### MenACWY Frequently Asked Questions for Health Professionals

#### What is MenACWY vaccine?

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The MenACWY vaccine is a non-live vaccine. It offers protection against four strains of meningococcal bacteria. Serotypes A, C, W, & Y are the four strains it protects against.

### What bacteria cause meningococcal infections?

Neisseria meningitidis is the bacteria that causes meningococcal infections.

### What are the symptoms of meningococcal infections?

Symptoms range from no symptoms, with the bacteria residing in the nose or rarely throat to serious, invasive disease.

The serious invasive disease includes septicaemia, meningitis, septic arthritis, and endophthalmitis. (Endophthalmitis is an infection of the lining of the eyes).

### Are there different serotypes of the Meningococcal bacteria?

Yes, there are 12 serogroups (A, B, C, E H, I, K, L, W (X, Y, and Z). Most disease-associated strains belong to serogroups A, B, C, W and Y.

Meningococcal bacteria are the leading cause of bacterial meningitis in Ireland.

### What is the name of the Men ACWY vaccine used in Ireland?

The school immunisation programme uses the MenACWY vaccine called Nimenrix. It's a conjugate vaccine with Group A, C, W, and Y polysaccharides conjugated to tetanus toxoid carrier protein.

### What does the vaccine protect against?

The MenACWY vaccine protects against the bacteria N. meningitidis Groups A, C, W, and Y strains.

### So, why is the Men ACWY vaccine recommended for teens?

Adolescents are at high risk of infection. They often carry and spread the bacteria. It is recommended for teenagers as the vaccine directly protects against four meningococcal types.

It also stops the bacteria from residing in the nose and throat. Vaccinating adolescents prevents the infection from spreading to others.

### Why does the vaccine cover so many strains including A, C, W,Y?

Since 2015, Ireland has seen more cases of invasive meningococcal serogroups W and Y disease.

Between 2015 and 2018, a total of 36 serogroup W and 20 serogroup Y cases were reported. For serogroup W, the rate was 9 cases per year. For serogroup Y, it was 5. Men W disease cases have increased in several European countries.

For example, the UK and the Netherlands have seen more cases recently. This is because of the rise of meningococcal serogroups W and Y. In 2019, the National Immunisation Advisory Committee (NIAC) advised that all 1st year students get one dose of MenACWY vaccine in 2019.

It replaced the Men C booster vaccine. Students received the booster in the 1st year of secondary school in years 2014 to 2019. The Men ACWY vaccine protects against Men C disease. It also guards against invasive N. meningitidis A, W, and Y infections.

About 10% of people are silent carriers. They carry the bacteria in their noses or throats without symptoms. Most of them become immune. Carriage is rare in babies and young kids. However, it peaks in teens, with rates hitting 25% in the 15-19 age group.

## Is MenACWY given to adolescents in other countries? +

Yes, it is given in UK, the Netherlands, Australia and USA.

In September 2015, the UK replaced the Men C vaccine for teens with a MenACWY vaccine. This was due to the rapid rise in N. meningitidis Group W disease in all age groups. In the Netherlands because of a similar increase in N. meningitidis Group W invasive disease all 13–14-year-olds are offered MenACWY vaccine.

### Why do you need to protect students in school against Meningococcal infection?

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Meningococcal disease is severe, causing meningitis and septicaemia. About 10% of those infected die. Survivors often face long-term problems. These include brain injury, memory loss, deafness, blindness, and limb loss. Meningococcal disease can occur at any age. But it is most common in children under 5. There is a second peak of cases in young people aged 15 to 19 years.

Adolescents are also known to have the highest rates of carriage of meningococcal bacteria. The Men ACWY vaccine provides direct protection. It also stops carriage of the bacteria. So, it will protect other age groups through herd immunity.

### When should MenACWY be given in the academic year? +

#### When should MenACWY be given in the academic year?

Children are offered the MenACWY booster to extend protection against N. meningitidis, Group C. It also gives protection against N. meningitidis, Groups A, W, and Y.

Protection from the vaccine lasts until early adulthood. The vaccine should be given later in the academic year, from January 2025.

### Are there any reasons why MenACWY should not be given? +

MenACWY vaccine should not be given if there is a history of anaphylaxis to a previous dose of the vaccine or one of its constituents. In the event of acute severe febrile illness, defer vaccination until recovery.

#### Can you have the Men ACWY vaccine if you have a latex allergy?

Yes, the MenACWY vaccine syringe or needle cap doesn't contain natural rubber.

