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DARRERES EVIDENCIES EN VACUNES I NOVES PAUTES

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Grup de Treball Vacunes i Profilaxi

INDEX

Grip

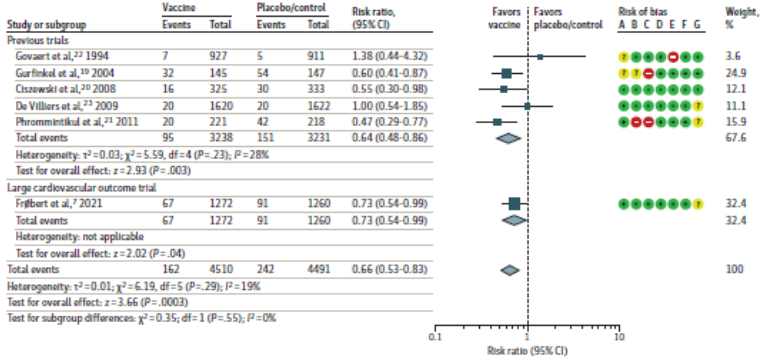
JAMA Network Open

Original Investigation | Cardiology

Association of Influenza Vaccination With Cardiovascular Risk A Meta-analysis

Bahar Behrouzi, MSc; Deepak L. Bhatt, MD, MPH; Christopher P. Cannon, MD; Orly Vardeny, PharmD, MS; Douglas S. Lee, MD, PhD; Scott D. Solomon, MD; Jacob A. Udell, MD, MPH

Figure 1. Major Adverse Cardiovascular Events for Influenza Vaccine vs Control When Comparing 2021 Large Cardiovascular Outcome Trial With Previous Meta-analysis



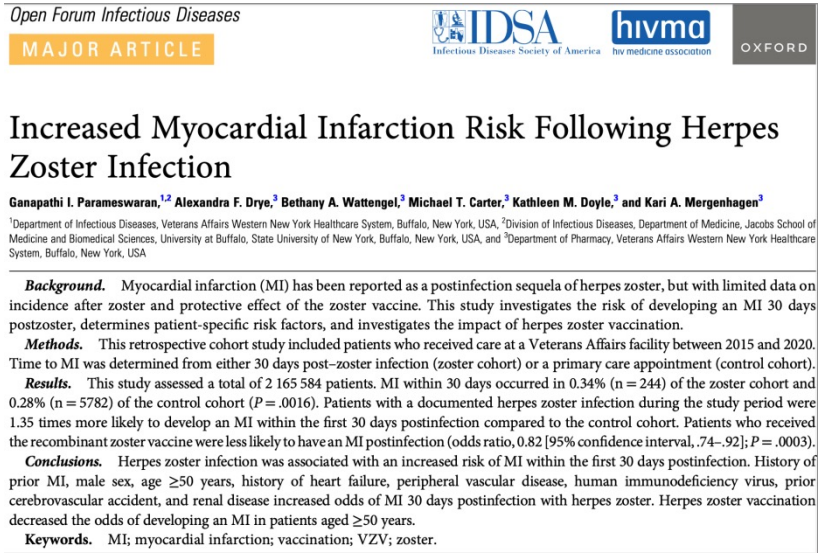
Study or subgroup	Vaccine Events	Vaccine Total	Placebo/control Events	Placebo/control Total	Risk ratio, (95% CI)	Weight, %
Previous trials						
Govaert et al,[22] 1994	7	927	5	911	1.38 (0.44-4.32)	3.6
Gurfinkel et al,[19] 2004	32	145	54	147	0.60 (0.41-0.87)	24.9
Ciszewski et al,[20] 2008	16	325	30	333	0.55 (0.30-0.98)	12.1
De Villiers et al,[23] 2009	20	1620	20	1622	1.00 (0.54-1.85)	11.1
Phrommintikul et al,[21] 2011	20	221	42	218	0.47 (0.29-0.77)	15.9
Total events	95	3238	151	3231	0.64 (0.48-0.86)	67.6
Heterogeneity: $\tau^2 = 0.03$; $\chi^2 = 5.59$, df = 4 ($P = .23$); $I^2 = 28\%$						
Test for overall effect: $z = 2.93$ ($P = .003$)						
Large cardiovascular outcome trial						
Frgbert et al,[7] 2021	67	1272	91	1260	0.73 (0.54-0.99)	32.4
Total events	67	1272	91	1260	0.73 (0.54-0.99)	32.4
Heterogeneity: not applicable						
Test for overall effect: $z = 2.02$ ($P = .04$)						
Total events	162	4510	242	4491	0.66 (0.53-0.83)	100
Heterogeneity: $\tau^2 = 0.01$; $\chi^2 = 6.19$, df = 5 ($P = .29$); $I^2 = 19\%$						
Test for overall effect: $z = 3.66$ ($P = .0003$)						
Test for subgroup differences: $\chi^2 = 0.35$, df = 1 ($P = .55$); $I^2 = 0\%$						

