

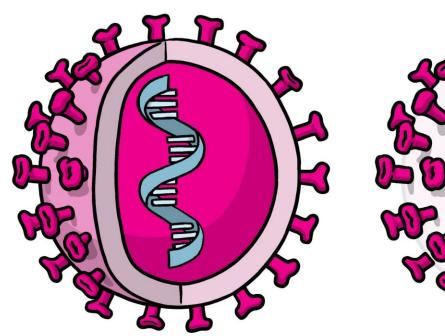
ΕΟΔΥ

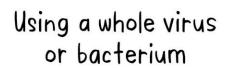
Συγχορήγηση εμβολίων COVID και ταξιδιωτικών εμβολίων: Τι νεότερο

Σπύρος Σαπουνάς Προϊστάμενος Διεύθυνσης Ετοιμότητας & Απόκρισης

- > ΠΟΙΑ ΕΊΝΑΙ ΤΑ ΕΙΔΗ ΤΩΝ ΕΜΒΟΛΙΩΝ
- \triangleright ΤΥΠΟΙ ΕΜΒΟΛΙΩΝ ENTANTI ΤΗΣ ΝΟΣΟΥ COVID 19
- > ΓΕΝΙΚΕΣ ΟΔΗΓΙΕΣ ΣΥΓΧΟΡΗΓΗΣΗΣ ΕΜΒΟΛΙΩΝ
- \triangleright ΣΥΓΧΟΡΗΓΗΣΗ ΕΜΒΟΛΙΩΝ ΕΝΑΝΤΙ ΤΗΣ ΝΟΣΟΥ COVID 19 ΜΕ ΛΟΙΠΑ ΕΜΒΟΛΙΑ

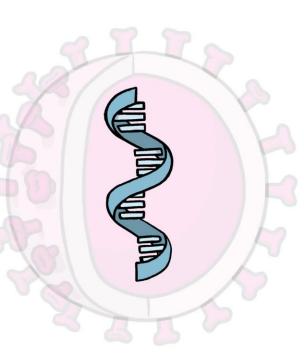
There are three main approaches to making a vaccine:



