

Executive summary

This document updates immunization recommendations for people at increased risk of suffering vaccine preventable diseases.

In order to establish recommendations, those already approved by the Committee of Vaccines Program and Registry and the Public Health Commission of the Interterritorial Council of the National Health System (ICNHS) were taken into account in the first place. In addition, WHO position papers, ECDC technical documents and recommendations conducted by National Immunization Technical Advisory Groups of other similar countries have been reviewed, paying particular attention to those recommendations based on systematic reviews with gradation of the evidence. Additionally, specific reviews of the literature have been made for each of the subsections. However, certain risk groups lack data on the efficacy or effectiveness of vaccines, although the risk of suffering from vaccine-preventable diseases is important. Generally this is due to the difficulty of recruiting these people to carry out this type of studies, or the difficulty of measuring these parameters in this type of population groups. In these cases, vaccination has been advised as long as the expected benefit foreseen will overcome the risks of its administration. For this reason, the document makes some recommendations outside the indications of the summary of product characteristics of vaccines, especially in cases where the risk of suffering the disease is very high.

People with immunodeficiencies are a special risk group of vaccine-preventable infections and vaccination recommendations have been established according to the cause of the immunodeficiency and the most appropriate time to administer the recommended vaccines. People suffering of chronic diseases constitute risk groups which are progressively more frequent, due to the increase in the life expectancy and the general aging of people in our society. The most frequent pathologies are addressed by establishing specific vaccination recommendations according to the risk that their condition entails. Moreover, vaccination recommendations for institutionalized people, those with risk behaviors and in certain occupational environments are included. Additionally, recommendations for women of childbearing age and during pregnancy and the puerperium are updated.

A table summarizes the vaccination recommendations at the end of each subsection to facilitate consultation.

Highlights of vaccination recommendations

With respect to the recommendations agreed to within the ICNHS, in force at the time of writing this document, some changes have been introduced that are listed below:

Tetanus and diphtheria (Td): *any contact with healthcare services, including occupational health services will be used to check the previous vaccination status, and to vaccinate if necessary. This review insists on certain risk groups.*

Pertussis (DTaP / dTap):

- *Solid organ transplantation and awaiting transplant*
- *Hematopoietic transplantation*
- *Cancer / malignant blood diseases*

Influenza: *1 annual dose in:*

- *Treatment with eculizumab*
- *Cerebrospinal fluid fistula*
- *Residents in long-term care facilities*
- *Occupational staff exposed to birds and pigs*

Pneumococcus:

Sequential vaccination *(conjugate vaccine plus polysaccharide vaccine) in:*

- *Treatment with eculizumab*
- *Chronic inflammatory diseases in treatment with immunosuppressive drugs*
- *Down's Syndrome*

Vaccination with VNP23:

- *Residents in long-term care facilities*

Hepatitis A:

- HIV infection
- Chronic liver disease, chronic alcoholism and cirrhosis
- Essential personnel traveling to high endemic areas or with poor hygienic-sanitary conditions
- People in a situation of prostitution

Hepatitis B:

- Residents in psychiatric centers
- Essential personnel traveling to areas of high endemic or poor hygienic-sanitary conditions and people at increased risk for HBV
- Down's Syndrome
- Chronic alcoholism, chronic liver disease and cirrhosis
- People in a situation of prostitution

MMR (measles, mumps and rubella): any contact with healthcare services, including occupational health services will be used to check the previous vaccination status, and to vaccinate if necessary.

Meningococcus B:

- Complement system deficiency
- Transplantation of hematopoietic progenitors

MenACWY (booster dose at 5 years of age in risk groups):

- Complement system deficiencies, including treatment with eculizumab
- Anatomical asplenia or severe splenic dysfunction (sickle cell anemia)
- HIV infection
- Laboratory staff

Varicella: any contact with healthcare services, including occupational health services, will be used to check the previous vaccination status or disease, and to vaccinate if necessary.

Herpes zoster: new vaccine with glycoprotein E (HZ/su) in adults with the following risk conditions, as soon as it is available. The most appropriate schedule and the ideal moment of vaccination will be determined later.

