

ACIP Update

Lisa Grohskopf, MD, MPH
Medical Officer
Influenza Division, CDC

National Influenza Vaccine Summit
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National Center for Immunization & Respiratory Diseases
Influenza Division



ACIP Influenza Statement, 2014-15

- ❑ **Shorter format (Policy Note) for 2014-15**
- ❑ **To be reviewed at ACIP on June 25, 2014**
- ❑ **Still under discussion and not final until ACIP vote and adoption by the Director, CDC**
- ❑ **Items discussed at ACIP this season:**
 - Updates on influenza vaccine coverage, vaccine efficacy, and 2013-14 season surveillance
 - Presentation of Fluzone High Dose comparative efficacy trial results
 - Review of relative efficacy and safety of LAIV and IIV for children using Grading of Recommendations Assessment, Development, and Evaluation (GRADE)

Policy Question

- ❑ **Should LAIV be recommended preferentially over IIV for healthy children?**
 - Ages 2-8
 - Ages 9-18

- ❑ **Rationale for selected age categories**
 - LAIV not licensed for children under 2 years of age
 - 8 years is upper limit of age range for consideration of 1 vs. 2 doses (selected for simplicity of recommendations)

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Methods Overview

- ❑ **Formulate policy question**
- ❑ **Determine inclusion criteria for relevant studies**
- ❑ **Identify and assign value to outcomes**
- ❑ **Search literature for relevant studies**
- ❑ **Evaluate quality of evidence for outcomes using GRADE**
- ❑ **Other considerations**

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Outcomes Evaluated

| Outcome | Importance |
|---------------------------------|------------|
| Efficacy/Effectiveness | |
| Laboratory-confirmed influenza* | Critical |
| Mortality** | Critical |
| Hospitalization** | Critical |
| MAARI | Critical |
| Influenza-like illness | Important |
| Acute otitis media** | Important |
| Safety | |
| Medically-significant wheezing | Critical |
| Fever | Important |
| Any related SAE | |

* Associated with respiratory illness; without regard to vaccine match

** Associated with influenza

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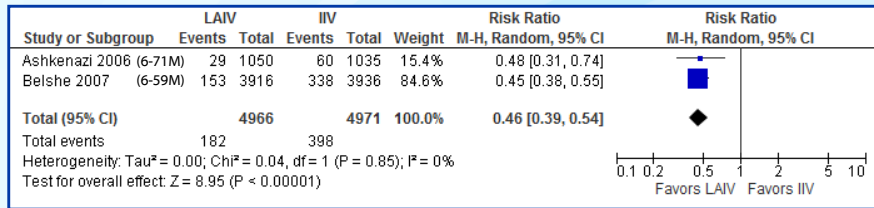
GRADE Parameters

Assessed across all studies for a given intervention/outcome:

- **Risk of Bias**
 - Randomization; Blinding
 - Allocation concealment
 - Loss to follow-up
- **Inconsistency**
 - Do risk estimates differ meaningfully among studies?
- **Indirectness**
 - Are study populations/interventions representative of those of interest?
- **Imprecision**
 - Are confidence interval wide?
- **Publication bias**

Evidence Profile—LAIV vs. IIV—2-8-year-olds Lab-confirmed Influenza—Randomized Studies (CRITICAL)

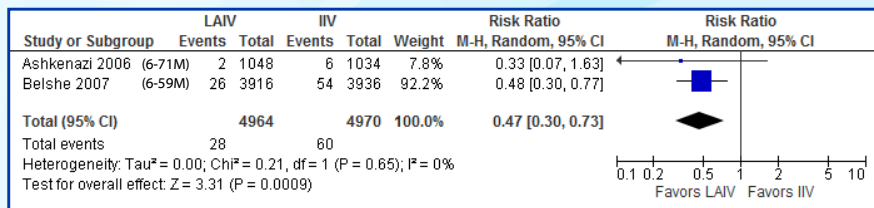
| Studies (n) | Risk of Bias | Inconsistency | Indirectness | Imprecision | Effect | | Quality |
|-------------|--------------|---------------|--------------|-------------|-----------------------|--------------------------------------|-------------|
| | | | | | RR [95% CI] | Risk Difference with LAIV [95% CI] | |
| 2 | Not serious | Not Serious | Not Serious | Not Serious | 0.46 [0.39 – 0.54] | 43 fewer per 1000 [37 – 49 fewer] | 1 (High) |