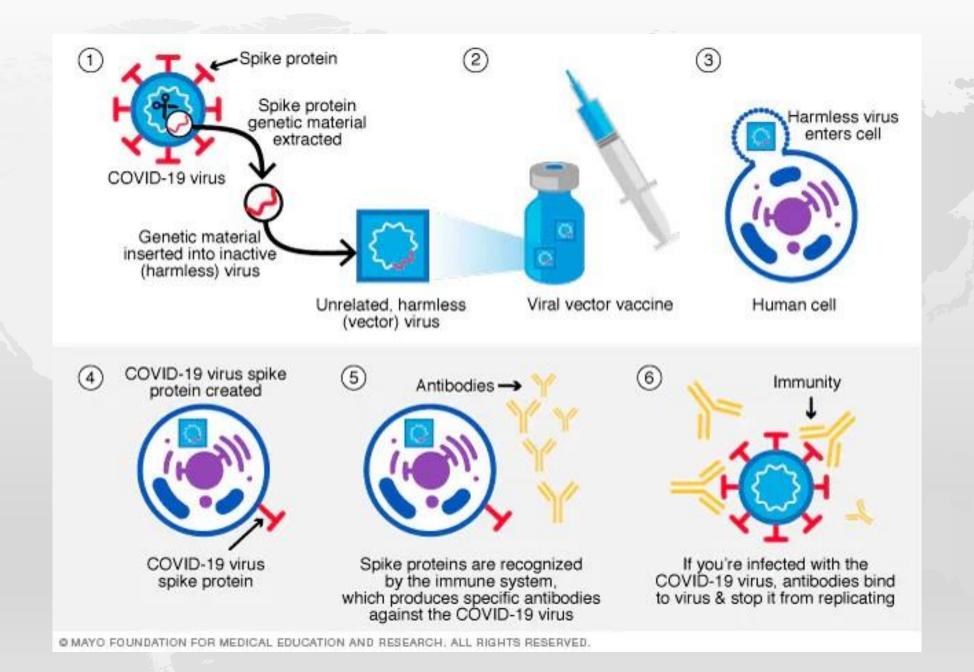


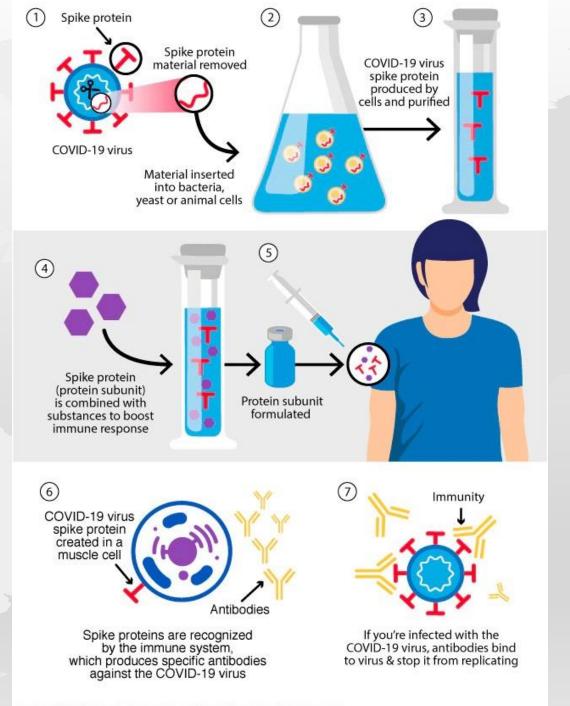


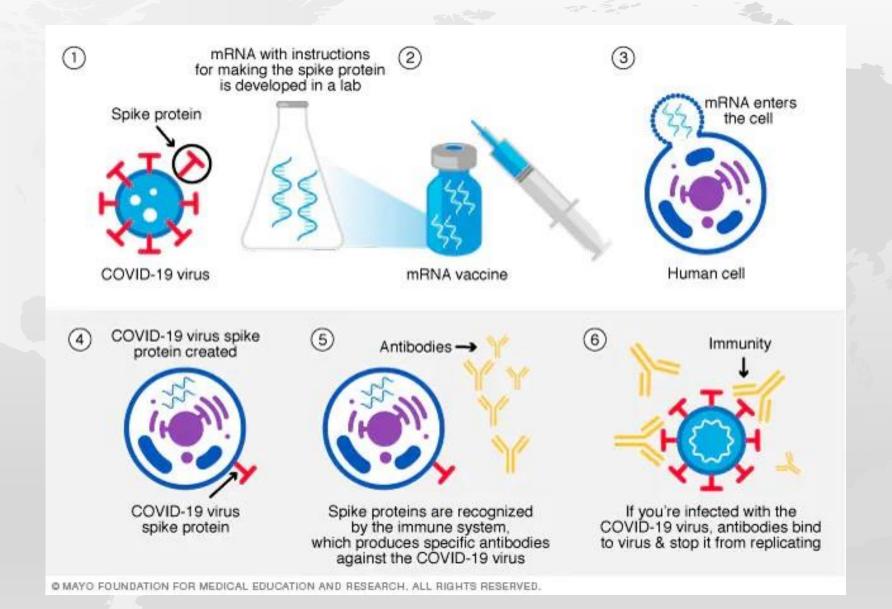
Parts that trigger the immune system

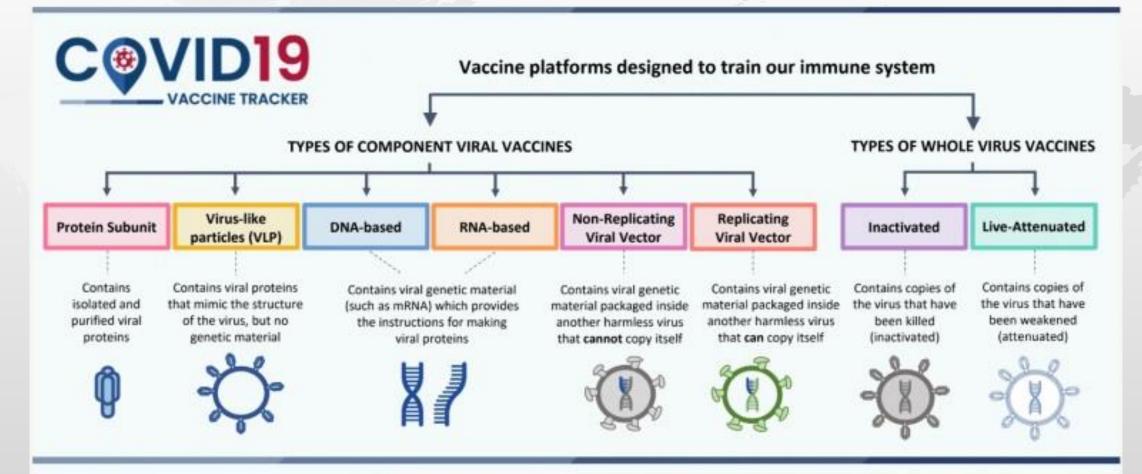


Just the genetic material











SARS-CoV-2 is the virus that causes COVID-19. The spike protein on the surface of SARS-CoV-2 is an example of an antigen. Vaccines are the best way to train our immune system to recognize viruses, or pieces of viruses, called antigens. Our immune system creates antibodies and other defenses to protect us. When a vaccinated person is exposed to SARS-CoV-2, their immune system will recognize the viral antigens and spring into action to keep them healthy. There are many different types of vaccines, as shown above.

5 Vaccines Approved for Use in Greece











Vaccine	0 month	1 month	2 month	3 month	4 month	5 month	6 month	7 month	8 month	9 month	10 month	11 month
Pfizer- BioNTech (ages 5-11 years)	1 st dose	2 nd dose (3 weeks after 1 st dose)										
Pfizer- BioNTech (ages 12 years and older)	1 st dose	2 nd dose† (3-8 weeks after 1 ^{nt} dose)					ster dose‡ east 5 months after 2°	dose)		See	footnote [§]	
