Update on COVID-19 Vaccination Recommendations and LA County Uptake

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Disclosures

There is no commercial support for today's webinar.

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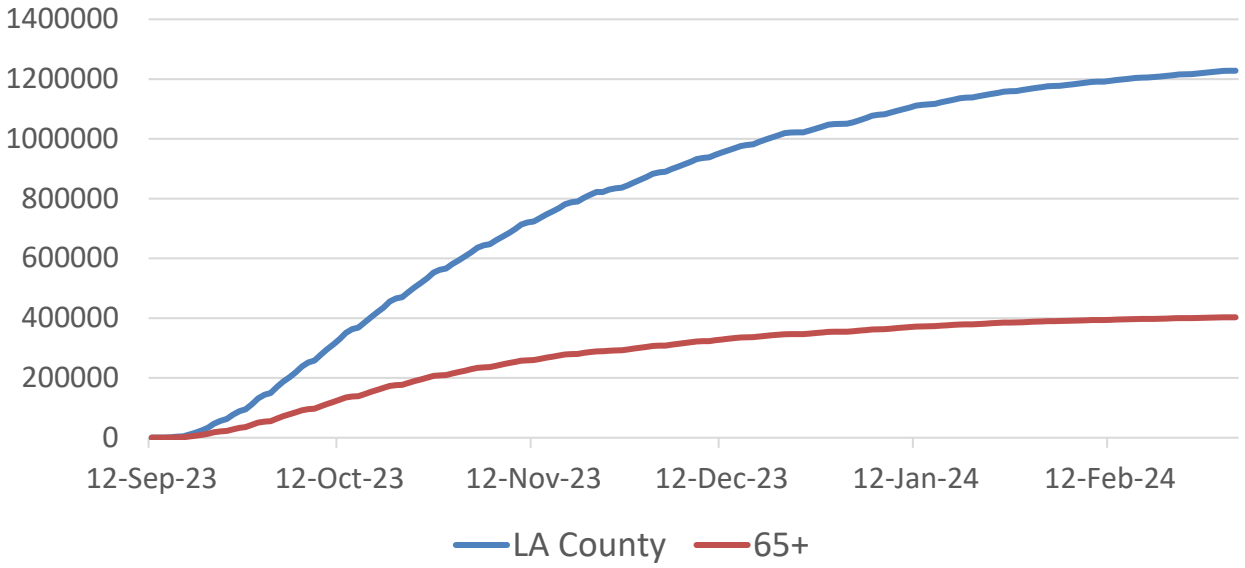
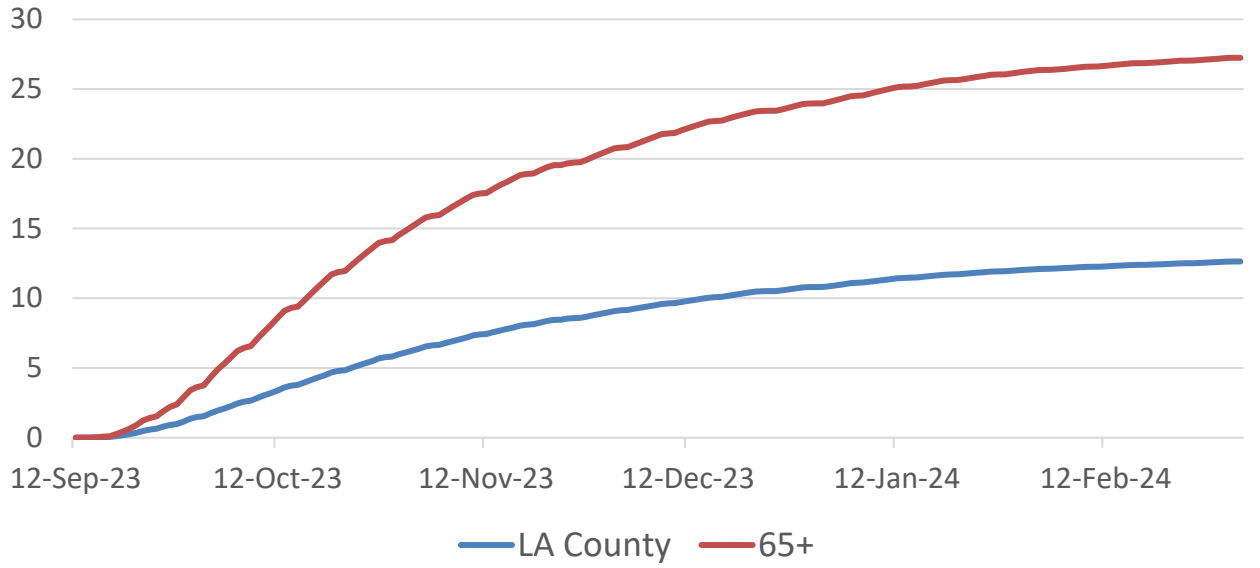
COVID Vaccination Trends

