

Briefing for the Citizen Participation and Public Petitions Committee on petition PE1939: [Amend the date of birth to allow wider accessibility to the HPV vaccination programme for boys](#), lodged by Suzanne Thornton

Brief overview of issues raised by the petition

The petition calls on the Scottish Parliament to urge the Scottish Government to demonstrate a commitment to health equality for young males born between 1 September 1997 and 1 September 2006 by allowing them to access the HPV vaccination via the NHS.

HPV infection

Human Papilloma Virus (HPV) is the name for a group of viruses that affect the skin and moist membranes lining the body, such as the cervix, anus, mouth and throat.

HPV is spread by direct physical contact. Anyone who is sexually active is at risk and the risk increases with the number of sexual partners. However, HPV can be transmitted through any physical contact, [such as kissing](#), and not just genital contact or sexual intercourse.

[HPV infections are very common and over 225 types of HPV have been identified, 40 of these infect the genital area](#). Most adults will have been infected at some point in their lives. Incidence of infection increases from the age of 14yrs.

HPV types

HPV types can be characterised into high and low risk types based on their ability to cause cancer. HPV infection is often without symptoms and usually resolves without treatment – 90% of types do so within two years with no apparent disease. Infection with low risk types of HPV can lead to warts on the skin and genital areas. Persistent infection with high risk types can cause cell changes that can eventually lead to cancer. There are 13 high risk types of HPV that have been associated with cancers such as:

- cancer of the cervix, vulva or vagina in women

- cancer of the penis in men
- some cancers of the head, neck, throat or anus in either sex.

The most common HPV induced cancer is cervical cancer, with HPV 16 and 18 responsible for 70% of cervical cancers worldwide, and 80% of cervical cancers within Scotland. The remaining 20% to 30% of cervical cancers are caused by the other high-risk HPV types.

Public information on HPV is available on the [NHS Inform website](#).

HPV vaccination

A vaccine can be used to help prevent HPV infection. This is usually given as two or three injections over several months.

The [GARDASIL](#) vaccine is routinely used in Scotland. The ingredients of the HPV vaccine are outlined in this [patient information leaflet](#).

HPV vaccination eligibility

HPV vaccination is recommended for all girls and boys between 11 and 14 years of age.

Since 1 September 2008, the vaccination for HPV (types 16 and 18) has been offered to secondary school girls in S1 in Scotland. [Ninety two point four per cent were fully vaccinated in 2008–09](#).

The HPV vaccine has been offered to adolescent boys in S1 from the 2019-20 school year; [uptake among those offered the first dose was 78.7%](#).

There are no exact published dates for vaccine eligibility in Scotland, but in England, [eligibility for the vaccine includes females born after 1 September 1991 and males born after 1 September 2006](#). For Scotland, Wales and Northern Ireland dates of birth for eligible cohorts may vary due to the different ages at which the HPV vaccine is first offered.

This age group is offered the vaccine because they are less likely to be sexually active or have already been exposed to HPV. Vaccination cannot treat or get rid of HPV infection if an individual has already been exposed.

The HPV vaccine is licensed to be given any time from age nine upwards. However, vaccination of girls and boys of this age is not covered by the national HPV vaccination programme. It's normally delivered in the immunisation programme from S1 at secondary school. The vaccine is offered in two or three doses over a period of 12 months, depending on age when an individual received the first dose. The first dose is offered to all pupils in S1 at secondary school. The second dose is usually offered in S2.

[Immunisation against Infectious Disease \('The Green Book'\)](#) sets out that males and females eligible for the vaccine remain eligible until their 25th birthday. This only applies to:

- females under 25 who would have been eligible under routine, and catch up programmes, introduced in 2008
- those boys who become eligible from the academic year 2019-20.

This means that some men under the age of 25 aren't eligible, whereas all females under 25 are eligible. This petition is calling for health equity between boys and girls, asking for boys born between 01/09/1997 and 01/09/2006 to be able to access a 'catch up' HPV vaccination through the NHS.

