

# Welsh Government Integrated Impact Assessment

## Sections 1 and 8

<b>Title of proposal:</b>	Varicella vaccination programme
<b>Official(s) completing the Integrated Impact Assessment (name(s) and name of team):</b>	Mandy Stone / Sharron Richards Vaccination policy team
<b>Department:</b>	Vaccination division
<b>Head of Division/SRO (name):</b>	Tania Nicholson
<b>Cabinet Secretary/Minister responsible:</b>	Minister for Health and Social Services
<b>Start Date:</b>	Autumn/winter 2025

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## Section 1. What action is the Welsh Government considering and why?

**In narrative form, please describe the issue and the action proposed by the Welsh Government.**

Varicella (commonly known as chickenpox) is a highly contagious infectious disease caused by the varicella zoster virus. Varicella is very common and affects most children during childhood, although it can be caught for the first time at any age. Varicella is often more serious in very young infants (under 4 weeks) and adults, in particular in pregnancy when it may cause complications in both the mother and the foetus, and in adults who are immunosuppressed.

Most varicella cases in children are relatively mild and the illness resolves without any need for treatment from a medical professional, though most children are unwell for several days and will miss 5 or more days from school or nursery. However, some children will go on to develop complications from varicella including bacterial infection of skin lesions (including group A streptococcus) and in rare cases, encephalitis, pneumonitis and stroke. These complications can sometimes result in hospitalisation and on rare occasions death.

The Joint Committee on Vaccination and Immunisation (JCVI) has recommended a universal varicella (chickenpox) vaccination programme should be introduced as part of the routine childhood schedule. This should be a 2-dose programme offering vaccination at 12 and 18 months of age using the combined MMRV (measles, mumps, rubella and varicella) vaccine: [JCVI statement on a childhood varicella \(chickenpox\) vaccination programme - GOV.UK \(www.gov.uk\)](#)

As has been shown in other countries which include varicella in their routine vaccination schedule, a 2-dose schedule is predicted to decrease the number of cases of varicella seen in childhood rapidly and dramatically. The programme will prevent severe cases of varicella, and other serious complications of varicella, which while rare may have otherwise resulted in hospitalisation or other serious outcomes.

Subject to Ministerial agreement, the Welsh Government, along with the other UK nations, proposes to introduce a routine varicella vaccination programme from December 2025.

**How have you applied / will you apply the five ways of working in the Well-being of Future Generations (Wales) Act 2015 to the proposed action, throughout the policy and delivery cycle?**

This policy relates to four of the goals under the Well-being of Future Generations (Wales) Act namely:

- a more prosperous Wales – a highly vaccinated population is healthier, which in turn leads to higher employment and greater productivity.

- a healthier Wales - through contributing to people's physical and mental well-being.
- A more equal Wales – where healthier children go on to reach their potential regardless of their background/ circumstances.
- A globally responsible Wales – where vaccination is key to global health security, in an interconnected world where disease outbreak can spread very quickly. A highly vaccinated country can respond better to public health outbreaks and emergencies.

In terms of the five ways of working, this policy considers:

- **Long Term** – The most significant impact of vaccines has been to prevent morbidity and mortality from serious infections that disproportionately affect children. Better protected children mean healthier adults. Vaccination programmes provide a degree of social mobility, as poverty and the associated ill-health and mortality from infectious diseases are no longer the determinants of one's life chances. Vaccine recipients have the potential for improved life-expectancy largely demonstrated by, but not confined to, infants and children<sup>1</sup>.
- **Prevention** – According to the World Health Organization, vaccines are estimated to prevent almost three million deaths/year. Vaccination is one of the most important actions we can take for our own health, and that of our children, and it's one of the most important preventative actions NHS Wales can offer to people in Wales.
- **Integration** – This vaccination programme will align with planned changes to the childhood vaccination schedule. Welsh Government officials will continue to work closely with Vaccine Programme Wales (VPW) and Public Health Wales (PHW) to minimise disruption to the NHS delivery. A VPW project manager has been appointed to evaluate options to plan for an efficient and effective rollout.
- **Collaboration** – The Welsh Government has and will continue to act in collaboration with VPW and PHW in planning the NHS Wales implementation of the varicella vaccination programme through regular on-line meetings and correspondence.
- **Involvement** – Relevant stakeholders were asked for their views to inform this integrated impact assessment and will be kept up to date as the policy develops. Subject to Ministerial agreement, the Welsh Government will work

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<sup>1</sup> Andre et al. (2008). Vaccination greatly reduces disease, disability, death and inequity worldwide. Bull. World Health Organ. 86, 140–146.

with clinical and operational colleagues to inform decisions on how a varicella programme would be delivered from December 2025.