Moderna (ages 18 years and older)	1 st dose	2 nd dose [†] (4-8 weeks after 1 st	dose)				Booster dose‡ (at least 5 months af dose)	ter 2 nd			See footnotes	
Janssen (ages 18 years and older)	1 st dose		Booster dose‡ (at least 2 months after 1st dose)				See footnote [§]					

-

Πληροφορίες για Ταξιδιώτες

Εμβόλιο για ταξιδιώτες – Κίτρινος πυρετός	
Εμβόλιο για ταξιδιώτες – Εγκεφαλίτιδα από κρότωνες	
Εμβόλιο για ταξιδιώτες – Ιαπωνική εγκεφαλίτιδα	
Εμβόλιο για ταξιδιώτες – Τυφοειδής πυρετός	
Εμβόλιο για ταξιδιώτες – Χολέρα	
Εμβόλιο για ταξιδιώτες – Μηνιγγιτιδοκοκκική μηνιγγίτιδα	
Εμβόλιο για ταξιδιώτες – Λύσσα	
Εμβόλιο για ταξιδιώτες – Ηπατίτιδα Α	
Εμβόλιο για ταξιδιώτες – Ηπατίτιδα Β	





Συγχορήγηση εμβολίων

Τα εμβόλια που περιέχουν αντιγόνα (π.χ. ηπατίτιδας Β, γρίπης) ή τα πολυσακχαριδικά εμβόλια (μηνιγγιτιδοκοκκικής μηνιγγίτιδας Α,C,W135,Y, τυφοειδούς πυρετού) καθώς και τα εμβόλια που περιέχουν νεκρούς, αδρανοποιημένους ιούς ή βακτήρια (ηπατίτιδας Α, λύσσας, πολιομυελίτιδας, χολέρας, Ιαπωνικής εγκεφαλίτιδας και εγκεφαλίτιδας από κρότωνες), μπορούν να χορηγηθούν ταυτόχρονα, χωρίς να επηρεάζεται η αποτελεσματικότητά τους ή να αυξάνεται ο αριθμός των ανεπιθύμητων ενεργειών τους.