Cumulative number vaccinated by date

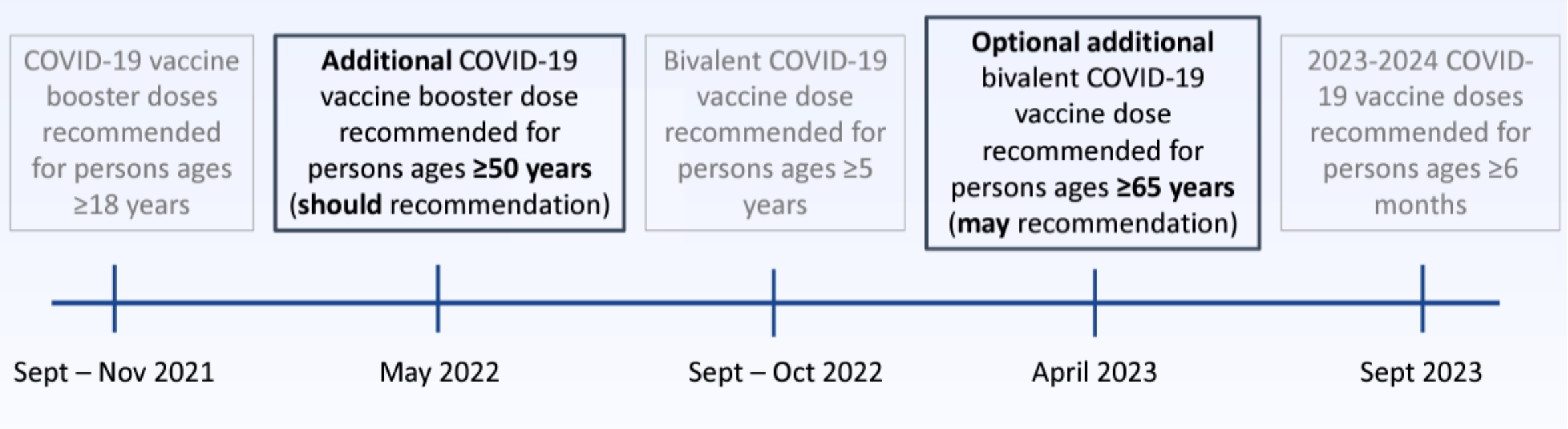


Cumulative % of population vaccinated by date



Updated COVID Vaccination Recommendations

Additional doses have been recommended previously for select populations



ACIP Evidence to Recommendations | Feb 28-29, 2024

Current recommendations for additional doses of updated (2023-2024 Formula) COVID-19 vaccine

People who are moderately or severely immunocompromised:

- Have the option to receive 1 additional dose of updated (2023-2024 Formula) COVID-19 Vaccine at least 2 months following the last recommended updated (2023-2024 Formula) COVID-19 vaccine dose.
- Further additional dose(s) may be administered, informed by the clinical judgement of a healthcare provider and personal preference and circumstances. Any further additional doses should be administered at least 2 months after the last updated (2023-2024 Formula) COVID-19 vaccine dose.

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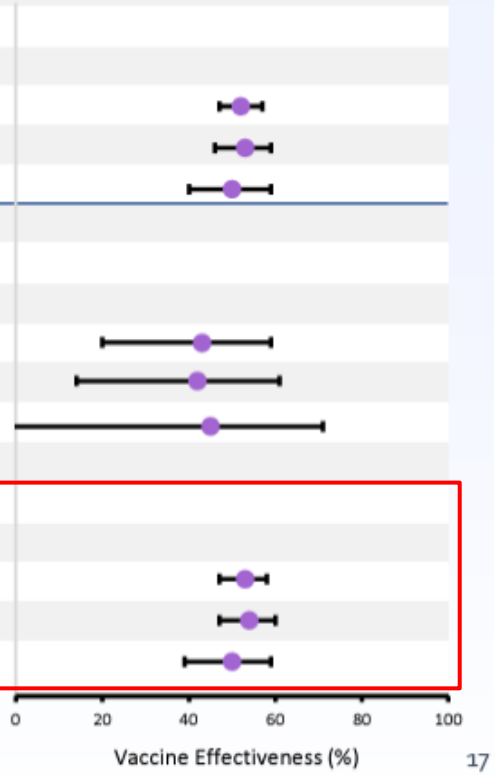
VISION: VE of *2023-2024 vaccine* against *hospitalization* among immuno*competent* adults aged ≥18 years, by age group

