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Influenza, 2020

Annual influenza outbreaks occur during autumn and winter months, and a typical increase in influenza cases is expected to occur later this year. Public health and health care organizations can plan for influenza vaccination to ameliorate the expected simultaneous respiratory circulation this year of the viruses causing COVID-19 and influenza.

Influenza virus (CDC)

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Influenza Vaccines

The available influenza vaccine types include:

- Inactivated influenza vaccine
- Cell-culture-based inactivated influenza vaccine
- Adjuvanted inactivated influenza vaccine
- High-dose inactivated influenza vaccine
- Recombinant influenza vaccine
- Live, attenuated influenza vaccine

Influenza vaccines are formulated to be either trivalent [currently A(H1N1), A(H3N2), and one B strain] or quadrivalent [A(H1N1), A(H3N2), and two B strains]. As influenza strains change, the specific composition of the influenza vaccine changes every year or so. The specific virus lineages used may vary by the type of influenza vaccine but the vaccines induce similar immunity. Choices for an individual's influenza vaccine type and dose depend on the age and other characteristics of the recipient (see table next page).

Two recently licensed influenza vaccines will be available for the 2020-2021 season: Fluzone High-dose Quadrivalent (Sanofi Pasteur), licensed for persons 65 years and older, will replace the trivalent Fluzone high-dose while Fluad Quadrivalent (Seqirus), also licensed for persons 65 and older, will be available for that age group in addition to trivalent Fluad.

U.S.-Licensed Influenza Vaccines Expected for 2020–21

Vaccine type	6 through 23 mos	2 through 3 yrs	4 through 17 yrs	18 through 49 yrs	50 through 64 yrs	≥65 yrs
IIV4s (egg)	Afluria Quadrivalent Fluarix Quadrivalent FluLaval Quadrivalent Fluzone Quadrivalent					
ccIIV4 (cell)			Flucelvax Quadrivalent			
RIV4 (recombinant)				Flublok Quadrivalent		
Adjuvanted aIIV3 (egg)						Fluad
Adjuvanted aIIV4 (egg)						Fluad Quadrivalent **NEW**
High-dose HD-IIV4 (egg)						Fluzone High-Dose Quadrivalent **NEW**
LAIV4 (egg)		FluMist Quadrivalent				

- No influenza vaccines are licensed for children under 6 months of age.
- For children 6 through 35 months of age, volume per dose is different than for older persons—refer to PI for dose volumes.
- For many people, there is more than one appropriate vaccine.
- ACIP expresses no preference for any one influenza vaccine over another where more than one is appropriate.
- All are intramuscular except for LAIV4 (intranasal).
- LAIV4 should not be used for some groups, including pregnant women and certain other populations (see ACIP statement).

Antiviral agents taken before or after vaccination may interfere with the response to live attenuated influenza vaccine (LAIV4). Newer antivirals have longer half-lives that older agents; peramivir should not be taken 5 days before to 2 weeks after LAIV4 and baloxavir should not be taken 17 days before to 2 weeks after LAIV4. Antiviral agents oseltamivir and zanamivir should not be taken 48 hours before to 2 weeks after LAIV4.

Concurrent Outbreaks

The level of influenza activity and the dominant strains circulating cannot be predicted for any particular season. Influenza activity in the Southern Hemisphere, where it is currently late winter, has been reported to be occurring at much lower rates than is typical for that region. This decrease could reflect use of COVID-19 prevention measures such as physical distancing and use of masks in those populations. However, there may be changes such as reduced use of healthcare facilities due to concern about exposure to COVID-19 and potential limitation of testing capacity, so the reported reduction in influenza is difficult to interpret.

During the 2020-2021 influenza season in the United States there may be reduction of influenza transmission due to interventions for COVID-19 such as physical distancing, school closures, and restricted visiting to long term care facilities. Nevertheless, it is likely that influenza viruses and SARS-CoV-2 will circulate concurrently in at least some areas. Coinfection with influenza and COVID-19 has been laboratory demonstrated in a few patients.