Τα εμβόλια που περιέχουν ζώντες εξασθενημένους ιούς (κίτρινου πυρετού, ιλαράς, παρωτίτιδας, ερυθράς και ανεμευλογιάς) συνιστάται να γίνεται είτε την ίδια ημέρα είτε μετά από 4 εβδομάδες.

Τα εμβόλια που περιέχουν αδρανοποιημένους μικροοργανισμούς μπορούν να χορηγηθούν μαζί με τα εμβόλια που περιέχουν ζώντες μικροοργανισμούς.

Όταν τα εμβόλια που χορηγούνται ταυτόχρονα, ο εμβολιασμός πρέπει να γίνεται χρησιμοποιώντας διαφορετική σύριγγα και σε διαφορετικά σημεία.

Συγκεκριμένα όσον αφορά το εμβόλιο του κίτρινου πυρετού μπορεί να χορηγηθεί ταυτόχρονα με τα εμβόλια με ζώντα εξασθενημένα στελέχη, διαφορετικά συστήνεται μεταξύ των δύο εμβολιασμών να μεσολαβεί χρονικό διάστημα 4 εβδομάδων. Τα εμβόλια που περιέχουν αδρανοποιημένα αντιγόνα, μπορούν να χορηγηθούν ταυτόχρονα με το εμβόλιο του κίτρινου πυρετού, χωρίς να τροποποιείται η ανοσολογική απάντηση στα εμβόλια και χωρίς να αυξάνονται οι ανεπιθύμητες ενέργειες. Λόγω πιθανής επίδρασης του εμβολίου στην ανοσολογική απάντηση στη φυματίνη της δοκιμασίας Mantoux, αυτή θα πρέπει να γίνεται τουλάχιστον 4-6 εβδομάδες μετά από τον εμβολιασμό.

Coadministration of COVID-19 vaccines with other vaccines

COVID-19 vaccines may be administered without regard to timing of other vaccines.

This includes simultaneous administration of COVID-19 vaccine and other vaccines on the same day. If multiple vaccines are administered at a single visit, administer each injection in a different injection site.

Best practices for multiple injections include:

- Label each syringe with the name and the dosage (amount) of the vaccine, lot number, initials of the preparer, and exact beyond-use time, if applicable.
- Separate injection sites by 1 inch or more, if possible.
- Administer the COVID-19 vaccine and vaccines that may be more likely to cause a local reaction in different limbs, if possible.

See ACIP's general best practices and <u>Epidemiology and Prevention of Vaccine-Preventable Diseases</u> (Pink Book) for further information.



Coadministration with Other Vaccines

California COVID-19 Vaccination Program



COVID-19 vaccines and other vaccines may be administered without regard to timing. This includes simultaneous administration of COVID-19 vaccine and other vaccines on the same day, as well as coadministration within 14 days. The benefits of coadministration and timely catch up on vaccinations outweigh any theoretical risk. New data shows that immunogenicity and adverse event profiles are generally similar when vaccines are administered simultaneously as when they are administered alone.

For detailed guidance, see How to Administer Multiple IM Injections to Adults.

AAP Supports Coadministration

May 12, 2021. The American Academy of Pediatrics (AAP) recommends vaccination for eligible children ages 12 and older with the federally authorized COVID-19 vaccine and supports coadministration of the COVID-19 vaccine with routine immunizations—particularly for children and teens who are behind on their immunizations. Any COVID-19 vaccine authorized through Emergency Use Authorization by the US Food and Drug Administration, recommended by the CDC, and appropriate by age and health status can be used for COVID-19 vaccination in children and adolescents.

AAP recommends that children and adolescents catch up on all vaccinations that may have been delayed during the pandemic. Between the substantial data collected on the safety of COVID-19 vaccines, and the extensive experience with non-COVID-19 vaccines which shows the immune response and side effects are generally similar when vaccines are given together as when they are administered alone, the benefits of coadministration and timely catch up on vaccinations outweigh any theoretical risk.

(For details, see Policy Statement, Press Statement, and New HealthyChildren.org article.)

CDC Guidance

When deciding whether to administer an(other) vaccine(s) with COVID-19 vaccine, providers should consider

- whether the patient is behind or at risk of becoming behind on recommended vaccines,
- · their risk of vaccine-preventable disease (e.g., during an outbreak or occupational exposures), and
- · the reactogenicity profile of the vaccines.