- 6 RCT
- 9001 participants (42.5% dones, 65.5 a mitjana)
- Seguiment 365 d
- RCV general en vacunes vs no vacunats:
- 3.6% vs 5.4% (RR, 0.66; 95% CI, 0.53-0.83; P < .001)
- Mortalitat vacunes vs no vacunes:

  1.7% vs 2.5% (RR, 0.74; 95% CI, 0.42-1.30; P = .29)

Herpes Zòster

- > 2 mill pacs:
  - 244 casos
  - 5782 controls
- 30 dies seguiment
- IM 0.34% HZ vs. 0.28% no-HZ OR 1.35 (P = .0016)
- Homes, >50, VIH, ERC, AVC, IM, IC > OD
- Vacuna <OR 0.82 (.74-.92; p=0,0003)



Open Forum Infectious Diseases

MAJOR ARTICLE

IDSA Infectious Diseases Society of America · hivma hiv medicine association · OXFORD

Increased Myocardial Infarction Risk Following Herpes Zoster Infection

Ganapathi I. Parameswaran,[1,2] Alexandra F. Drye,[3] Bethany A. Wattengel,[3] Michael T. Carter,[3] Kathleen M. Doyle,[3] and Kari A. Mergenhagen[3]

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Background. Myocardial infarction (MI) has been reported as a postinfection sequela of herpes zoster, but with limited data on incidence after zoster and protective effect of the zoster vaccine. This study investigates the risk of developing an MI 30 days postzoster, determines patient-specific risk factors, and investigates the impact of herpes zoster vaccination.

Methods. This retrospective cohort study included patients who received care at a Veterans Affairs facility between 2015 and 2020. Time to MI was determined from either 30 days post–zoster infection (zoster cohort) or a primary care appointment (control cohort).

Results. This study assessed a total of 2 165 584 patients. MI within 30 days occurred in 0.34% (n = 244) of the zoster cohort and 0.28% (n = 5782) of the control cohort ($P = .0016$). Patients with a documented herpes zoster infection during the study period were 1.35 times more likely to develop an MI within the first 30 days postinfection compared to the control cohort. Patients who received the recombinant zoster vaccine were less likely to have an MI postinfection (odds ratio, 0.82 [95% confidence interval, .74–.92]; $P = .0003$).

Conclusions. Herpes zoster infection was associated with an increased risk of MI within the first 30 days postinfection. History of prior MI, male sex, age ≥50 years, history of heart failure, peripheral vascular disease, human immunodeficiency virus, prior cerebrovascular accident, and renal disease increased odds of MI 30 days postinfection with herpes zoster. Herpes zoster vaccination decreased the odds of developing an MI in patients aged ≥50 years.

Keywords. MI; myocardial infarction; vaccination; VZV; zoster.

Herpes Zòster

- Mateixa població?
- Mateix seguiment?
- 71911 HZ
- HZ OR 1.93 (IC 1.57.2.4; p=0.0001)
- 324920 mil vacunats
- Vacuna HZ
  - Recombinant OR 0.57 (.46-.72; p=.0001)
  - Viva 0.77 (.65-.91; p=.002)

Clinical Infectious Diseases

MAJOR ARTICLE

IDSA Infectious Diseases Society of America · hivma hiv medicine association · OXFORD

Increased Stroke Risk Following Herpes Zoster Infection and Protection With Zoster Vaccine

Ganapathi Iyer Parameswaran,[1,2] Bethany A. Wattengel,[3] Hubert C. Chua,[3] Jessica Swiderek,[3] Tom Fuchs,[4] Michael T. Carter,[3] Laura Goode,[3] Kathleen Doyle,[3] and Kari A. Mergenhagen[3]

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Background. Studies evaluating stroke following varicella zoster virus (VZV) infection are limited, and the utility of zoster vaccination against this phenomenon is unclear. This study aimed to determine the risk of stroke 30 days following zoster infection and to evaluate the impact of zoster vaccinations on the risk of stroke in VZV-infected patients.