## **Impact**

Positive –

- The purpose of establishing this varicella vaccination programme (like all vaccination) is as a preventative measure to provide protection against disease.
- The varicella vaccine will prevent outbreaks in childcare settings and schools, leading to reduced incidence of the disease, less school time missed by children and less chance of exposing people who cannot get vaccinated.
- The vaccination programme would also limit the infection rate and reduce the number of severe cases in the community. This will have a positive health effect for those vaccinated and will reduce the impact of varicella on public health services.
- Vaccination would be offered to all eligible children regardless of background. The deployment model of routine childhood vaccination undertaken by health boards is through primary care. GP administered vaccinations tend to be more accessible, in terms of locality.

## **Negative**

- The childhood vaccination programme already has a high number of vaccinations which a child will be offered before they reach school age. Adding another vaccination to this schedule could result in people experiencing vaccine fatigue, possibly leading to a reduction in uptake of other vaccines in the schedule or reduce uptake of the MMR (measles, mumps and rubella) vaccination.
- It's common to experience some mild-to-moderate side effects when receiving vaccinations. This is because the immune system is instructing the body to react in certain ways. There is evidence that using the combined MMRV vaccine as a first dose has been associated with a slightly increased rate of febrile seizures when compared with using separate MMR and varicella vaccines at the same visit. Febrile seizures are convulsions in children caused by elevated body temperatures.

## **Costs and savings**

- The Welsh Government's Science, Evidence, Advice (SEA) Division prepared a paper to estimate the cost-effectiveness of a varicella vaccination programme for Wales. The paper concludes that a number of studies suggest

that varicella vaccination would produce cost savings from a societal perspective, by preventing productivity losses, absenteeism, and informal care. JCVI considered evidence that showed that a routine childhood programme would be cost effective and may be cost saving depending on the vaccine price.

- The JCVI has recommended a catch-up programme be initiated following implementation of a universal programme to infants aged 12 months and 18 months, to prevent a gap in immunity. The Committee has not yet published the detail around this recommendation. Once clarity is available on the catch-up programme, this IIA will be updated to reflect cost of the recommended catch-up programme.
- A full estimate of cost for the programme (including the catch-up element) will be available in due course.

## **Mechanism**

- No new legislation is required to introduce this vaccination programme in Wales.
- Any decision to proceed with a varicella vaccination programme/ catch-up will be communicated to NHS via a Wales Health Circular and a written statement will be published to inform members of the Senedd.
- The [National Immunisation framework](#) was published in October 2022 and sets out our plans to inform people to know what vaccinations they are eligible for and how to receive them.
- The deployment will be the responsibility of NHS Wales, with health boards in Wales developing local plans and impact assessing these plans.
- PHW will develop a communications strategy to inform parents/ carers of how the programme fits in with the childhood schedule and of the benefits of immunising children.

## Section 8. Conclusion

### How have people most likely to be affected by the proposal been involved in developing it?

The Joint Committee on Vaccination and Immunisation (JCVI) has recommended a universal varicella (chickenpox) vaccination programme to be given in a 2-dose schedule to infants aged 12 months and 18 months, in the context of the proposed changes to the routine childhood immunisation schedule, and for a catch up programme for older children. The Minister for Health and Social Services is being advised to accept this recommendation and for a programme to be implemented in Wales.

As part of their considerations JCVI looked at evidence around parental acceptance of a varicella programme. A study by Sherman et al [Parental acceptance of and preferences for administration of routine varicella vaccination in the UK: a study to inform policy](#) reported on parental acceptability of and preferences for the introduction of varicella vaccination to the UK.