If multiple vaccines are administered at a single visit, administer each injection in a different injection site. For adolescents and adults, the deltoid muscle can be used for more than one intramuscular injection administered at different sites in the muscle.

Consider these best practices for multiple injections:

- Label each syringe with the name and the dosage (amount) of the vaccine, lot number, the initials of the preparer, and the exact beyond-use time, if applicable.
- Separate injection sites by 1 inch or more, if possible.
- Administer the COVID-19 vaccines and vaccines that may be more likely to cause a local reaction (e.g., tetanus-toxoid-containing and adjuvanted vaccines) in different limbs, if possible.

(Source: Interim Clinical Considerations for Use of COVID-19 Vaccines | CDC.)

The American Academy of Pediatrics (AAP) recommends vaccination for eligible children ages

12 and older with the federally authorized COVID-19 vaccine and supports coadministration of the COVID-19 vaccine with routine immunizations

ACIP (Advisory Committee on Immunization Practices) recommends use of COVID-19 vaccines for everyone ages 5 and older. COVID-19 vaccine and other vaccines may be administered on the same day.

A-Z Index

Advanced Search

National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)

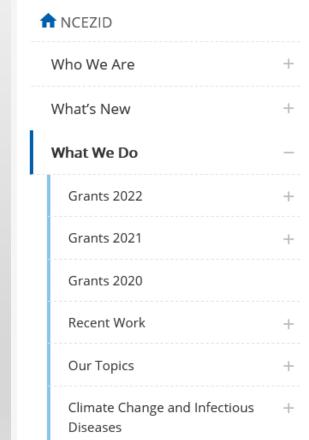
CDC > NCEZID > What We Do > Our Partners











Cross-cutting Programs

Innovations

Yellow Fever Vaccination Campaigns Continue Safely During COVID-19 Pandemic

Continuing safe yellow fever vaccination efforts are critical during the COVID-19 pandemic. A yellow fever outbreak amidst a pandemic would devastate already strained healthcare systems and lead to unnecessary lives lost. CDC, CDC Foundation, and their partners have been critical to ensuring public health professionals and vaccine recipients have access to resources needed to continue the global fight against yellow fever while reducing the risk of COVID-19.

CDC works globally to combat the threat of mosquito-borne diseases, including yellow fever which kills an estimated 30,000 people annually. As a World Health Organization (WHO) Collaborating Centre for Arboviral Reference and Research, CDC's Arboviral Disease Branch contributes to WHO's Eliminate Yellow Fever Epidemics (EYE) strategy. This strategy aims to end yellow fever outbreaks by 2026 through improved laboratory and epidemiologic surveillance, as well as improved vaccination coverage for people living in at risk areas. CDC staff provide technical assistance, conduct training and research, and seek funding for yellow fever vaccination campaigns in endemic countries, as needed.

Yellow fever is found in tropical and subtropical areas of Africa and South America and is spread to people by the bite of an infected mosquito. Illness ranges from a fever with aches and pains to severe disease with bleeding and yellowing skin (jaundice). There is no medicine to treat or cure infection. To prevent getting sick from yellow fever, people are encouraged to use insect repellent, wear long-sleeved shirts and long pants, and get vaccinated. More



influenza vaccine administered concomitantly with a third dose of the mRNA-1273 SARS-CoV-2 vaccine in adults aged ≥65 years: a phase 2, randomised, open-label study

> Ruvim Izikson, Daniel Brune, Jean-Sébastien Bolduc, Pierre Bourron, Marion Fournier, Tarnala Mallett Moore, Aseem Pandey, Lucia Perez, Nessryne Sater, Anju Shrestha, Sophie Wague, Sandrine I Samson

Sanoff Pasteur, Swiftwarer, PA. USA (R trikson MD. A Shresha MDI- Accelerated (J-S Bolduc PhD, Sanoff Pasteur, Lyon, France

Lancer Respir Med 2022; Background Concomitant seasonal influenza vaccination with a COVID-19 vaccine booster could help to minimise 10:392-402 potential disruption to the seasonal influenza vaccination campaign and maximise protection against both diseases Published Online among individuals at risk of severe disease and hospitalisation. This study aimed to assess the safety and immunogenicity of concomitant administration of high-dose quadrivalent influenza vaccine (QIV-HD) and a mRNA-1273 vaccine booster dose in older adults.