Methods. This retrospective case-control study was conducted from January 2010 to January 2020 utilizing nationwide patient data retrieved from the Veterans Affairs' Corporate Data Warehouse.

Results. A total of 2 165 505 patients ≥18 years of age who received care at a Veterans Affairs facility were included in the study, of whom 71 911 had a history of zoster infection. Zoster patients were found to have 1.9 times increased likelihood of developing a stroke within 30 days following infection (odds ratio [OR], 1.93 [95% confidence interval {CI}, 1.57–2.4]; $P < .0001$). A decreased risk of stroke was seen in patients who received the recombinant zoster vaccine (OR, 0.57 [95% CI, .46–.72]; $P < .0001$) or the live zoster vaccine (OR, 0.77 [95% CI, .65–.91]; $P = .002$).

Conclusions. Patients had a significantly higher risk of stroke within the first month following recent herpes zoster infection. Receipt of at least 1 zoster vaccination was found to mitigate this increased risk. Vaccination may therefore be viewed as a protective

Herpes Zòster

The immunogenicity and the safety of the adjuvanted glycoprotein E (gE)-based recombinant vaccine against herpes zoster (RZV) in cancer patients during immunotherapy

Angioletta Lasagna, Dalila Mele, Federica Bergami, Domiziana Alaimo, Chiara Dauccia, Nicolò Alessio, Giuditta Comolli, Francesca Pasi, Alba Muzzi, Viola Novelli, Fausto Baldanti, Paolo Pedrazzoli & Irene Cassaniti

- 38 receptors de bole immune
- Tilos Ac basals, setmana 3 i mes 6
- 40.5% resposta immune satisfactòria

Table 1. Demographic and clinical characteristics of the enrolled patients who received RZV.

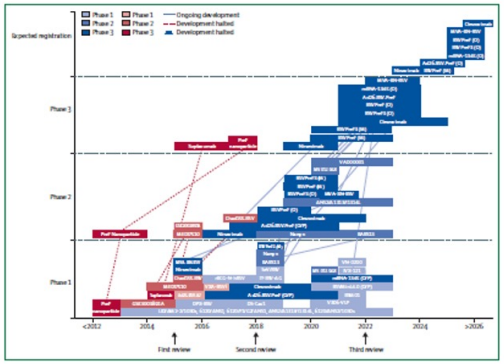
Sex	Num patients	%
Female/Male	10/28	27/73
Comorbidities		
Cardiovascular	20	52.6
COPD/Asthma	6	15.8
Coronaric heart disease	4	10.5
Diabetes mellitus	6	15.8
Autoimmune disorders	1	2.6
HCV	5	13.2
HBV	2	5.3
HIV	0	0
No comorbitidies	11	28.9
≥1 comorbidity	27	71.1
Previous HZ		
Yes/No	2/36	5.3/94.7
Type of tumor		
Lung Cancer	21	55.3
Kidney cancer	7	18.4
Melanoma	5	13.2
HCC	3	7.9
Head&Neck cancer	2	5.2
Type of ICIs		
Pembrolizumab	15	39.5
Nivolumab	12	31.6
Nivolumab + Ipilimumab	6	15.7
Cemiplimab	2	5.3
Tislelizumab	2	5.3
Atezolizumab	1	2.6

Legend: COPD: chronic obstructive pulmonary disease; HBV: Hepatitis B virus; HCV: Hepatitis C virus; HIV: Human immunodeficiency virus; HCC: hepatocellular carcinoma; ICIs: immune-checkpoints inhibitors.

