

Information resources for families

Immunisations during cancer treatment

In Australia, immunisations (also called vaccines or injections) are recommended for all healthy children as part of the government-funded National Immunisation Program.

They are usually given at birth, two, four, six, 12 and 18 months of age, three and a half years of age and during high school years. These vaccines protect your child and the community from many different infections. While some of the vaccines are not recommended during cancer treatment, there are a number that can still be safely given and are recommended. Talk to your child's oncologist about which immunisations they should have during treatment. If you have any objections to immunisations, you should discuss this with your oncologist as well as a specialist immunisation provider.

Which additional immunisations are recommended during cancer treatment?

Children with cancer have a higher risk of infection because the cancer treatment also reduces the immune system. Some of these infections can be prevented by immunisations. Immunisations that are usually recommended during cancer treatment include:

The influenza ('flu') vaccine (given yearly)

Influenza, commonly called 'the flu' is an infection that can make your child very ill when they have cancer. The flu vaccine is the best way to prevent the flu. The vaccine is safe to use for children with cancer and works best when given between chemotherapy cycles. It is usually given once a year at the start of the flu season (March/April) but may be given any time during the flu season (May–October). Special arrangements can be made for overseas travel. This vaccine is free. It can be given by your child's GP or arranged by the oncologist.

The tetanus vaccine (given following certain injuries)

Your child should have a tetanus vaccine if they have any of the following injuries:

- a cut from rusty metal
- an animal bite
- a cut caused by something dirty.

The tetanus vaccine is usually combined with the vaccine for diphtheria and pertussis (whooping cough). This is still safe during cancer treatment. This vaccine can be given by your child's GP, emergency department or arranged by your child's oncologist or nurse at hospitals or health services closer to home. If you have any questions about this, ask your child's nurse.

The pneumococcal vaccine (given shortly after cancer diagnosis)

Pneumococcal disease is very serious. It causes sepsis (blood infection), meningitis (brain inflammation) and pneumonia (chest infection). A vaccine is given on the National Immunisation Program at ages two, four and six months (three vaccines in total). Some children with cancer may be at a higher risk of getting pneumococcal disease and so a fourth (or booster) dose of this vaccine will help to prevent this. You should discuss the pneumococcal vaccine with your child's oncologist.

Which immunisations are NOT recommended during cancer treatment?

Some vaccines have a small amount of virus or bacteria that has been altered to make it safe to be given to people. These are called 'live' vaccines. They don't normally cause disease as the immune system clears the infection, but children with cancer have a weaker immune system and are less able to do this, therefore they should not be given these vaccines during treatment.

Your child's nurse can give you a letter for school saying which immunisations your child should have and which ones should not be given during their treatment. If required, your oncologist or doctor can also complete an 'Immunisation exemption for medical reasons (contraindication) form' for Medicare to ensure that your government payments/benefits linked to immunisation are not affected.

The live vaccines on the National Immunisation Program that should not be given during chemotherapy include:

- measles, mumps, rubella (MMR)
- varicella (Chickenpox)
- measles, mumps, rubella, varicella (MMRV)
- rotavirus (only given to young infants, ask your oncologist what age this should be given).

There are other 'live vaccines' given to people who are going overseas to specific countries. If you want to take your child overseas when they are on treatment, you must talk to your oncologist first. The following live vaccines should not be given to your child during treatment:

- oral polio (sabin). This is no longer given in Australia and has been replaced by the inactivated polio vaccine (iPV) that is safe to give
- oral typhoid. An alternative typhoid vaccine that is safe to give is available
- Bacille Calmette–Guerin (BCG) for prevention of tuberculosis
- yellow fever
- Japanese encephalitis.

Some immunisations are safe during cancer treatment, and are recommended.

Which immunisations should family members or other people living in the house receive?

To best protect children with cancer from infection, all members of the family and people living in the house should be fully vaccinated according to current recommendations. It is safe and strongly recommended for other children in the house to have their routine immunisations including:

- measles, mumps, rubella (MMR)
- measles, mumps, rubella, varicella (MMR-V)
- varicella (Chickenpox)
- rotavirus (given to infants under six months).

If anyone in the household develops a chickenpox like rash after the varicella or MMR-V vaccines, cover the rash (with clothing or a large dressing) and contact your GP or oncologist.

There is a small risk that the rotavirus vaccine virus may spread to other people living in the house for up to two weeks after the vaccine has been given. To avoid this, take extra care with hand washing and nappy disposal.

Other vaccines that are strongly recommended for other people living in the house include:

- influenza ('flu') vaccine – given to everyone over six months of age
- pertussis (whooping cough) – booster doses may be required for people over 15 years of age.

Which immunisations should be given after cancer treatment?

Your child may require boosters of their childhood immunisations about six months after treatment has completed. This will depend on what chemotherapy your child has had.

When your child is six months off treatment, ask your oncologist if it is time for their booster immunisations.

For more information, please refer to Immunisations after cancer treatment has finished on www.pics.org.au

Who to contact for further questions.

Talk to your oncologist if you have any questions about immunisations for your child or family. You can also contact the Immunisation Clinic at your hospital.