National Center for Immunization & Respiratory Diseases



Published Estimates of LAIV Effectiveness

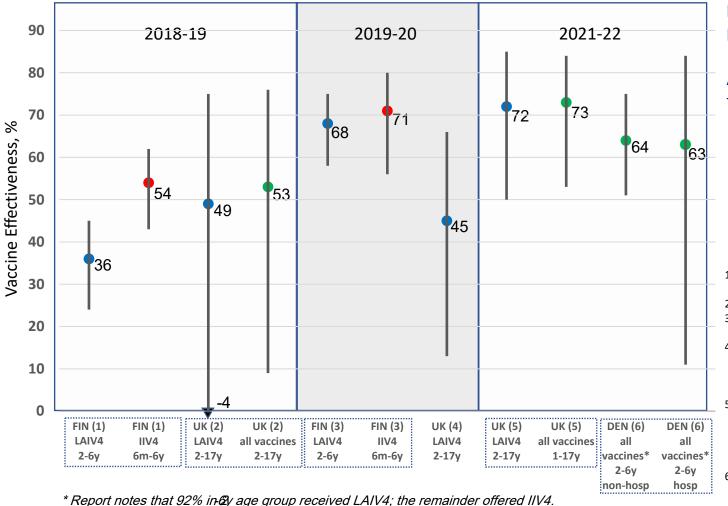
Lisa Grohskopf

Advisory Committee on Immunization Practices

February 22, 2023

Update on Published Estimates of LAIV4 Effectiveness: Background

- LAIV4 not recommended in the U.S. for 2016-17 and 2017-18, following observation of poor effectiveness against H1N1pdm09 viruses.
- Subsequent studies suggested poor replicative fitness of the LAIV4 H1N1pdm09-like vaccine virus, which was subsequently updated.
- LAIV4 again a recommended option starting in 2018-19 after discussion of
 - Combined U.S. individual level patient VE analysis,
 - Systematic review of post-2009 US/non-US LAIV VE estimates,
 - MedImmune data suggesting better fitness of new H1N1pdm09 vaccine virus.
- LAIV4 use within CDC U.S. VE networks has been low since 2018-19, precluding assessment of vaccine-specific VE.
- LAIV VE estimates have been published from non-U.S. observational studies.



Published Non-US VE Estimates

All influenza viral types/subtypes



- 1. Stuurman et al Vaccine 2020;38:6455-6463
- 2. Pebody, Vaccine 38 (2020) 489–4
- 3. Stuurman et al Vaccine 2021;39:3964-3973
- https://webarchive.nationalarchive s.gov.uk/ukgwa/20220401215804/ https://www.gov.uk/government/s tatistics/annual-flu-reports
- https://www.gov.uk/government/s tatistics/annual-flureports/surveillance-of-influenzaand-other-seasonal-respiratoryviruses-in-winter-2021-to-2022
- Emborg, Euro Surveill
 2022;27:pii=2200278

For more information, contact CDC 1-800-CDC-INFO (232-4636)

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