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Evidence Profile—LAIV vs. IIV—2-8-year-olds Otitis Media—Randomized Studies (IMPORTANT)

| Studies (n) | Risk of Bias | Inconsistency | Indirectness | Imprecision | Effect | | Quality |
|-------------|--------------|---------------|--------------|-------------|-----------------------|-----------------------------------|-------------|
| | | | | | RR [95% CI] | Risk Diff. with LAIV [95% CI] | |
| 2 | Not Serious | Not Serious | Not Serious | Not Serious | 0.47 [0.30 – 0.73] | 6 fewer per 1000 [3 – 8 fewer] | 1 (High) |

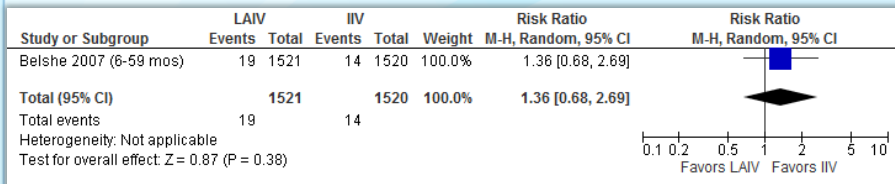


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Evidence Profile—LAIV vs. IIV—2-8-year-olds Medically-attended wheezing (CRITICAL)

| Studies (n) | Risk of Bias | Inconsistency | Indirectness | Imprecision | Effect | | Quality |
|-------------|--------------|---------------|--------------|-------------|-----------------------|--|-----------------|
| | | | | | RR [95% CI] | Risk Difference with LAIV [95% CI] | |
| 1 | Not Serious | Not Serious | Not Serious | Serious | 1.36 [0.68 – 2.69] | 3 more per 1000 [3 fewer – 16 more] | 2 (Moderate) |

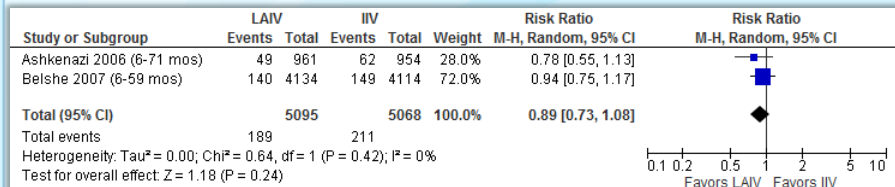
- Protocol-defined “medically significant wheezing”
- Follow-up 42 days.
- Data limited to children aged 24 through 59 months.
- Following dose 1; NOT previously vaccinated.



Evidence Profile—LAIV vs. IIV—2-8-year-olds Fever, $\geq 38.6^\circ\text{C}$ or $\geq 38.9^\circ\text{C}$ —Randomized Studies (IMPORTANT)

| Studies (n) | Risk of Bias | Inconsistency | Indirectness | Imprecision | Effect | | Quality |
|-------------|--------------|---------------|--------------|-------------|-----------------------|---|-----------------|
| | | | | | RR [95% CI] | Risk Difference with LAIV [95% CI] | |
| 2 | Not Serious | Not Serious | Not Serious | Serious | 0.89 [0.73 – 1.08] | 5 fewer per 1000 [11 fewer – 3 more] | 2 (Moderate) |

- Follow-up days 0-10.
- Following dose 1.
- Data for Belshe et al. from sBLA .
- Temperature thresholds differed slightly between studies: 38.6°C (Ashkenazi) vs. 38.9 °C (Belshe).



June ACIP Meeting

- **June 25-26, 2014**
- **Anticipate further discussion regarding use of LAIV and IIV for children**
- **Discussion of draft language for 2014-15**

Thank You!

For more information please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333
Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov Web: www.cdc.gov

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