

Proposal to extend Papillomavirus (HPV) vaccination to men and women up to 26 years old: A way of speeding up the elimination of HPV-induced cancers¹

Proposition d'une extension de la Vaccination contre le Papillomavirus (HPV) pour les hommes et les femmes jusqu'à 26 ans : Un moyen d'accélérer l'élimination des cancers HPV induits

The French National Academy of Medicine (ANM) has mobilized on several occasions to promote vaccination against the papillomavirus (HPV) in the hope of eliminating HPV-induced cancers of the cervix, oropharynx, oral cavity, and anus (1-4). Since their first publications in 2007, the vaccination recommendations of government authorities have evolved significantly.

Currently, vaccination against HPV infections is recommended in France for all girls and boys aged 11 to 14 with a 2-dose schedule. Furthermore, as part of the vaccination catch-up program, HPV vaccination with Gardasil9® is recommended for both sexes between 15 and 19, and for men who have sex with other men or for immunocompromised patients, up to 26 according to a 3-dose schedule. In September 2023, a free vaccination campaign in second grade class for all schoolchildren aged 11 to 14 was set up.

The ANM welcomes all these measures but is concerned, given the vaccination delay since 2007, about the number of people not having benefited from it since its beginning. It is thus estimated that there is a cumulative backlog of 2 million unvaccinated women aged 20 to 26 (5) and this backlog doubles, in including the male vaccination now accepted. Moreover, the COVID-19 period had an additional negative impact on vaccination (6).

An extension of vaccination to adults up to 26 years old for both sexes would represent an individual decision and not a parental one and is fully justified on the following arguments:

- The risk of HPV infection persists throughout life in both sexes (7, 8) and 50% of cervical cancers are due to infections acquired after 20 (9).
- While the benefit of vaccination is optimal for uninfected people, it remains important for infected people, especially since in 88% of infections only one HPV genotype is found (10) while the Gardasil9® vaccine has nine.
- Several studies have shown the effectiveness and good tolerance of the vaccine between 16 and 26 on preneoplastic lesions and genital warts in women and men. A study carried out in Sweden, shows a 62% reduced risk of developing an uterus cervix cancer for vaccinated women between 20 and 30 compared to those unvaccinated (11).

This extension of vaccination to the general population without distinction of sex is already the rule in many countries.

¹ Press release from the French National Academy of Medicine. January 29, 2024

For all these reasons, the French National Academy of Medicine recommends extending and encouraging HPV vaccination in the general population up to 26 years old to help eliminating HPV-related cancers and diseases more reliably and quickly.

Références

1. P. Bégué, R. Henrion, B. Blanc, M. Girard, H. Sancho-Garnier. Les vaccins des papillomavirus humains. Leur place dans la prévention du cancer du col utérin. *Bull. Acad. Natle Méd.*, 2007, 191, 9, 1805-1817
2. J. Rouëssé, R. Villet. Le cancer du col utérin : insuffisance de dépistage et de vaccination contre l'agent responsable *Bull. Acad. Natle Méd.*, 2016, 200, 4-5, 969-971
3. R. Villet. Vacciner les filles et les garçons contre le Papillomavirus humain (HPV) : une nécessité pour éliminer les cancers du col utérin mais aussi de l'oropharynx, de la cavité buccale et de l'anus. *Bull Acad Natle Méd*, 2019 203, 659-661
4. Communiqué de l'Académie nationale de médecine, 23 juin 2022 Vaccination contre le papillomavirus humain (HPV) : la France est très en retard
5. Données de couverture vaccinale papillomavirus humains (HPV) par groupe d'âge (santepubliquefrance.fr)
6. Weill A, Drouin J, Desplas D, *et al.* Usage des médicaments de ville en France durant l'épidémie de la Covid-19 – point de situation jusqu'au 25 avril 2021. EPI-PHARE - Groupement d'intérêt scientifique (GIS) ANSM-CNAM.
7. Shi R, Devarakonda S, Liu L *et al.* Factors associated with genital human papillomavirus infection among adult females in the United States, NHANES 2007–2010, *BMC Research Notes* 2014, 7:544
8. Giuliano A.R., E.Villa L.L *et al.* The Human Papillomavirus Infection in Men Study: Human Papillomavirus Prevalence and Type Distribution among Men Residing in Brazil, Mexico, and the United States. *Cancer Epidemiol Biomarkers Prev* 2008 17 (8): 2036–2043.
9. Burger E.A., Kim J.J., Sy S. *et al.* Age of Acquiring Causal Human Papillomavirus (HPV) Infections: Leveraging Simulation Models to Explore the Natural History of HPV-induced Cervical Cancer. *Clin Infect Dis.* 2017 Sep 15;65(6):893-899.
10. Ferris D.G., Brown D.R. Giulano A.R. *et al.* Prevalence, incidence, and natural history of HPV infection in adult women ages 24 to 45 participating in a vaccine trial *Papillomavirus Res.* 2020 Dec:10:100202.
11. Lei J., Ploner A., Elfström K.M. *et al.*, HPV Vaccination and the Risk of Invasive Cervical Cancer *N Engl J Med* 2020; 383:1340-1348