September 2023 – January 2024

COVID-19 dosage pattern/age group	COVID-19 case-patients N (Col %)	COVID-19 control-patients N (Col %)	Median interval since last dose among vaccinated among those vaccinated, days (IQR)	Adjusted VE (95% CI)
≥18 years				
No updated (2023-2024) monovalent dose (ref)	4,194 (91)	28,715 (87)	627 (383-765)	**Ref**
Updated (2023-2024) monovalent dose, ≥7 days	395 (9)	4,199 (13)	42 (24-62)	**52 (47-57)**
Updated (2023-2024) monovalent dose, 7-59 days earlier	270 (6)	3,056 (9)	32 (19-45)	**53 (46-59)**
Updated (2023-2024) monovalent dose, 60-119 days earlier	125 (3)	1,143 (3)	73 (66-81)	**50 (40-59)**
18-64 years				
No updated (2023-2024) monovalent dose (ref)	938 (96)	11,342 (95)	685 (447-829)	**Ref**
Updated (2023-2024) monovalent dose, ≥7 days	38 (4)	657 (5)	38 (22-58)	**43 (20-59)**
Updated (2023-2024) monovalent dose, 7-59 days earlier	28 (3)	503 (4)	30 (19-44)	**42 (14-61)**
Updated (2023-2024) monovalent dose, 60-119 days earlier	10 (1)	154 (1)	74 (67-81)	**45 (-6-71)***
≥65 years				
No updated (2023-2024) monovalent dose (ref)	3,256 (90)	17,373 (83)	549 (370-745)	**Ref**
Updated (2023-2024) monovalent dose, ≥7 days	357 (10)	3,542 (17)	43 (25-62)	**53 (47-58)**
Updated (2023-2024) monovalent dose, 7-59 days earlier	242 (7)	2,553 (12)	32 (19-46)	**54 (47-60)**
Updated (2023-2024) monovalent dose, 60-119 days earlier	115 (3)	989 (5)	73 (66-81)	**50 (39-59)**



VE estimates adjusted for age, sex, race and ethnicity, geographic region, and calendar time. MMWR to be published February 29, 2024

*Some estimates are imprecise, which might be due to a relatively small number of persons in each level of vaccination or case status. This imprecision indicates that the actual VE could be substantially different from the point estimate shown, and estimates should therefore be interpreted with caution. Additional data accrual could increase precision and allow more precise interpretation.

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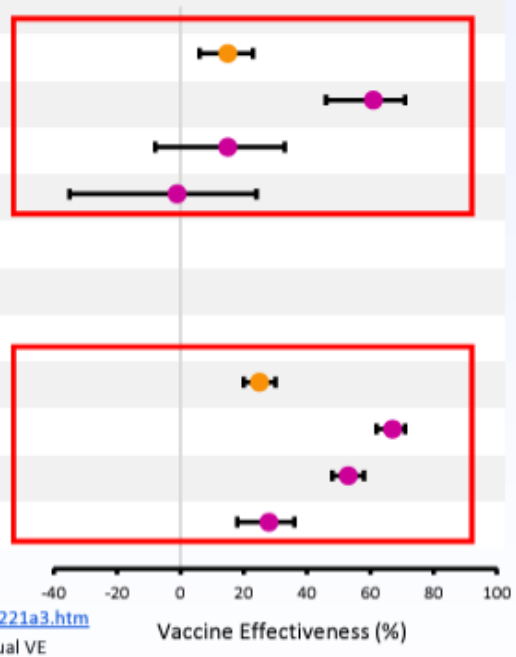
ACIP Vaccine effectiveness of updated COVID-19 vaccines | Feb 28-29, 2024

VISION: *Absolute* VE of *original monovalent* and *bivalent* booster doses against *hospitalization* among immuno*competent* adults, by age group – September 2022 – August 2023

mRNA Dosage Pattern	Total tests	SARS-CoV-2-test-positive, N (%)	Median interval since last dose, days (IQR)	Adjusted VE (95% CI)
18-64 years				
Unvaccinated (ref)	13,089	803 (6)	--	**Ref**
Original monovalent doses only	19,799	1,129 (6)	455 (333-575)	**15 (6 to 23)**
Bivalent booster, 7-59 days earlier	1,208	45 (4)	33 (21-45)	**61 (46 to 71)**
Bivalent booster, 60-119 days earlier	1,248	87 (7)	87 (73-102)	**15 (-8 to 33)**
Bivalent booster, 120-179 days earlier	1,075	59 (6)	147 (134-163)	**-1 (-35 to 24)***
≥65 years				
Unvaccinated (ref)	12,015	1,688 (14)	--	**Ref**
Original monovalent doses only	37,001	4,216 (11)	402 (288-555)	**25 (20-30)**
Bivalent booster, 7-59 days earlier	4,607	328 (7)	35 (21-48)	**67 (62-71)**
Bivalent booster, 60-119 days earlier	5,252	490 (9)	88 (73-104)	**53 (48-58)**
Bivalent booster, 120-179 days earlier	4,482	415 (9)	149 (134-164)	**28 (18-36)**