Most parents (74.0%) were likely to accept a varicella vaccine for their child, 18.3% were unlikely to accept it and 7.7% were neither likely nor unlikely. Reasons provided by parents likely to accept the vaccine included protection from complications of chickenpox, trust in the vaccine/healthcare professionals, and wanting their child to avoid their personal experience of chickenpox. Reasons provided by parents who were unlikely included chickenpox not being a serious illness, concern about side effects, and believing it is preferable to catch chickenpox as a child rather than as an adult. A combined MMRV vaccination or additional visit to the surgery were preferred over an additional injection at the same visit.

*Please describe how you have involved:*

- *Children and their representatives; People with protected characteristics under the Equality Act 2010; and, other people who may be affected by the proposal.*

Public Health Wales (PHW) has a role in engaging with the public and a range of statutory and third sector organisations to gain behavioural insights on the barriers, perceptions and experiences of the vaccine programmes in Wales. The organisation uses various tools and methods to engage directly with groups to inform and influence national strategies and service improvements. The aim is to actively involve the different sections of the public, such as ethnic minority groups<sup>2</sup> in the development of resources and interventions, with the aim of informing and building trust. As part of a [Study Report Evaluation of information resources](#) published in 2023 ) PHW used focus groups and in depth interviews with service users, to explore

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<sup>2</sup> <https://phw.nhs.wales/topics/immunisation-and-vaccines/engagement-insights/evaluation-of-information-resources-ethnic-minorities-summary-report-2023/>

attitudes towards vaccinations, as well as awareness and views of information on vaccinations. In addition, PHW published a [survey of parental attitudes](#) in 2021, with the aim of informing the pre-school vaccination programme, ensuring PHW's communication with parents meets their needs and to develop a deeper understanding of vaccine confidence in Wales. Some of the findings include:

- Parents classed as 6 C2DE<sup>3</sup> (9%) and disabled parents (19%) are more likely to have reservations about vaccine safety.
- Welsh speakers are less likely than other groups to have seen or heard information about vaccination in the past 12 months (77%).
- Younger age groups (16-24), parents of children under 18, those who receive Universal Credit and people who identify as transgender are more likely to have encountered concerning information about vaccinations.
- People from ethnic minority backgrounds are more likely to rate several diseases that the Welsh vaccine programme protects from as not serious, as are LGBTQ+ people.

Further work is planned by PHW communications on a strategy which sets out for parents and carers of young children the benefits of receiving varicella vaccination, including tailored information/ leaflets for specific groups, based on the results of the studies referenced above.

These messages will be taken forward at local level by health board communication teams to reach their resident populations.

## **8.2 What are the most significant impacts, positive and negative?**

### **Impacts**

The Welsh Government's Science Evidence Advice (SEA) team has obtained data from Annual PEDW data tables from Digital Health and Care Wales on admissions and finished consultant episodes due to varicella with and without complications such as meningitis, encephalitis, pneumonia, and other complications was obtained. From the latest data available (pre-pandemic) there were on average 265 admissions due to varicella without complications. Additionally, 47 admissions were specifically due to varicella with complications.

Further, the SEA team estimated the economic burden of varicella in Wales, focusing on the productivity losses of caregivers, and calculated to be in the region of 130,000 days lost, resulting in a productivity loss of £16 million per year.

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<sup>3</sup> those out of work and those educated to below degree level are less likely than average to consider these diseases serious.

Implementing a varicella vaccination programme will have a positive impact on the health of children in Wales. The programme will not only offer individual personal, direct protection from disease, but there are benefits at a population level, in terms of (community) immunity, which is evidenced in the experience of other countries such as the USA and Australia, which have seen the incidence of the disease and severe outcomes associated with it greatly reduced.

Cost effectiveness analysis undertaken shows that resources invested in immunisation programmes, such as the varicella programme, will return more in terms of gains by reducing pressure on the NHS, reducing the need to seek medical interventions both in terms of GP appointments and hospitalisations.

There is evidence that childhood vaccination is one of the interventions that can play an important part in levelling the playing field for disadvantaged groups. Vaccination programmes provide a degree of social mobility, as poverty and the associated ill-health and mortality from infectious diseases are no longer the determinants of one's life chances. Studies indicate vaccinated children are in better health and perform better at school. Vaccine recipients have the potential for improved life-expectancy largely demonstrated by, but not confined to, infants and children (Andre et al., 2008). Health interventions such as routine vaccinations could reduce infectious disease burden in early childhood and thereby help break the intergenerational cycle of poverty, poor health, and low income.