Methods This study is an ongoing, phase 2, multicentre, open-label, descriptive trial at six clinical research sites in the TMARKET MOORE MID. U.S.A. We describe the interim results up to 21 days after vaccination (July-August, 2021). Community-dwelling adults aged 65 years and older, who were previously vaccinated with a two-dose primary schedule of the mRNA-1273 SARS-CoV-2 vaccine, were eligible for inclusion. The second dose of the primary mRNA-1273 vaccination series was II, USA(D Brune MD); Sanot required to have been received at least 5 months before enrolment in the study. Participants were randomly Pasteur, Marcy PEtolle, France assigned (1:1:1) using a permuted block method stratified by site and by age group (<75 years vs ≥75 years), to receive concomitant administration of OIV-HD and mRNA-1273 vaccine, QIV-HD alone, or mRNA-1273 vaccine alone. Randomisation lists, generated by Sanofi Pasteur biostatistics platform, were provided to study investigators for study @ Roumon Pharms, group allocation. Unsolicited adverse events occurring immediately, solicited local and systemic reactions up to day 8, M Fourier MSC, SWague MSC, and unsolicited adverse events, serious adverse events, adverse events of special interest, and medically attended adverse events up to day 22 were reported. Haemagglutination inhibition antibody responses to influenza A/H1N1, Correspondence to: A/H3N2, B/Yamagata, and B/Victoria strains and SARS CoV-2 binding antibody responses (SARS-CoV-2 pre-spike SMITHWAIRS PAIRSTOLUSA I IgG ELISA) were assessed at day 1 and day 22. All analyses were descriptive. The study is registered with nvim.trikson@sanoft.com ClinicalTrials.gov, NCT04969276.

> Findings Between July 16 and Aug 31, 2021, 306 participants were enrolled and randomly assigned, of whom 296 received at least one vaccine dose (100 in the coadministration group, 92 in the OIV-HD, and 104 in the mRNA-1273 group). Reactogenicity profiles were similar between the coadministration and mRNA-1273 groups. with lower reactogenicity rates in the QIV-HD group (frequency of solicited injection site reactions 86-0% [95% CI 77.6-92.1], 91.3% [84.2-96.0], and 61.8% [50.9-71.9]; frequency of solicited systemic reactions 80.0%, [70·8-87·3], 83·7% [75·1-90·2], and 49·4% [38·7-60·2], respectively). Up to day 22, unsolicited adverse events were reported for 17.0% (95% CI 10.2-25.8) of participants in the coadministration group and 14.4% (8.3-22.7) of participants in the mRNA-1273 group, and tended to be reported at a slightly lower rate (10-9% [5-3-19-1]) in participants in the QIV-HD group. Seven participants each reported one medically attended adverse event (three in the coadministration group, one in the QIV-HD group, and three in the mRNA-1273 group). There were no serious adverse events, adverse events of special interest, or deaths. Haemagglutination inhibition antibody geometric mean titres increased from day 1 to day 22 to similar levels in the coadministration and QIV-HD groups, for each influenza strain (A/H1N1: 363 [95% CI 276-476] vs 366 [272-491]; A/H3N2: 286 [233-352] vs 315 [257-386]; B/Yamagata: 429 [350-525] vs 471 [378-588]; B/Victoria: 377 [325-438] vs 390 [327-465] for the coadministration and QIV-HD groups, respectively). SARS-CoV-2 binding antibody geometric mean concentrations also increased to similar levels in the coadministration and mRNA-1273 groups at day 22 (7634 [95% CI 6445-9042] and 7904 [6883-9077], respectively).

> Interpretation No safety concerns or immune interference were observed for concomitant administration of QIV-HD with mRNA-1273 booster in adults aged 65 years and older, supporting co-administration recommendations.

Funding Sanofi Pasteur.