VE estimates adjusted for age, sex, race and ethnicity, geographic region, and calendar time. Updated from: Link-Gelles et al., MMWR, https://www.cdc.gov/mmwr/volumes/72/wr/mm7221a3.htm

* These estimates are imprecise, which might be due to there being a relatively small number of persons in each level of vaccination or case status. This imprecision indicates that the actual VE could be substantially different from the point estimate shown, and estimates should therefore be interpreted with caution. Additional data accrual could increase precision and allow more precise interpretation.

The 2023-24 vaccine is effective, and boosters have worked before

- Updated (2023-24) COVID-19 vaccination provided increased protection against symptomatic SARS-CoV-2 infection and COVID-19-associated ED/UC visits and hospitalizations compared to no updated vaccine dose
- Effectiveness of an additional dose in older adults has been demonstrated by past additional doses
  - Effectiveness against ED/UC encounters and hospitalization was increased in adults over 50 years of age who got a second original monovalent mRNA booster
  - Effectiveness against severe COVID-19-related outcomes was increased during Omicron circulation in nursing home residents who got a second original monovalent mRNA booster

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Annual and semiannual COVID-19 vaccine doses likely to have largest benefit in people ages ≥65 years and people who are immunocompromised

	Absolute annual risk of severe COVID-19 (cases per 100,000; uncertainty interval)	Annual risk reduction of severe COVID-19		NNT to avert severe COVID-19 case
		Absolute risk (cases per 100,000)	Relative risk (%)	
One-time booster				
18-49 years	98 (85 - 125)	--	--	--
50-64 years	199 (185 - 238)	--	--	--
65-74 years	524 (499 - 562)	--	--	--
75+ years	1,398 (1,332 - 1,501)	--	--	--
Immunocompromised (mild)	1,290 (1,205 – 1,403)	--	--	--
Immunocompromised (moderate/severe)	1,367 (1,266-1,503)	--	--	--
Annual booster				
18-49 years	84 (74 - 106)	14	14%	3,534
50-64 years	171 (159 - 202)	28	14%	1,806
65-74 years	446 (425 - 475)	78	15%	642
75+ years	1,198 (1,144 - 1,272)	199	14%	251
Immunocompromised (mild)	1,180 (1,088 - 1,316)	110	9%	456
Immunocompromised (moderate/severe)	1,183 (1,091-1,307)	184	13%	273
Semiannual booster (every 6 months)				
18-49 years	72 (64 - 90)	26	27%	1,916
50-64 years	147 (136 - 171)	52	26%	968
65-74 years	382 (365-404)	142	27%	353
75+ years	1,030 (988 - 1,088)	368	26%	136
Immunocompromised (mild)	1,095 (987 - 1,255)	195	15%	257
Immunocompromised (moderate/severe)	1,057 (966-1,183)	310	23%	162

https://www.medrxiv.org/content/10.1101/2023.07.10.23292473v4
HJ Park…NC Lo. Accepted at *Nature Communications* (2024).

NNT: number of persons needed to follow vaccine strategy to prevent one severe COVID-19 case over 2-year period
Severe COVID-19 case: defined as being hospitalized

Updated COVID-19 Vaccination Recommendations

- People **ages 12-64 years** who are moderately or severely immunocompromised **MAY** receive 1 additional dose of any updated COVID-19 vaccine at least 2 months after the last dose of updated COVID-19 vaccine.
- People **over age 65 years** who are moderately or severely immunocompromised **SHOULD** receive 1 additional dose of any updated COVID-19 vaccine at least 2 months after the last dose of updated COVID-19 vaccine.
- People **over age 65 years** who are not immunocompromised **SHOULD** receive 1 additional dose of any updated COVID-19 vaccine at least *4 months* after the last dose of updated COVID-19 vaccine.

CDC Interim Clinical Considerations for Use of COVID-19 Vaccines in the United States

Thank you!

For additional questions, please contact:
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For additional information, visit:
http://publichealth.lacounty.gov/ip/index.htm.