe diarrhoea  
Dehydration  
Kidney and liver abnormalities



# Measles

**Viral infection;** acute and can cause respiratory illness<sup>50a pg 1</sup>

## How it spreads<sup>50b pg 2</sup>

Spread by droplets or by airborne means (coughing, breathing or sneezing) of infected person

Remains infectious in the air for up to 2 hours after an infected person leaves the area

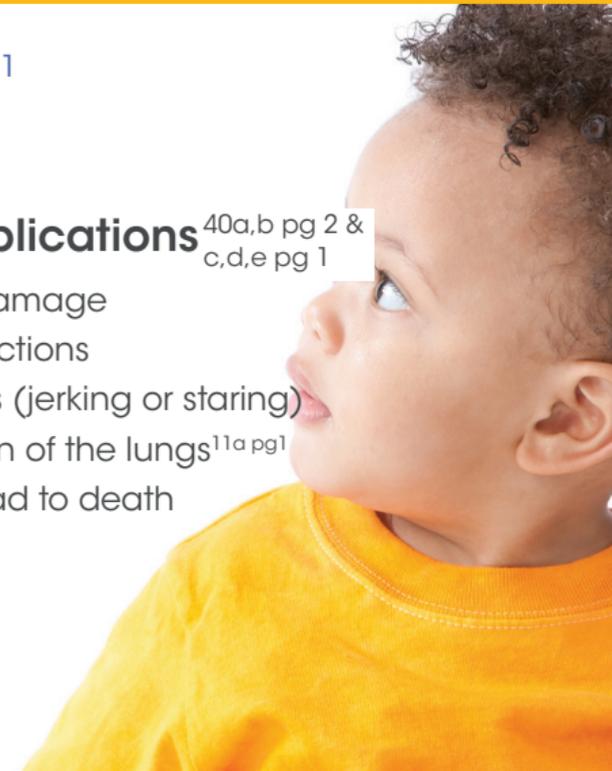
**Time between exposure to the virus and the development of signs and symptoms:**<sup>50c pg 1</sup> 14 days<sup>50c pg 1</sup>

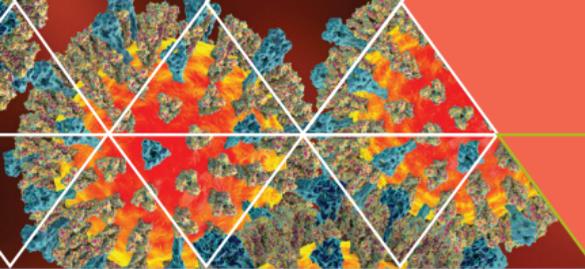
## Signs and Symptoms<sup>50d,e pg 1</sup>

Fever  
General feeling of being ill  
Cough  
Rash spreading from the head to abdomen, to lower extremities  
Tiny white spots inside the mouth<sup>51a pg 1</sup>

## Complications<sup>40a,b pg 2 & c,d,e pg 1</sup>

Brain damage  
Ear infections  
Seizures (jerking or staring)  
Infection of the lungs<sup>11a pg 1</sup>  
May lead to death





# Rubella – ‘German Measles’

**Viral infection** that is contagious<sup>46a pg 325 & b,c pg 329</sup>

## How it spreads<sup>47a pg 1</sup>

Coughing or sneezing

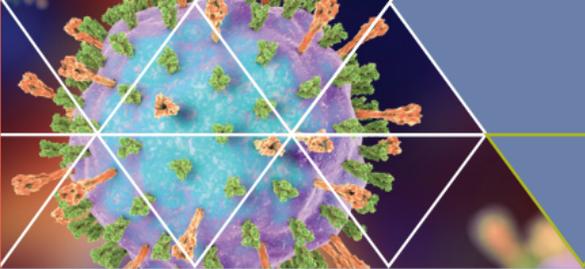
## Signs and Symptoms<sup>48a pg 1</sup>

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

## Complications<sup>49a,b pg 1</sup>

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

**Time between exposure to the virus and the development of signs and symptoms:**<sup>8a pg 1</sup> 12 - 23 days<sup>46d pg 325</sup>



# Mumps

**Viral infection** of the salivary glands that is contagious<sup>38a,b pg 1</sup>

## How it spreads<sup>39a pg 1</sup>

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 symptoms:**<sup>8a pg 1</sup> 12 - 25 days<sup>40a pg 1</sup>

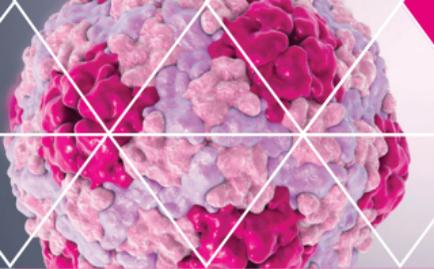
## Signs and Symptoms<sup>40b pg 1</sup>

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

## Complications<sup>41b pg 1</sup>

Inflammation of the brain  
Infection and inflammation of the brain and spinal cord<sup>4a pg 1</sup>  
Inflammation of the ovaries and/or inflammation of the breast tissue  
Deafness





# Hepatitis A

**Viral infection** of the liver caused by Hepatitis A<sup>42a pg 1</sup>

## How it spreads<sup>43a pg 3</sup>

The virus spreads from human faeces through improperly washed hands onto objects, food and water that come into contact with the mouth<sup>2</sup> and CDC Oral faecal a pg 3 or through contaminated food or water<sup>33</sup>

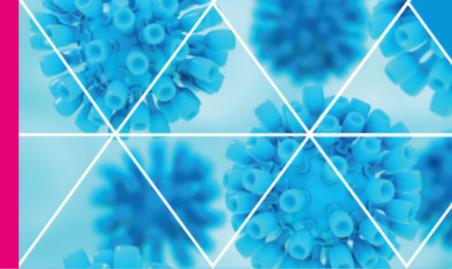
**Time between exposure to the virus and the development of signs and symptoms:**<sup>8a pg 1</sup> 15 - 50 days<sup>43b pg 4</sup>

## Signs and Symptoms<sup>42b pg 1 & 43c pg 4</sup>

Fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, clay-coloured stools, joint pain, jaundice (yellowing of the skin and eyes)<sup>44a pg 1</sup>

## Complications<sup>43d pg 2</sup>

In rare cases, can cause:  
Liver failure  
Death



# Hepatitis B

**Viral infection** of the liver caused by Hepatitis B virus<sup>45a pg 1 & b pg 2</sup>

## How it spreads<sup>45b pg 1</sup>

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 symptoms:**<sup>8a pg 1</sup> An average of 90 days<sup>45c pg 1</sup>

## Signs and Symptoms<sup>45d pg 1</sup>

Fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, clay-coloured stools, joint pain, jaundice (yellowing of the skin and eyes)<sup>44a pg 1</sup>

## Complications<sup>45e pg 1</sup>

Permanent liver damage  
Cancer of the liver

