Immunisation Advisory Centre

VERSION 2

Down syndrome and immunisation

What is special about people with Down syndrome and immunisation?

People with Down syndrome (trisomy 21) have a weakened immune system (immunodeficiency). They are more likely to get respiratory tract infections, and for these infections to enter the lower respiratory tract to cause pneumonia, bronchiolitis or croup. Infections may be severe, and it can take a long time to recover. Skin conditions, such as eczema, are more common in people with Down syndrome which can be aggravated by chickenpox.

Immunisation can protect against some of the bacteria and viruses that cause these diseases. This factsheet aims to help parents, caregivers and adults make an informed decision around immunisation.

National Immunisation Schedule vaccines

It is important for everyone with Down syndrome to receive the free National Immunisation Schedule vaccines when they are due: for infants at ages 6 weeks, 3 months, 5 months, 12 months and 15 months; for children at ages 4 years and 11 or 12 years; and for adults at 65 years of age. It is never too late to catch-up most Schedule immunisations.

Other recommended vaccines

Other vaccines are recommended and may be free or can be purchased through your doctor. These are described in the table below.

Vaccine	Recommendation	Eligibility for free immunisation
Pneumococcal vaccines	Infants, children and adults are more likely to get respiratory infections which can also increase the risk of getting a second infection that causes pneumonia	**<u>Infants and children aged under 5 years</u>** **Prevenar 13** • Given at 6 weeks, 3 months*, 5 months and 12 months of age. *Free* • Can be given for catch-up immunisation for children aged under 5 years. *Free* **3-month dose is an addition to the routine schedule for special groups* **Pneumovax23** • The first dose for children aged 2 years to under 5 years, and a second dose five years later. *Free* **<u>Children aged 5 years to under 18 years</u>** **Prevenar 13** • One dose for children aged 5 years to under 18 years who have not received any doses of Prevenar 13. *Free* **Pneumovax23** • Two doses given at least five years apart. *Free* **<u>Adults aged 18 years or older</u>** **Prevenar 13** • One dose for adults who have not received any doses of Prevenar 13. *Not free* **Pneumovax23** • Two or three doses depending on the person's age when they have their first Pneumovax23. *Not free* Note: Prevenar 13 and/or Pneumovax23 can be purchased for children aged 5 years or older and adults not eligible to receive vaccine for free.

Influenza vaccine	In infants, children and adults, influenza can cause a serious illness and can increase the risk of pneumonia	**Annual flu immunisation** • Infants from 6 months of age, children and adults. *Free* Note: Influenza vaccine can be purchased by family and support people who are not eligible for free flu immunisation.
Meningococcal vaccines (MenACWY and MenB)	People in close living situations, e.g. group accommodation, may have a higher risk of meningococcal disease, an illness that can cause inflammation of the membranes around the brain	• Adolescents and young adults aged 13–25 years inclusively who are going to living in a boarding school hostel, tertiary education halls of residence, military barrack, youth justice residences or prisons within three months, or who are already in their first year living in one of these close living situations. *Free* • Adolescents and young adults aged 13–25 years inclusively who have been living in a boarding school hostel, tertiary education halls of residence, military barracks, or prison for more than one year. Note: ❖ Group, residential and supported accommodation are not included in the close living situations eligible for free meningococcal immunisation. ❖ Meningococcal vaccines can be purchased for children and adolescents and by adults who are not eligible for free meningococcal immunisation.
Chickenpox vaccine	Children and adults who have not had chickenpox disease or immunisation, particularly if they have a skin condition like eczema	• Children born on/after 1 April 2016. *Free* • Adolescents who turn 11 years of age on/after 1 July 2017 and have not already had the immunisation or chickenpox disease. *Free* Note: Varilrix can be purchased for children and by adults who are not eligible for free chickenpox immunisation.
COVID-19 vaccine	People with Down syndrome are up to four times more likely to need hospital treatment than those who do not have Down syndrome	• Currently, those aged 6 months and older, who meet the eligibility criteria, can receive COVID-19 immunisation.
Hepatitis B vaccine	People in close living situations, e.g. group accommodation, may share their home with someone who has a chronic hepatitis B infection	• Children and adolescents aged under 18 years. *Free* • Some adults. *Only free for adults in certain circumstances* Note: Engerix-B can be purchased by adults who are not eligible for free hepatitis B immunisation.
Infant RSV (Palivizumab)	Infants with Down syndrome may be at increased risk of severe Respiratory Syncytial Virus (RSV) infection. Some infants are eligible for passive immunisation with a preventative agent, Palivizumab (Synagis), against RSV infection	• Those under 12 months of age born less than 32 weeks gestation or under 24 months of age requiring ongoing ventilatory/respiratory support in the community or with haemodynamically significant heart disease (certain categories) or certain immune deficiencies are eligible with special authority. See starship.org.nz/guidelines/palivizumab-synagis-r-immunisation-for-respiratory-syncytial-virus-rsv/
Adult RSV (Arexvy)	Adults with Down syndrome who have congenital heart disease, chronic lung disease, obesity, sleep apnoea, immunocompromise, or are older (>50 years) are recommended RSV vaccination	• Not funded and use <50 years is off-label.