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The safety and immunogenicity of concomitant administration of COVID-19 vaccines (ChAdOx1 or BNT162b2) with seasonal influenza vaccines in adults: a phase IV, multicentre randomised controlled trial with blinding (ComFluCOV).

Rajeka Lazarus, DPhil; Sarah Baos, PhD; Heike Cappel-Porter, MMath; Andrew Carson-Stevens, PhD; Madeleine Clout, BSc; Lucy Culliford, PhD; Stevan R Emmett, DPhil; Jonathan Garstang, MBBS; Lukuman Gbadamoshi, MBBS; Bassam Hallis, PhD; Rosie A Harris, MSc; David Hutton, BSc; Nick Jacobsen, MRCGP; Katherine Joyce, MSc; Rachel Kaminski, MBBS; Vincenzo Libri, MD; Alex Middleditch FRCA FFICM; Liz McCullagh, BPharmS; Ed Moran, PhD; Adrian Phillipson, MSc; Elizabeth Price, MD; John Ryan, BM; Russell Thirard, MSc; Rachel Todd, MSc; Matthew D Snape, MD; David Tucker, DPhil; Rachel Lauren Williams, MSc; Prof Jonathan S Nguyen-Van-Tam, DM; Prof Adam Finn, PhD; Prof Chris A Rogers, PhD and the ComfluCOV Trial Group*

Discussion

Our findings demonstrate that concomitant administration of six different combinations of COVID-19 and influenza vaccines raises no safety concerns, produces acceptable reactogenicity profiles and preserves immunogenicity.

Coadministration of seasonal inactivated influenza and COVID-19 vaccines

Interim guidance 21 October 2021



Background

This interim guidance has been developed on the basis of the advice issued by the Strategic Advisory Group of Experts (SAGE) on Immunization at its meeting on 7 October 2021 (1).

Declarations of interests were collected from all external contributors, assessed for any conflicts of interest and appropriate measures taken. Summaries of the reported interests can be found on the SAGE meeting website and SAGE Working Group website.

The guidance is based on the evidence outlined in this document which was presented to SAGE on 7 October 2021.

All referenced documents are available on the SAGE COVID-19 webpage: https://www.who.int/groups/strategic-advisory-group-of-experts-on-immunization/covid-19-materials.

Methods

SAGE applies the principles of evidence-based medicine and has set in place a thorough methodological process for issuing and updating recommendations. A detailed description of the methodological processes can be found in the SAGE guidance for the development of evidence-based vaccine-related recommendations (2). An ongoing, WHO and Cochrane supported, living systematic review of evidence on COVID-19 vaccines is used to identify relevant randomized controlled trials. The living mapping and evidence synthesis can be found on the COVID-NMA website: https://covid-nma.com/.

Current situation

Since the outbreak of COVID-19 was declared a public health emergency of international concern in January 2020, the virus has spread throughout the world, with an enormous impact on the health and well-being of individuals and populations, and with major disruptions to various sectors of society and economies. To curb COVID-19 transmission, countries have implemented large scale public health and social measures, such as physical distancing and wearing of facemasks.

As shown in Figure 1, global influenza virus detection, based on virological surveillance data from the Global Influenza Surveillance and Response System (GISRS), has decreased drastically during the COVID-19 pandemic, probably as a result of the measures put in place to prevent and limit the spread of COVID-19. This decrease is not an artifact due to weakened or absent surveillance systems, as influenza surveillance has been maintained or rapidly re-established in the course of the COVID-19 pandemic.



THE ASSISTANT SECRETARY OF DEFENSE



1200 DEFENSE PENTAGON WASHINGTON, DC 20301-1200

MEMORANDUM FOR: ASSISTANT SECRETARY OF THE ARMY (MANPOWER AND RESERVE AFFAIRS

ASSISTANT SECRETARY OF THE NAVY (MANPOWER AND RESERVE AFFAIRS

ASSISTANT SECRETARY OF THE AIR FORCE (MANPOWER AND RESERVE AFFAIRS

DIRECTOR, JOINT STAFF

DIRECTOR, DEFENSE HEALTH AGENCY

SUBJECT: Co-Administration of Coronavirus Disease 2019 Vaccines with Other Vaccines

The vaccines currently available for use for coronavirus disease 2019 (COVID-19) are authorized under an emergency use authorization (EUA) from the U.S. Food and Drug Administration. Consistent with current Department of Defense (DoD) policy, as outlined in DoD Instruction (DoDI) 6205.02, "DoD Immunization Program," dated July 23, 2019, all DoD personnel will be offered immunizations in accordance with recommendations from the Centers for Disease Control and Prevention (CDC) and its Advisory Committee on Immunization Practices (ACIP).