So, a history of anaphylaxis to latex doesn't stop you from getting the MenACWY vaccine.

### What about a child who has had MenACWY vaccine recently? +

A student vaccinated with MenACWY conjugate vaccine at 10 years or older doesn't need a booster. Their immunity lasts into adulthood. However, those who got the polysaccharide MenACWY vaccine should get a booster with the conjugated vaccine as it is more effective.

### Can other vaccines be given at the same time as MenACWY? +

Yes, MenACWY is an inactivated vaccine. It can be given with any live (like MMR) or inactivated (like HPV or Tdap) vaccine. Give these vaccines in separate limbs or if giving three vaccines two in the same limb and keep them at least 2.5cm (1 inch) apart.

# 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."

See chapter 2 of the immunisation guidance

https://rcpi.access.preservica.com/uncategorized/IO\_67b1011b-87ed-4b8a-94ac416bfe112caa/

### Can Tdap and MenACWY vaccines be given at the same time?

The Tdap and MenACWY vaccine can be safely given at the same time.

# Can Tdap or MenACWY vaccines be given at the same time as HPV vaccine?

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Yes, the Tdap and MenACWY vaccines can also be given at the same time as the HPV (human papillomavirus) vaccine. All three vaccines are administered in one visit by the school team since 2023.

### Can MenACWY vaccine be given during pregnancy? +

MenACWY vaccine may be given to pregnant women when indicated. Meningococcal disease is severe. Pregnancy should not stop vaccination when the risk is clear.

#### Does MenACWY vaccine contain thiomersal?

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No, MenACWY vaccine does not contain thiomersal.

Is a catch-up programme being provided for older students? +

The National immunisation Advisory Committee has not recommended a MenACWY vaccine catch up programme for older students.

How safe is MenACWY vaccine?

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MenACWY vaccine is safe and well tolerated.

### What are the side effects of MenACWY vaccine?

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See information from SPC below

#### Table 1: Tabulated summary of adverse reactions by system organ class

System Organ Class	Frequency	Adverse reactions
Blood and lymphatic	Not known***	Lymphadenopathy
system disorders		
Metabolism and	Very common	Appetite lost
nutrition disorders		
Psychiatric disorders	Very common	Irritability
	Uncommon	Insomnia
		Crying
Nervous system disorders	Very common	Drowsiness
-		Headache
	Uncommon	Hypoaesthesia
		Dizziness
	Rare	Febrile convulsion
Gastrointestinal disorders	Common	Diarrhoea
		Vomiting
		Nausea*
Skin and subcutaneous	Uncommon	Pruritus
tissue disorders		Urticaria
		Rash**
Musculoskeletal and	Uncommon	Myalgia
connective tissue		Pain in extremity
disorders		

General disorders and administration site conditions	Very common	Fever Swelling at injection site Pain at injection site Redness at injection site Fatigue
	Common	Injection site haematoma*
	Uncommon	Malaise
		Injection site induration
		Injection site pruritus
		Injection site warmth
		Injection site anaesthesia
	Not known***	Extensive limb swelling at the injection site, frequently associated with erythema,
		sometimes involving the adjacent joint or
		swelling of the entire
		injected limb

\*Nausea and Injection site haematoma occurred at a frequency of Uncommon in infants

\*\*Rash occurred at a frequency of Common in infants

\*\*\*ADR identified post-marketing

(Available at <u>https://www.ema.europa.eu/en/documents/product-information/nimenrix-epar-product-information\_en.pdf</u>) (size 1.223MB) (you will be directed to the EMA website)

### What MenACWY vaccine is being used in the school programme? +

The MenACWY conjugate vaccine used in the school programme is called Nimenrix.

#### How is Nimenrix presented?

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Nimenrix is presented as a vial containing Nimenrix powder (contains the MenACWY components) and solvent for solution for injection in prefilled syringe. The packaging contains two needles, the orange one to be used for reconstitution and the blue one for administration of the vaccine.

### The vaccine requires reconstitution.

### How is Nimenrix reconstituted?

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Nimenrix is reconstituted by adding the entire content of the pre-filled syringe of solvent to the vial containing the powder. After the addition of

the solvent to the powder, the mixture should be well shaken until the powder is completely dissolved in the solvent. The reconstituted vaccine is a clear colourless solution.

The reconstituted vaccine should be inspected visually for any foreign particulate matter and/or variation of physical aspect prior to administration. In the event of either being observed, discard the vaccine.

After reconstitution, the vaccine should be used promptly. Give Nimenrix only by intramuscular injection.

#### This page was added on 12 July 2024