Tdap Frequently Asked Questions

Tdap Booster Vaccine - Frequently asked questions for healthcare professionals

What is Tdap booster vaccine?
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Tdap is a tetanus (T), low dose diphtheria (d) and low dose acellular pertussis (ap) booster vaccine which protects against tetanus, diphtheria and pertussis. The childhood schedule as per the Immunisation Guidelines for Ireland from the National Immunisation Advisory Committee (NIAC) is:

- Primary immunisation course of 3 doses of vaccines protecting against tetanus, diphtheria and pertussis at 2, 4, and 6 months of age. It is given as the 6 in1 over three visits
- A booster dose at 4-5 years as DTaP/IPV
- A second low dose booster aged 12-13 years as Tdap.

The aim is that each child should be given at least 5 doses of tetanus and diphtheria containing vaccines.

How is Tdap booster vaccine given to adolescents?
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The HSE provides Tdap vaccine to students in first year of second level schools. This vaccination programme was introduced to the school's immunisation programme in September 2011 replacing Td vaccine and has been in place in all areas nationally since 2012/2013.

Why has pertussis booster been added to the diphtheria and tetanus booster at 12 to 13 years?
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NIAC recommended that students aged 12-13 years should receive a booster dose of a pertussis containing vaccine. This is because more cases of pertussis have been occurring in adolescents and adults due to the waning immunity that occurs over time, combined with a reduction in natural boosting. In addition, 30% of adults with a cough lasting longer than 2 weeks may have pertussis and most infants and young people who contract pertussis are infected by a family member.

Are there any reasons why Tdap should not be given?
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- Tdap should not be given if there is a history of anaphylaxis to a previous dose of the vaccine or one of its constituents.
- If there is a history of an *Arthus-type reaction to a previous dose, a further routine or emergency booster dose of tetanus or diphtheria containing vaccines should not be given more frequently than every 10 years.

*(Very rarely a major local (Arthus) reaction occurs, involving swelling and erythema of most of the diameter of the upper arm from shoulder to elbow. This usually begins 2-8 hours after vaccination and is more common in adults. This resolves without sequelae. This severe reaction is usually associated with very high serum tetanus or diphtheria antitoxin levels).

In the event of acute severe febrile illness defer until recovery.

Note: The following are **not** considered either contraindications or precautions to pertussis vaccination.

They have not been shown to cause permanent harm and are significantly less common after acellular vaccine (for example Tdap) than after whole- cell pertussis vaccines that were used in Ireland in the past.

1. Temperature of more than 40.5°C within 48 hours of a previous dose of a pertussis-containing vaccine
2. Hypotonic-hyporesponsive episode within 48 hours of a previous dose of a pertussis-containing vaccine
3. Seizures within 72 hours of a previous dose of a pertussis containing vaccine
4. Persistent, inconsolable crying lasting more than 3 hours within 48 hours of a previous dose of a pertussis- containing vaccine.
5. Active or progressive neurological disease.

What interval should there be between Tdap and a previous dose of a tetanus or diphtheria containing vaccine?

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NIAC recommends that no interval is required between Tdap booster at 12-13 years and any previous tetanus or diphtheria toxoid containing vaccine.

If a student has received 3 primary immunisations and 1 booster at 4-5 years of age and also got a tetanus booster following tetanus prone injury, should they get Tdap?

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Yes. The student should get the Tdap booster because of the benefit of the pertussis component even if this is the sixth dose of a tetanus and diphtheria containing vaccine. NIAC's Immunisation Guidelines for Ireland recommend that each child should be given a minimum of 5 doses of tetanus and diphtheria vaccines.

If a student has come to Ireland from another country, e.g. United States, and has had 4 primary doses of Diphtheria and Tetanus + 1 preschool booster, so already has had 5 doses should they have a 6th dose of tetanus containing vaccine?

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The US recommends a Tdap at 11-12 years, i.e. the US recommends 6 doses by 12 years. This is also the recommended in other countries. NIAC Immunisation Guidelines for Ireland recommend a minimum of 5 doses, and no maximum number of doses. Therefore, the recommendation is that they have the Tdap booster.

