Quali vaccinazioni occorre raccomandare per le persone con HIV e per i pazienti immunocompromessi?

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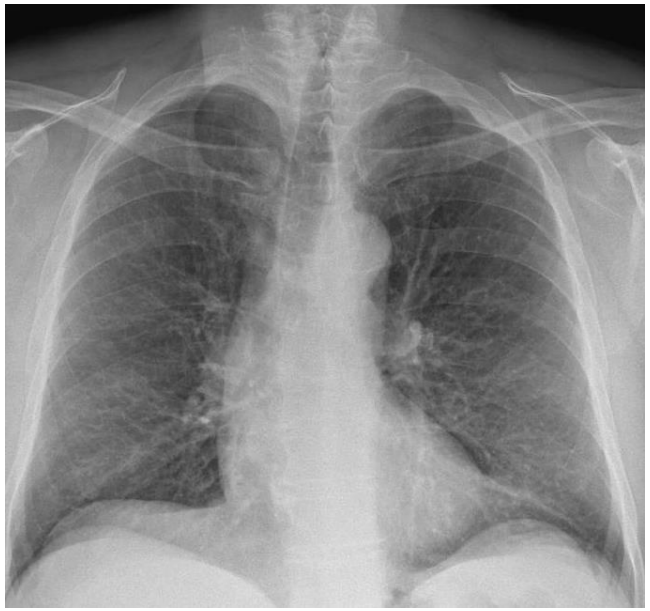
RSV e HIV: vaccinare anche prima dei 60 anni?

M, 58 anni

- HIV e pregresso LH a cellularità mista. All'inizio della CT CD4 : 58/mmc
- Attualmente HIV RNA non rilevato e CD4 379/mmc (ratio 0.9)
- Tosse, dispnea, broncospasmo, febbre e dolori artromialgici diffusi durati 14 giorni
- RX negativo
- Tampone NF pos per RSV A

G, 60 anni

- HIV, fumatore, IRC
- Attualmente HIV RNA non rilevato, CD4 721, ratio 0.6
- Tosse produttiva, iperpiressia e dispnea per 3 settimane, trattato dal curante con azitromicina e ceftriaxone IM
- RX : diffuso ispessimento interstiziale, comparsa di piccolo sfumato addensamento parenchimale in sede basale destra.
- Tampone NF pos per RSV B



MPOX vaccination and revaccination

Research Letter

FREE

October 3, 2024

Decline of Mpox Antibody Responses After Modified Vaccinia Ankara–Bavarian Nordic Vaccination

Ai-ris Y. Collier, MD[1]; Katherine McMahan, MS[1]; Catherine Jacob-Dolan, PhD[1]; et al

2 doses: median binding antibody ELISA titers to mpox M1R, B6R, A35R, A29L, and H3L antigens were 28, 25, 25, 27, and 27 at baseline, respectively, and peaked at 112, 384, 85, 29, and 76 at week 3 after vaccination but then declined to 38, 82, 32, 25, and 31 at 12 months

1 dose: median binding antibody ELISA titers to mpox M1R, B6R, A35R, A29L, and H3L antigens peaked at 45, 90, 32, 31, and 28 at week 3 but then declined to 33, 43, 30, 25, and 28 at 12 months

Mpox serum neutralizing antibody titers were minimal in participants after 2-dose or 1-dose MVA-BN vaccines (median titers, 11 and 9.5, respectively) at 3 months. High titers of mpox neutralizing antibodies (median titer, 965) were detected at 3 months after natural infection and persisted at 9 months postinfection (median titer, 284)

Collier et al. JAMA. 2024 Nov 19;332(19):1669-1672

B, 28 anni, AIDS

- MPOX infection (severe) 2022
- MPOX vaccine after infection?

G, 27 anni, PrEP user

- MPOX vaccine (II doses Jul 24 and Aug 24)
- MPOX infecton Apr 25

SARS-COV-2 and revaccination

The Journal of Infectious Diseases

MAJOR ARTICLE

Impact of Population Immunity and Public Health Measures on the Transmission of Omicron Subvariants BA.2 and BA.5 in Hong Kong

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Background. The rapid evolution of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and population-level vaccine administration have significantly shifted the population immunity. In Hong Kong, these shifts, coupled with the emergence of Omicron BA.5 with a strong ability of immune evasion, necessitate a deeper understanding of how population immunity and public health and social measures (PHSMs) have shaped the epidemic dynamics across age groups within the population.

Methods. We developed an age-structured, multistrain model and estimated key parameters including transmissibility for the emerging BA.5, the effects of PHSMs on transmission, and contributions of natural infection and vaccination to age-specific immunity against infection of each subvariant over time.

Results. We found that reactive PHSMs implemented in February 2022 decreased the time-varying effective reproductive number without the effect of immunity (R_t^{WI}) by 67% (95% credible interval [CrI], 52%–78%). However, subsequent relaxation of control measures since April 2022, alongside the enhanced transmissibility of BA.5, drove R_t^{WI} back to 3.4 (95% CrI, 2.8–4.1) by late May. Prior to the fifth wave, only 15% of the Hong Kong population had immunity and protection against BA.2 infection. Population immunity against BA.2 infection then increased significantly to 55% within 2 months given 47% cumulative infections and >30% vaccination uptake. Subsequently, with the emergence of BA.5, population immunity against BA.5 infection was 15% lower than that against BA.2 during the end of May.

Conclusions. Our findings underscore the dynamic interplay between population immunity, PHSMs, and variant transmissibility and highlight the potential risks posed by immune-evasive variants in the context of waning immunity and control relaxation.

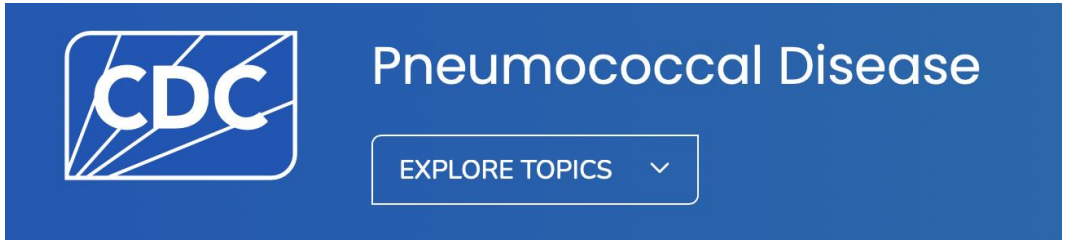
S, 44 anni, HIV

- CD4 873 (31%), R 1.0
- HIV non rilevato
- Non fumatore
- Dal 2021 regolari richiami vaccinali per SARS-CoV-2

Still needed yearly revaccination?

J Infect Dis. May 2025, online ahead of print.

Pneumococcal Vaccination and Revaccination



Recommendation for shared clinical decision-making

Based on shared clinical decision-making, adults **65 years or older** have the option to get PCV20 or PCV21, or to not get additional pneumococcal vaccines. They can get PCV20 or PCV21 if they have received both

- PCV13 (but not PCV15, PCV20, or PCV21) at any age and
- PPSV23 at or after the age of 65 years old

https://www.cdc.gov/pneumococcal/hcp/vaccine-recommendations/index.html

A, 70 anni, HIV

- Fumatore, BPCO, diabetico
- PCV13 e PPV23 nel 2013 (a 58 anni)
- Oggi ha 70 anni

Is there a place for revaccination?