VRS

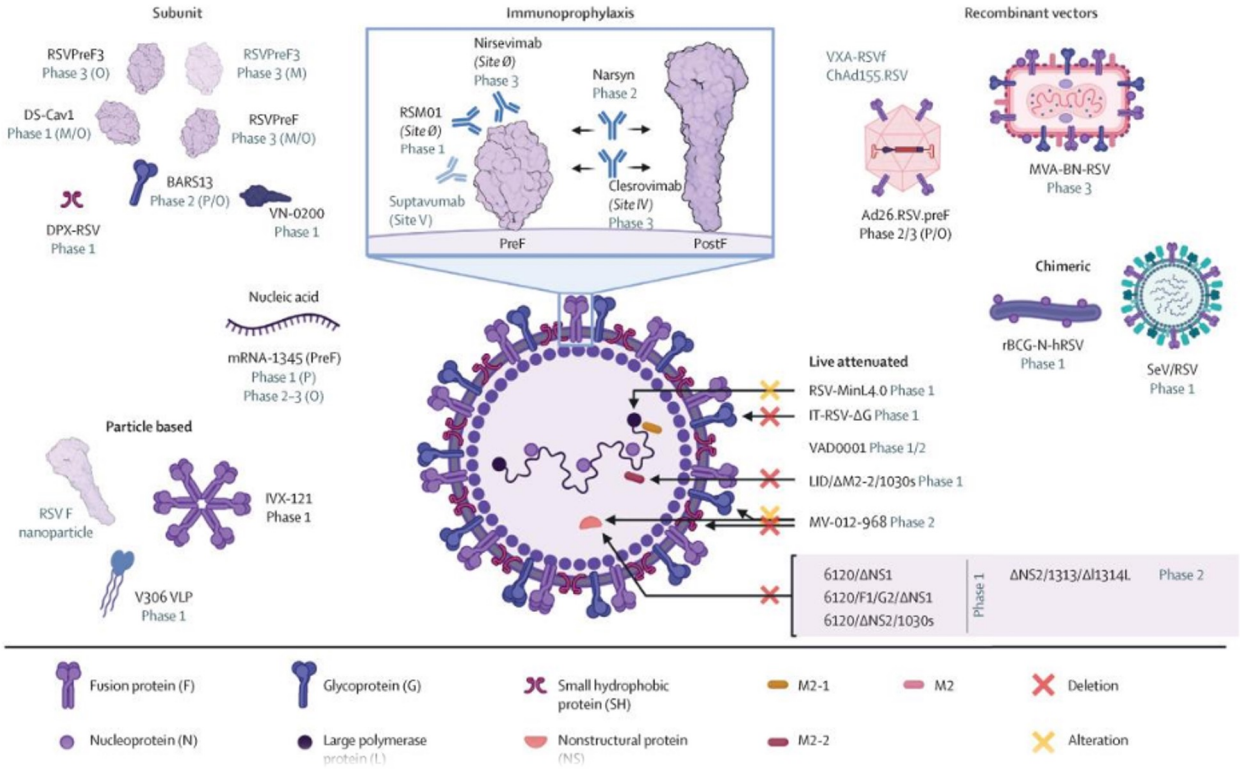
Respiratory syncytial virus prevention within reach: the vaccine and monoclonal antibody landscape

Natalie I Mazur, Janne Terstappen, Ranju Baral, Azucena Bardají, Philippe Beutels, Ursula J Buchholz, Cheryl Cohen, James E Crowe Jr, Clare L Cutland, Linda Eckert, Daniel Feikin, Tiffany Fitzpatrick, Youyi Fong, Barney S Graham, Terho Heikkinen, Deborah Higgins, Siddhivinayak Hirve, Keith PKlugman, Leyla Kragten-Tabatabaie, Philippe Lemey, Romina Libster, Yvette Löwensteyn, Asuncion Mejias, Flor M Munoz, Patrick K Munywoki, Lawrence Mwananyanda, Harish Nair, Marta C Nunes, Octavio Ramilo, Peter Richmond, Tracy J Rockwardt, Charles Sande, Padmini Srikantiah, Naveen Thacker, Kody A Waldstein, Dan Weinberger, Joanne Wildenbeest, Dexter Wiseman, Heather J Zar, Maria Zambon, Louis Bont



- Vector
- Subunit
- Particle
- Live attenuated
- Chimeric
- Nucleic acid
- ❖ mAb