What advice should be given to parents regarding the need for further Td doses?

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In the event of an injury, a risk assessment should be carried out in relation to the nature of injury and time since last dose of tetanus containing vaccine to determine if Td or Tetanus Immunoglobulin (TIG) is required – see Immunisation Guidelines for Ireland Tetanus Chapter 21 available at https://www.hiqa.ie/reports-and-publications/niac-immunisation-guideline/chapter-21-tetanus

Can other vaccines be given at the same time as Tdap?

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Yes. Tdap is an inactivated vaccine so this can be administered at the same time as any other live (e.g. MMR) or inactivated (e.g. HPV and Tdap) vaccine.

What way should the three vaccines Tdap, HPV and Men ACWY be given?

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When three vaccines are administered at the same vaccination session it is useful to follow an agreed convention about the site of each vaccine as this will make it easier to attribute local reactions to the correct vaccine in the event of a report of an adverse reaction. It is also easier to enter this information uniformly into the electronic record. Second level students should be given

- a dose of HPV9 vaccine in the left deltoid.
- Men ACWY and Tdap vaccines 2.5 cms apart in the right deltoid.

NIAC advise that “Multiple vaccines given at the same visit must be given at least 2.5cm (1 inch) apart, and if necessary in different limbs.”

Can Tdap be given during pregnancy?

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Tdap is recommended for pregnant women as early as possible after 16 weeks and before 36 weeks gestation. This is to allow optimal transfer of pertussis antibodies to their baby to protect them from pertussis in the first months of life. However, Tdap can be given later in pregnancy but may not be as effective.

Does Tdap vaccine contain thiomersal?

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No. Tdap vaccine does not contain thiomersal.

How safe is Tdap vaccine?

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Tdap vaccine is safe and well tolerated. See reported adverse events below:

Table 1: Adverse reactions reported in clinical trials with Boostrix (Tdap)

System Organ Class	***Frequency***	***Adverse Reactions***	
		Subjects aged 4 - 8 years (N=839)	***Subjects aged 10-76 years old (N= 1931)***
Infections and infestations	Uncommon	upper respiratory tract infection	upper respiratory tract infection, pharyngitis
Blood and lymphatic system disorders	Uncommon		lymphadenopathy
Metabolism and nutrition disorders	Common	anorexia	
Psychiatric disorders	Very Common	irritability	
Nervous system disorders	Very common	somnolence	headache
	Common	headache	dizziness
	Uncommon	disturbances in attention	syncope
Eye disorders	Uncommon	conjunctivitis	
Respiratory, thoracic and mediastinal disorders	Uncommon		Cough

Gastrointestinal disorders	Common	diarrhoea, vomiting, gastrointestinal disorders	nausea, gastrointestinal disorders
	Uncommon		diarrhoea, vomiting
Skin and subcutaneous tissue disorders	Uncommon	rash	hyperhidrosis, pruritus, rash
Musculoskeletal and connective tissue disorders	Uncommon		arthralgia, myalgia, joint stiffness, musculoskeletal stiffness
General disorders and administration site condition	Very common	injection site reactions (such as redness and/or swelling), injection site pain, fatigue	injection site reactions (such as redness and/or swelling), malaise, fatigue, injection site pain
	Common	pyrexia (fever ≥ 37.5°C including fever > 39.0°C), extensive swelling of vaccinated limb (sometimes involving the adjacent joint)	pyrexia (fever ≥ 37.5°C), injection site reactions (such as injection site mass and injection site abscess sterile)
	Uncommon	other injection site reactions (such as induration), pain	pyrexia (fever > 39.0°C), influenza like illness, pain

See information at https://assets.hpra.ie/products/Human/24448/Licence_PA1077-020-001_11052023104630.pdf

Very common (>1 in 10): Local injection site reactions (pain, redness and swelling).
Common (> 1 in 100 to <1 in 10): Pyrexia, malaise, fatigue

Serious side effects are very rare

This page was added on 5th June 2025