The CDC ACIP, on May 14, 2021, published revised guidance regarding approaches on co-administering the currently authorized COVID-19 vaccines and other vaccines ("Interim Clinical Considerations for Use of COVID-19 Vaccines Currently Authorized in the United States," https://www.cdc.gov/vaccines/covid-19/info-by-product/clinical-considerations.html). The COVID-19 vaccines were previously recommended by the CDC ACIP to be administered alone, with a minimum interval of 14 days before or after administration of any other vaccines. The new CDC ACIP guidance is that COVID-19 vaccines and other vaccines may now be administered without regard to timing, noting that substantial data have now been collected regarding the safety of COVID-19 vaccines currently authorized for emergency use by the FDA (Attachment 1). The CDC ACIP also noted that, although data are not available for COVID-19 vaccines administered simultaneously with other vaccines, extensive experience with non-COVID-19 vaccines has demonstrated that immunogenicity and adverse event profiles are generally similar when vaccines are administered simultaneously, as when they are administered alone.

The Joint Preventive Medicine Policy Group (JPMPG) reviewed the recommendations made by the CDC ACIP with regards to co-administration of COVID-19 vaccines. The JPMPG's recommendations were as follows:

 The authorized COVID-19 vaccine products (e.g., Moderna, Pfizer-BioNTech, and Johnson & Johnson/Janssen vaccines) may now be co-administered with other vaccines without regard to timing. These authorized COVID-19 vaccines The decision to co-administer a COVID19 vaccine and non-COVID19 vaccine, or the simultaneous administration of these, is a shared decision-making process between the individual and the healthcare provider. The latter should take into consideration a vaccine recipient's risk of vaccine-preventable disease (i.e., during an outbreak, or an occupational exposure), the adverse event profile of the vaccines, and the vaccine recipient's risk of delay in the recommended vaccines that he/she has to receive.

The administration of <7 days of COVID19 vaccine and any other vaccine, including coadministration, can be done when there is an increased risk of COVID19 infection or another vaccinepreventable disease (e.g. COVID19 outbreak, tetanus-prone wound), or if logistics issues are anticipated (e.g. difficulty in scheduling visits to maintain the 7-day interval) (ATAGI, 2021).

According to Public Health England (2021), vaccination should proceed "to avoid any further delay in protection and to avoid the risk of the patient not returning for a later appointment". The rationale behind simultaneously administering all vaccines for which the individual is eligible at the time of the visit increases the probability that the patient will be vaccinated (PSMID, 2019

https://apps.who.int/iris/rest/bitstreams/1382850/retrieve

https://eziz.org/assets/docs/COVID19/IMM-1385.pdf

https://www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html#appendix

https://www.cdc.gov/ncezid/what-we-do/partnership-in-action/yellow-fever-vaccination-during-covid-19.html

https://eziz.org/assets/docs/COVID19/IMM-1385.pdf

https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#recommendations

https://www.who.int/news-room/feature-stories/detail/the-race-for-a-covid-19-vaccine-explained

https://deliverypdf.ssrn.com/delivery.php?ID=5810840691201071080280941090200300760220140010510100070060 57050043118028014010059071041022105089107075110070058008115110029050086085020074079084085096089 11208208011701612107209502300506709106201604802408600108406410501207311809100006711701606809911 0022071024124081023085068115120028011020118&EXT=pdf&INDEX=TRUE

https://www.thelancet.com/action/showPdf?pii=S2213-2600%2821%2900557-9

https://www.carson.army.mil/assets/docs/covid/SG_coadministration_of_COVID19_and_other_vaccines.pdf

Ευχαριστώ για την προσοχή σας!