### **8.3 In light of the impacts identified, how will the proposal:**

- **maximise contribution to our well-being objectives and the seven well-being goals; and/or,**
- **avoid, reduce or mitigate any negative impacts?**

Due consideration has been given to how the policy relates to the goals under the Well-being of Future Generations (Wales) Act and the five ways of working. A highly vaccinated population is healthier, physically and mentally, which contributes to the healthier Wales goal, and healthier people mean a more productive workforce and higher productivity which lends itself to a more prosperous Wales. Healthier children go on to reach their potential regardless of their background/ circumstances which will mean a more equal Wales. Vaccination is key to global health security, in an interconnected world where disease outbreak can spread very quickly. A highly vaccinated country can respond better to public health outbreaks and emergencies, which results in a more globally responsible Wales.

### **In terms of the five ways of working, this policy considers:**

Vaccination programmes in the **long term** provide a degree of social mobility, as poverty and the associated ill-health and mortality from infectious diseases are no longer the determinants of one's life chances. Vaccine recipients have the potential

for improved life-expectancy largely demonstrated by, but not confined to, infants and children. Vaccination is one of the most important actions we can take for our own health, and it's the most important **preventative** action NHS Wales can offer to people in Wales. This vaccination programme will **integrate** and align with planned changes to the childhood vaccination schedule. Welsh Government officials will continue to work closely with Vaccine Programme Wales (VPW) and Public Health Wales (PHW) to minimise disruption to the NHS delivery. The Welsh Government has and will continue to act in **collaboration** with VPW and PHW in planning the implementation of the vaccination programme and monitoring its success, through regular engagement. Relevant stakeholders were **involved** to inform this integrated impact assessment and will be kept up to date as the policy develops. Subject to Ministerial agreement, the Welsh Government will work with clinical and operational colleagues to inform decisions on how a varicella programme would be delivered from December 2025.

In order to maximise the benefits described, vaccination must be accessible to all.

To maximise uptake for the varicella programme in hard-to-reach groups, NHS Wales will be implementing the principles of the National Immunisation Framework, published by the Welsh Government in 2022<sup>4</sup>, which aims to transform and improve the delivery of vaccination and immunisation programmes for the people of Wales, with an emphasis on increased uptake and with equity at its core.

In delivering this vaccination programme, health boards will be expected to offer tailored support to enable and encourage under-served groups to take-up the offer of the vaccination. This requires a proactive approach to ensure that:

- Everyone eligible for a vaccination is appropriately offered an appointment (and recalled when necessary) and can access a vaccination.
- Everyone is supported with the information that they need to make an informed decision on vaccination based upon reliable sources.

There should be locally-led action to engage and empower communities to understand the benefits of vaccination and support and motivate others in their communities to be vaccinated, in particular, in areas of low uptake. Health boards are expected to develop a Vaccine Equity Strategy and programme of work with dedicated public health input.

Person centred, accessible deployment options are critical to maximising uptake and so there is the expectation on health boards have this at the centre of their deployment planning and delivery. Bringing vaccines as close to individuals as possible improves uptake – delivery by GPs through primary care is one of the most

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<sup>4</sup> <https://www.gov.wales/sites/default/files/publications/2022-10/national-immunisation-framework-for-wales.pdf>

accessible ways to obtain vaccination due to the general proximity of GP surgeries to where people live.

#### **8.4 How will the impact of the proposal be monitored and evaluated as it progresses and when it concludes?**

Surveillance of uptake and equality of routine childhood vaccinations in Wales is carried out by Public Health Wales' Vaccine Preventable Disease Programme through the national COVER scheme in Wales. COVER reports are published on a quarterly basis, summarising vaccination uptake for children.

An annual COVER report is produced, summarising coverage of vaccinations for children reaching key birthdays during the 12 month period April to March. Trends in inequalities in coverage, according to level of socioeconomic deprivation are also published on an annual basis.