Dianes VRS


Subunit
RSVPreF3 Phase 3 (O)
RSVPreF3 Phase 3 (M)
DS-Cav1 Phase 1 (M/O)
RSVPreF Phase 3 (M/O)
BARS13 Phase 2 (P/O)
DPX-RSV Phase 1
VN-0200 Phase 1
Immunoprophylaxis
Nirsevimab (Site Ø) Phase 3
Narsyn Phase 2
RSM01 (Site Ø) Phase 1
Suptavumab (Site V)
Clesrovimab (Site IV) Phase 3
PreF
PostF
Recombinant vectors
VXA-RSVf ChAd155.RSV
Ad26.RSV.preF Phase 2/3 (P/O)
MVA-BN-RSV Phase 3
Chimeric
rBCG-N-hRSV Phase 1
SeV/RSV Phase 1
Nucleic acid
mRNA-1345 (PreF) Phase 1 (P) Phase 2–3 (O)
Particle based
RSV F nanoparticle
IVX-121 Phase 1
V306 VLP Phase 1
Live attenuated
RSV-MinL4.0 Phase 1
IT-RSV-ΔG Phase 1
VAD0001 Phase 1/2
LID/ΔM2-2/1030s Phase 1
MV-012-968 Phase 2
6120/ΔNS1
6120/F1/G2/ΔNS1
6120/ΔNS2/1030s
Phase 1
ΔNS2/1313/Δl1314L
Phase 2
Fusion protein (F)
Glycoprotein (G)
Small hydrophobic protein (SH)
M2-1
M2
Deletion
Nucleoprotein (N)
Large polymerase protein (L)
Nonstructural protein (NS)
M2-2
Alteration

Càrrega VRS

Estimation of RSV-attributable hospitalizations and deaths in Spain between 2016–2019

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INTRODUCTION

- In Spain, Respiratory Syncytial Virus (RSV) hospitalization rates have been reported to be approximately 2,500/100,000[1,2] in children aged <1 year and 1.7/100,000[3] in adults aged ≥60 years
- RSV incidence can be underestimated, due to nonspecific symptoms and infrequent testing and reporting, particularly among older children[1] and adults[4]
- Model-based approaches can indirectly estimate the proportion of a health outcome attributable to RSV[5]
- We aimed to estimate the population-based incidence of RSV-attributable hospitalizations and mortality in Spain using a statistical model-based approach

METHODS

Study design

- Observational retrospective database study

Data sources

- National hospital discharge and mortality data (2016–2019) were obtained from the Ministry of Health's national hospital discharge database[6] and the National Statistical Office's mortality database[7]

Statistical methods

- The number of RSV-attributable respiratory hospitalizations and deaths (ICD-10 codes: J00-99) were predicted using a Quasi-Poisson regression model that linked baseline seasonal variation in the number of outcome events with the activity of viral proxies (RSV in children aged <2 years, and influenza in children or adults aged ≥60 years for respective models)
- The number of events attributed to RSV were calculated as the predicted number of events from the full model minus those from a model with no RSV circulation
- Predicted incidence rates (IR) were obtained by dividing the yearly model-based number of RSV-attributable events by the population at risk
- The proportion of RSV-attributable events (%) was obtained by dividing the yearly model-based age-specific number of RSV events by the annual number of all respiratory hospitalizations or deaths
- RSV observed incidence rates were calculated based on reported RSV-specific codes (ICD-10 codes: B97.4, J21.0, J12.1, J20.5)

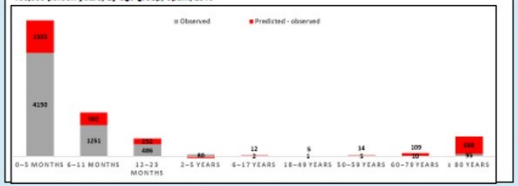
RESULTS

- Observed and predicted incidence rates increased between 2016–2019. The highest incidences were observed in the youngest (<2 years) and oldest (≥80 years) age groups, where up to 73% and 10% of all respiratory hospitalizations were attributed to RSV in respective groups (Table 1)
- During 2019, RSV-attributable hospitalization rates among children aged 0–5, 6–11, 12–23 months and 6–17 years, were approximately 1.3, 1.4, 1.5 and 6.5 times higher than those reported based on RSV-specific codes alone (Figure 1). Predicted rates in children aged 2–5 years were lower than observed with poor model fit
- Mortality was not modelled in children due to a low number of events
- During 2019, RSV-attributable hospitalization rates among adults aged 18–49, 50–59, 60–69, 70–79 and ≥80 years were 4.9, 4.0, 6.4 and 8.3 higher than those observed based on RSV-specific codes alone (Figure 1)
- Annual population-based RSV-attributable mortality rates were less than 1/100,000 among adults aged 18–59 years, ranged (by calendar year) between 3.2–4.4/100,000 for those aged 60–79 years and ranged from 49.0 to 67.9/100,000 for those ≥80 years of age

Table 1. Estimated RSV-attributable respiratory hospitalizations incidence rate (IR) (per 100,000 person-years) and percentage of all respiratory hospitalizations attributable to RSV infections by age group and year, Spain

