

## Published Estimates of LAIV Effectiveness

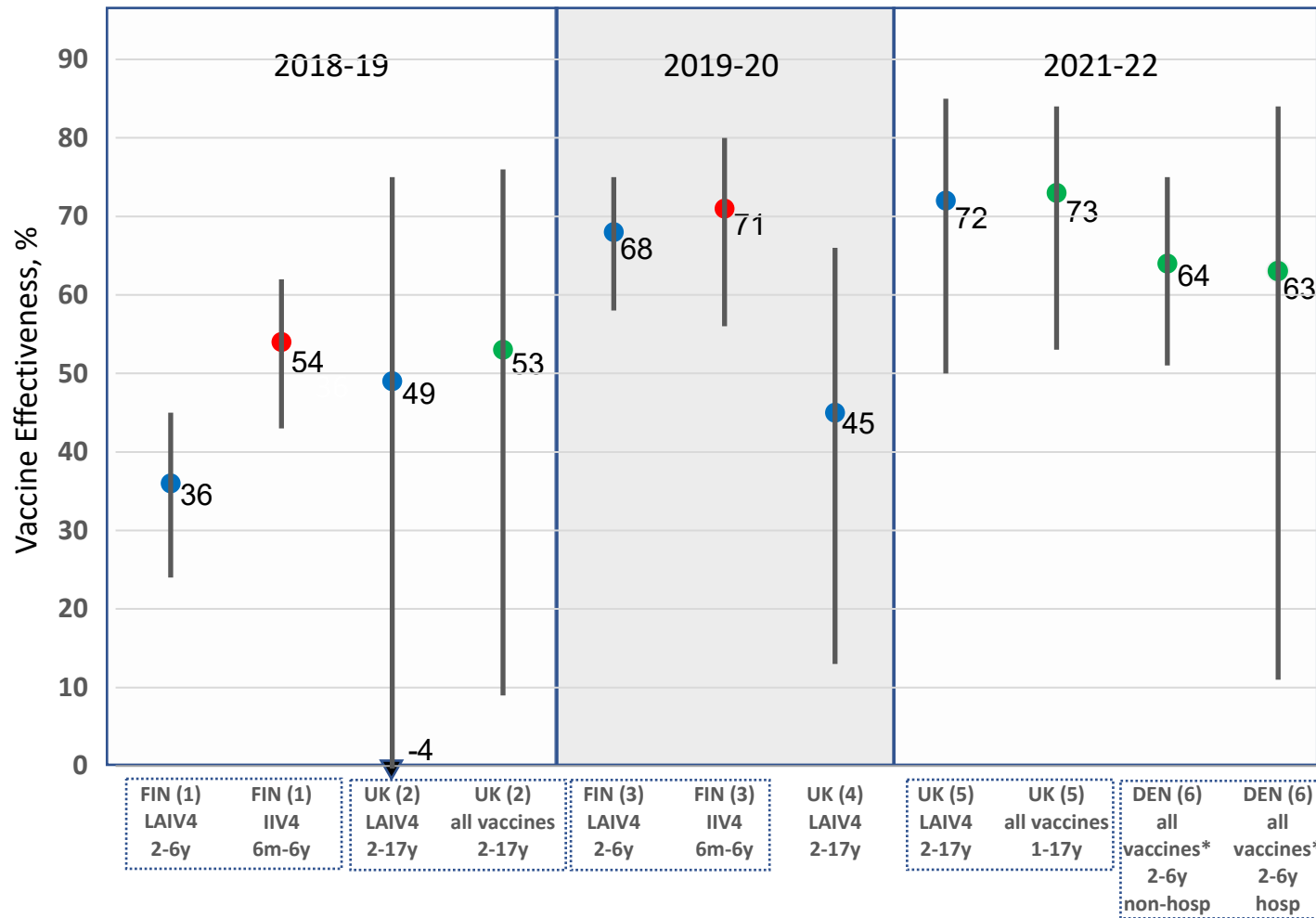
**Lisa Grohskopf**

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

- LAIV4
- IIV4
- All vaccines
- FIN Finland
- UK United Kingdom
- DEN Denmark

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
4. <https://webarchive.nationalarchives.gov.uk/ukgwa/20220401215804/https://www.gov.uk/government/statistics/annual-flu-reports>
5. <https://www.gov.uk/government/statistics/annual-flu-reports/surveillance-of-influenza-and-other-seasonal-respiratory-viruses-in-winter-2021-to-2022>
6. Emborg, Euro Surveill 2022;27:pii=2200278

\* Report notes that 92% in 6y age group received LAIV4; the remainder offered IIV4.

For more information, contact CDC  
1-800-CDC-INFO (232-4636)  
TTY: 1-888-232-6348 [www.cdc.gov](http://www.cdc.gov)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Photographs and images included in this presentation are licensed solely for CDC/NCIRD online and presentation use. No rights are implied or extended for use in printing or any use by other CDC CIOs or any external audiences.