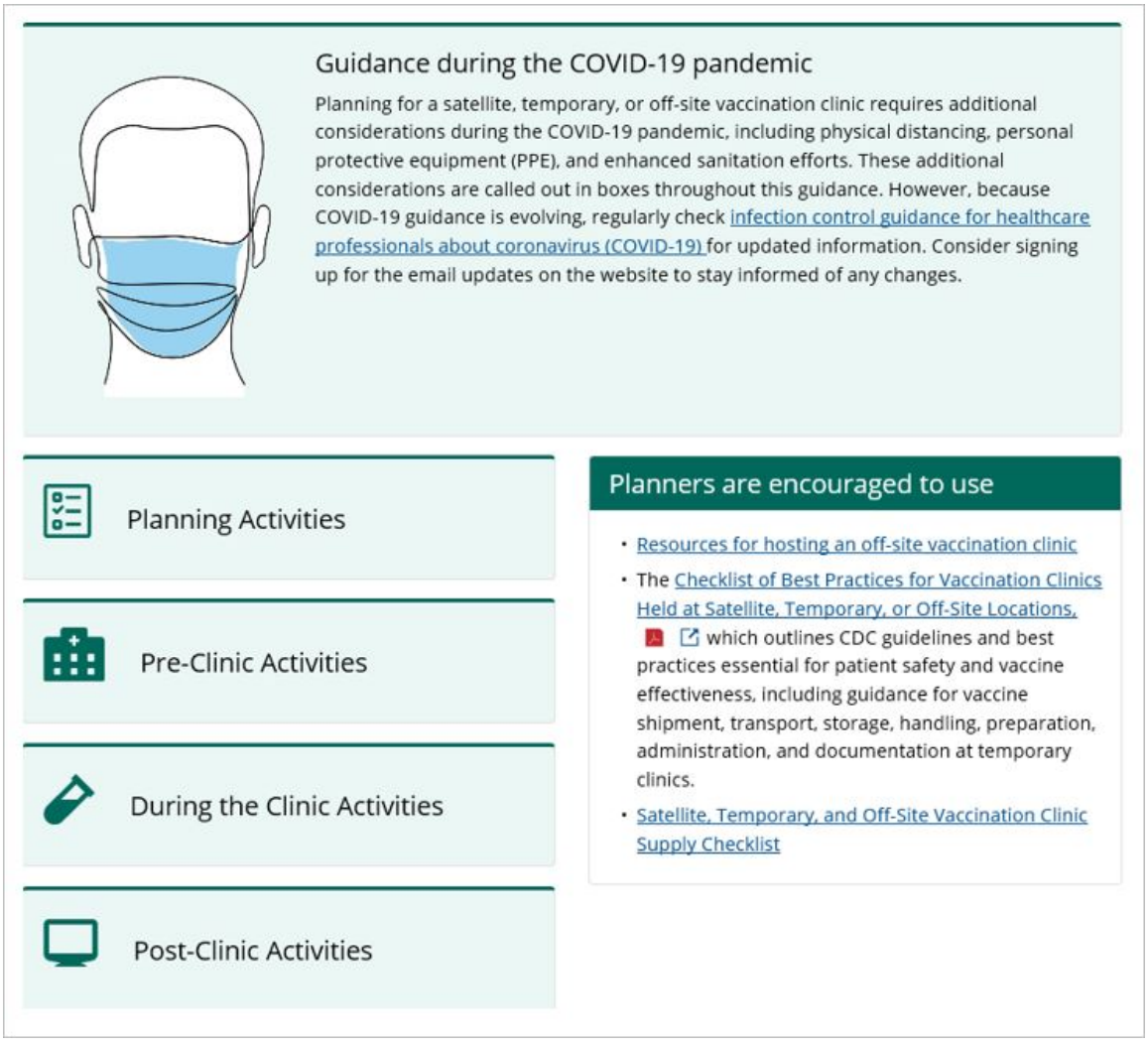
Simultaneous occurrence of COVID-19 and influenza in a region will likely stress the public health, laboratory, and healthcare systems. If coinfections result in more severe illnesses, hospitalizations and deaths may both increase.

Public Health Role

Vaccinating the general population and known risk groups influenza is one intervention that can reduce the number of influenza cases. Increasing the levels of influenza vaccination has the potential to decrease medical visits, laboratory work, and hospitalizations for influenza, as well as decreasing the likelihood of coinfections.

Providing influenza vaccination may involve new challenges this year. There may be fewer worksite vaccination clinics. Concern about COVID-19 exposure may discourage some people from going to a healthcare facility or a pharmacy. Fewer outpatient settings may be open as telehealth options have increased, with fewer in-person visits. Other challenges are the impacts of the COVID-19 outbreak on unemployment and income and increased time demands on working parents due to school and child care responsibilities.

Providers may opt for a satellite, temporary, or off-side clinic locations for influenza vaccination. CDC has prepared a guidance (https://www.cdc.gov/vaccines/hcp/admin/mass-clinic-activities/index.html) for planning such vaccination clinics.



Particular issues are physical distancing, personal protective equipment, and environmental cleaning. In any healthcare setting providing patient services, extra precautions will be needed during influenza vaccine administration while COVID-19 is present in the community. Enhanced infection control measures include:

- Screen patients for COVID-19 symptoms before and during the visit
- Maintain physical distance for patients and for staff (at least 6 feet apart, where possible)
- Limit and monitor points of entry to the facility
- Install barriers to reduce physical contact for staff and patients at entry
- Promote respiratory hygiene (facemasks for staff and face coverings for patients over 2 years of age, if tolerated) and cough etiquette
- Promote hand hygiene (including at least 60% alcohol hand sanitizer for patients)
- Enhance surface decontamination

While annual influenza vaccination is recommended for all persons over 6 months of age, a particular focus this year can be protecting adults at higher risk for exposure to or for severe illness with COVID-19. This group would include staff and residents of long-term care facilities, those with underlying illnesses associated with poorer outcome, persons negatively impacted by racism, and adults who work as part of critical infrastructure.

During the current COVID-19 outbreak, reducing influenza's impact is essential. Promoting influenza vaccination can protect the individuals from infection and protect the healthcare system from excessive demands.

Resources

CDC Vaccination Guidance during a Pandemic
https://www.cdc.gov/vaccines/pandemic-guidance/index.html

CDC Guidance for Planning Vaccination Clinics Held at Satellite, Temporary, or Off-Site Locations
https://www.cdc.gov/vaccines/hcp/admin/mass-clinic-activities/index.html

CDC 2020-2021 Influenza Vaccination Recommendations and Clinical Guidance during the COVID-19 Pandemic (the source for this article, with free medical CE)
https://emergency.cdc.gov/coca/calls/2020/callinfo_082020.asp?deliveryName=USCDC_450-DM36815

Southern Hemisphere influenza surveillance data (see page 8):
https://www1.health.gov.au/internet/main/publishing.nsf/Content/9900391582DCDF64CA2585D100805DC5/$File/flu-10-2020.pdf