- Transplant of solid organ, pre-transplant or post-transplant
- Transplantation of hematopoietic progenitors
- HIV infection
- Treatment with anti-JAK drugs

HPV:

- WHIM syndrome (Primary immunodeficiency)
- Women solid organ transplantation and hematopoietic transplantation up to age 26
- HIV infection:
 - Children: both girls and boys with a 3-dose schedule
 - Adults: men and women up to age 26 (3 dose schedule)
- Men who have sex with men (MSM) up to age 26 (3 dose schedule)
- People in situation of prostitution up to the age of 26 (3 dose schedule)
- Women with excisional treatment of the cervix

Hib:

- Complement system deficiency, including treatment with eculizumab
- Anatomical asplenia or severe splenic dysfunction (sickle cell anemia)

These recommendations update those previously made in other ICNHS documents dealing with immunization in risk groups: against tetanus and diphtheria with Td¹, pertussis², pneumococcus³, hepatitis A⁴, meningococcal serogroup B⁵ and varicella⁶.

Immunization schedules for risk groups

The update of vaccination recommendations for risk groups are reflected in an immunization schedule for children and adolescents with risk conditions and an immunization schedule for adults with risk conditions. Both immunisation schedules are available in Annex 3.

Bibliografía Resumen ejecutivo (References Executive summary)

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 - ² Grupo de Trabajo Tosferina 2012 de la Ponencia de Programa y Registro de Vacunaciones. Revisión del programa de vacunación frente a tos ferina en España. Comisión de Salud Pública del Consejo Interterritorial del Sistema Nacional de Salud. Ministerio de Sanidad, Servicios Sociales e Igualdad, 2013. Disponible en: <http://www.msssi.gob.es/profesionales/saludPublica/prevPromocion/vacunaciones/docs/TosFerina.pdf> [consultado el 4 de septiembre de 2017].
 - ³ Grupo de trabajo vacunación frente a neumococo en grupos de riesgo 2015 de la Ponencia de Programas y Registro de Vacunaciones. Utilización de la vacuna frente a neumococo en grupos de riesgo. Comisión de Salud Pública del Consejo Interterritorial del Sistema Nacional de Salud. Ministerio de Sanidad, Servicios Sociales e Igualdad, mayo 2015. Disponible en: http://www.msssi.gob.es/profesionales/saludPublica/prevPromocion/vacunaciones/docs/Neumococo_Grupos_riesgo.pdf [consultado el 30 de marzo de 2017].
 - ⁴ Grupo de trabajo hepatitis A en grupos de riesgo de la Ponencia de Programa y Registro de Vacunaciones. Recomendaciones de vacunación frente a hepatitis A en grupos de riesgo. Comisión de Salud Pública del Consejo Interterritorial del Sistema Nacional de Salud, abril 2017. Disponible en: http://www.msssi.gob.es/profesionales/saludPublica/prevPromocion/vacunaciones/docs/Recomend_Hepatitis_A.pdf [consultado el 31 de agosto de 2017].
 - ⁵ Grupo de Trabajo Uso de 4CMenB en situaciones especiales de la Ponencia de Programa y Registro de Vacunaciones y Ponencia de Vigilancia Epidemiológica. Recomendaciones de utilización de la vacunas frente a enfermedad meningocócica por serogrupo B. Comisión de Salud Pública del Consejo Interterritorial del Sistema Nacional de Salud. Ministerio de Sanidad, Servicios Sociales e Igualdad, abril 2014. Disponible en: http://www.msssi.gob.es/profesionales/saludPublica/prevPromocion/vacunaciones/docs/MenB_situacEspecial_es.pdf [consultado el 20 de abril de 2017].
 - ⁶ Ponencia de Programas y Registro de Vacunaciones. Revisión de las recomendaciones de vacunación frente a varicela en grupos de riesgo. Comisión de Salud Pública del Consejo Interterritorial del Sistema Nacional de Salud. Ministerio de Sanidad, Servicios Sociales e Igualdad, mayo 2015. Disponible en: http://msssi.es/profesionales/saludPublica/prevPromocion/vacunaciones/docs/Recomend_Varicela_Gruposriesgo.pdf [consultado el 31 de agosto de 2017].