Additional eligibility criteria

The HPV vaccine is also offered to [men who have sex with men \(MSM\)](#) up to and including 45 years old attending sexual health and HIV clinics across Scotland. This is because MSM attending sexual health and HIV clinics are known to have a higher risk of HPV infection.

Other people may have the vaccine because they have higher risks from HPV infection. For example, if an individual has HIV they are more likely to get HPV infection, which means those individuals have a higher risk of developing HPV-related cancer.

The Scottish Government's Chief Medical Officer's letter provides information on key elements of the [HPV immunisation programme](#).

Scottish Government vaccination advice

Vaccination policy in Scotland, in line with the rest of the UK, is based on recommendations from the [Joint Committee on Vaccination and Immunisation \(JCVI\)](#). Scottish Ministers are not bound by JCVI recommendations but, to date, have never diverged from them.

The JCVI is an expert group which considers a wide range of evidence to inform advice on all aspects of vaccination. Following the JCVI's recommendation, Scottish Ministers approved the HPV programme for girls in 2008.

[The JCVI note that the consideration of HPV vaccination in boys is a complex issue and taking into wider issues of health economic methodology, prevalence rates and equality issues](#). Boys were not initially covered in the recommendations for the vaccination programme as it was concluded at that time that:

- it would not be a cost-effective use of health service resources
- high coverage in girls would provide herd protection to boys

- vaccination of boys would generate little additional benefit to the prevention of cervical cancer, which is the most common HPV induced cancer and the main aim of the vaccination programme.

The JCVI has been reviewing the evidence for vaccinating boys since 2013, particularly in relation to the efficacy of the vaccination in preventing non-cervical cancers. In 2018, [the JCVI concluded](#):

“It is predicted that by vaccinating boys as well as girls, additional cases of HPV attributable cervical and non-cervical cancer will be prevented in women and additional cases of HPV attributable non-cervical cancer will be prevented in males especially in men who have sex with men (MSM).”

It further noted a gender-neutral programme would also provide resilience against short-term fluctuations in uptake. Following the JCVI’s recommendation, Scottish Ministers approved the HPV programme to include adolescent boys offering the vaccine to all S1 boys from the 2019-20 school year.

The JCVI has not recommended that older boys be offered the vaccine. [This is reported](#) to be due to the rationale that evidence suggests it is not needed as they are already benefitting greatly from the indirect protection, known as herd protection, that has built up from 10 years of the girls’ HPV vaccination programme.

To find out more about the JCVI recommendations (Published 18 July 2018) visit [JCVI statement: extending the HPV vaccination programme – conclusions - GOV.UK \(www.gov.uk\)](#)

Immunisation coverage rates

Public Health Scotland provides an annual update on HPV immunisation coverage rates. Coverage rates are reported for males and females in their first and second year of secondary school (S1 and S2), and for females in their third and fourth year of secondary school (S3 and S4). [The latest update was published in December 2021.](#)

Vaccination rates have been affected by the COVID-19 pandemic; this was the second consecutive year when the HPV immunisation programme in Scotland was not fully completed during the school year due to the COVID-19 pandemic and associated school closures. NHS Boards are running catch-up programmes for any pupils not offered the vaccine during this time.

Impact of vaccination

[Research published in the British Medical Journal](#) suggests vaccination of girls aged 12-13 years with the HPV vaccine in Scotland has led to a dramatic reduction in cervical disease and shows evidence of herd immunity in

unvaccinated women. It notes this is consistent with the reduced prevalence of high-risk HPV in Scotland.

Other relevant petitions and reports

Relevant petitions have been considered by the Scottish Parliament including:

- [PE01477: Gender neutral Human Papillomavirus vaccination](#)
- [PE01574: HPV Vaccine Safety](#)

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[03/08/2022]

The purpose of this briefing is to provide a brief overview of issues raised by the petition. SPICe research specialists are not able to discuss the content of petition briefings with petitioners or other members of the public. However, if you have any comments on any petition briefing you can email us at spice@parliament.scot

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Published by the Scottish Parliament Information Centre (SPICe), an office of the Scottish Parliamentary Corporate Body, The Scottish Parliament, Edinburgh, EH99 1SP