	2016		2017		2018		2019	
Age group	IR [95%CI]	%	IR [95%CI]	%	IR [95%CI]	%	IR [95%CI]	%
0–5 months	3098.3 [3812.9; 151.5]	65,4	4329.9 [4129.1; 495.8]	69	5390.0 [5140.1; 5596.6]	69,1	5453.2 [5200.4; 5662.2]	72
6–11 months	1285.3 [1151.8;1423.6]	47,5	1301.9 [1247.3;1541.6]	51,2	1732.7 [1552.7; 1919.1]	51,2	1753.0 [1570.9; 1941.6]	51,8
12–23 months	543.9 [460.9; 637.5]	29	578.3 [490.0; 677.9]	30,5	707.3 [599.4; 829.1]	31,1	717.9 [608.4; 841.5]	33,5
2–5 years	11.7 [0; 74.9]	0,9	11.0 [0; 70.2]	1	11.9 [0; 75.8]	0,9	13.1 [0; 83.5]	1,1
6–17 years	14.1 [0.3; 28.6]	5	12.8 [0.3; 25.9]	4,6	13.5 [0.3; 27.3]	4,7	14.6 [0.3; 29.5]	5,1
18–49 years	5.1 [0; 11.5]	2,1	4.8 [0; 10.7]	1,9	5.1 [0; 11.4]	1,9	5.5 [0; 12.4]	2,1
50–59 years	18.2 [7.1; 29.2]	3,2	16.4 [6.4; 26.3]	2,9	17.1 [6.7; 27.5]	2,8	18.3 [7.1; 29.4]	3,1
60–79 years	114.5 [85.4; 145.2]	5,8	116.0 [86.5; 147.1]	5,8	130.9 [97.6; 165.9]	6,1	125.8 [93.8; 159.4]	6,1
≥80 years	702.5 [540.4; 871.0]	9,5	683.6 [525.9; 847.7]	8,7	753.8 [579.9; 934.7]	8,9	776.9 [597.7; 963.3]	9,4

Figure 1. Difference between observed and predicted RSV-attributable respiratory hospitalization incidence rate (per 100,000 person-years) by age group, Spain, 2019



CONCLUSIONS

- When accounting for under ascertainment, estimated incidence rates of RSV-attributable hospitalizations were considerably higher than those reported based on RSV-specific codes, in all ages but particularly among older children and older adults
- Annual RSV-attributable hospitalization incidence estimates were comparable to other model-based studies assessing children in the United Kingdom (4,184 in 0-5 months to 1,272/100,000 in 6–23 months)[8] and a global meta-analysis assessing adults (from 231 in 65-74 year olds to 692/100,000 in >85 year olds)[9]
- Preventive measures such as vaccines, as well as effective RSV anti-virals, would have a substantial impact on health, particularly among infants and older adults

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Disclosures

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Presented at the European Respiratory Society International Congress 2023; September 9–13, 2023; Milan, Italy

NOVES PAUTES

- Qualsevol edat si CIN2 o superior (3 dosis:0,1-2,6m)
- VPH fins els 45 a si: 3 dosis (0.1.6)
  - Síndrome WHIM (IDP): (vacuna per tipus 6 i 11).
  - VIH
  - TOS i TPH
- VPH fins el 25 si CSR: 2 dosis, 6 mesos
- Catch-Up fins el 18 si noies no vacunades, o nois des de la data d'introducció de la vacunació (2 dosis, 6 mesos)


Recomendaciones de vacunación frente a VPH.
Revisión de la estrategia de una dosis.

Ponencia de Programa y Registro de Vacunaciones 2023

15 febrero 2024

Consejo Interterritorial
SISTEMA NACIONAL DE SALUD

GOBIERNO DE ESPAÑA
MINISTERIO DE SANIDAD

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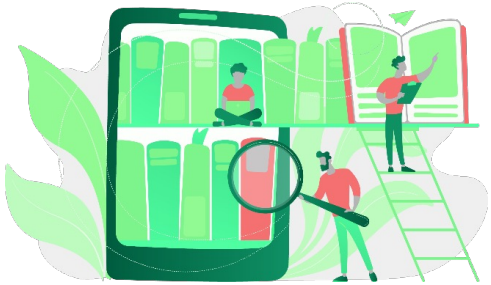

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L'actualització en AP

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