Children are among the most susceptible to influenza infection and are primarily responsible for transmitting the illness to others. In several countries, live attenuated influenza vaccine (LAIV) is approved for use in eligible children and adolescents 2 years of age and older. Multiple randomized controlled clinical trials have evaluated the efficacy of LAIV against culture-confirmed influenza illness compared with placebo or trivalent inactivated influenza vaccine (TIV). These data have not been collectively analyzed for children 2–17 years of age. The age group for whom LAIV is approved for use.

To evaluate the efficacy of LAIV in children 2–17 years of age, using data from all available randomized, controlled clinical trials.

-8 randomized, controlled trials enrolled children 2–17 years of age (Table 1).

-5 compared LAIV with placebo; 3 compared LAIV with TIV.

-Illnesses caused by drifted influenza B viruses were analyzed as originally classified by the trials and secondarily by classifying all antigenic B variants as dissimilar.

-The meta-analysis was conducted using a fixed-effects model. A log-binomial model was used to calculate LAIV relative risk adjusting for study variation.

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**References**


3. McIntosh K and Lieu T.

4. Longini IM, Jr. and Halloran ME.


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**Results**

LAIV=live attenuated influenza vaccine. Symbol sizes are relative to the study population sizes.

**Conclusions**

-This meta-analysis provides precise estimates of LAIV efficacy among children 2–17 years of age, the age group for whom the vaccine is approved for use.

-In children 2–17 years of age, LAIV has demonstrated:

- High efficacy after 2 doses in year 1

- High efficacy after revaccination in year 2

-Greater efficacy compared with TIV

-LAIV efficacy estimates relative to placebo and TIV for only those studies in which United States were robust and were similar to or higher than those observed overall.

-The most common adverse reactions with LAIV in children are runny nose/conjunctival fever >100°F.