ACIP COVID-19 Vaccines Work Group

Dr. Matthew F. Daley, Work Group Chair

June 17, 2022
Trends in number of COVID-19 cases in the United States among all persons

January 23, 2020 – June 14, 2022
Cases: 85,681,615

7-day average: 103,935 cases

Daily Trends in Number of COVID-19 Deaths, United States

January 22, 2020 – June 14, 2022
Deaths: $1,007,374$

7-day average: 276 deaths

COVID-19 death rate among children by age, United States, March 1, 2020—April 30, 2022

- Based on cumulative total incidence, COVID-19 is the leading cause of death among infectious diseases for people ages 0-19
  - COVID-19 is the seventh most common of all causes of death for people ages 0-19
- Among people ages 1-4, COVID-19 is the fifth most common of all causes of death

Based on death certificate data from the National Center for Health Statistics. COVID-19 based on cumulative total incidence of COVID-19 deaths from March 1, 2020-April 30, 2022.
Unvaccinated people ages ≥5 years had **10X** the risk of dying from COVID-19 through March compared to people vaccinated with at least the primary series.

Pediatric vaccine preventable diseases: Deaths per year in the United States prior to recommended vaccines

<table>
<thead>
<tr>
<th>Age</th>
<th>Hepatitis A¹</th>
<th>Meningococcal (ACWY)²</th>
<th>Varicella³</th>
<th>Rubella⁴</th>
<th>Rotavirus⁵</th>
<th>COVID-19⁶</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average deaths per year</td>
<td>3</td>
<td>8</td>
<td>16</td>
<td>17</td>
<td>20</td>
<td>86</td>
</tr>
</tbody>
</table>

Flu Vaccination Coverage by Age Group, Children 6 months—17 years, United States, 2010—2020

Data Source: National Immunization Survey-Flu (NIS-Flu)
Error bars represent 95% confidence intervals around the estimates.
Estimated influenza illnesses, medical visits, hospitalizations and deaths averted by seasonal flu vaccine among children ages 6 months—4 years in the United States, 2010—2020

Among children ages 6 months—4 years, seasonal flu vaccines have averted:

- 4.3-20.1 million illnesses
- 2.9-15.5 million visits
- 32,000-164,000 hospitalizations
- 130-2350 deaths

In the context of:

- Substantial disease burden
- Seasonal incidence of about 5-20%³
- Variable vaccine efficacy (VE)
  - Vaccine efficacy estimates ranging from 19-60% from 2010—2020⁴
- Consistent vaccine coverage
  - 63.6-75.2% flu vaccine coverage among children 6 months—4 years from 2010—2020⁵

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Current recommendations for COVID-19 vaccines

- There is **no** COVID-19 vaccine currently authorized for use in children less than 5 years of age.
- Only the Pfizer-BioNTech vaccine is currently authorized for use in children ages 5—17 years.

*Age-appropriate mRNA COVID-19 vaccines are preferred over Janssen COVID-19 Vaccine for primary and booster vaccination. Janssen COVID-19 Vaccine should only be used in limited situations.
FDA update
Convenings of the Vaccines and Related Biological Products Advisory Committee (VRBPAC)

- June 14, 2022: VRBPAC meeting to review the request for EUA for the Moderna COVID-19 vaccine in children and adolescents ages 6—17 years
- June 15, 2022: VRBPAC meeting to review requests for EUA for:
  - The Moderna COVID-19 vaccine in children ages 6 months—5 years
  - The Pfizer-BioNTech COVID-19 vaccine in children ages 6 months—4 years
COVID-19 vaccine Work Group activities
Late May- Early June 2022

Reviewed and discussed:

- Vaccine safety, immunogenicity and efficacy data—including both immunobridging and laboratory-confirmed direct efficacy—for the Moderna COVID-19 vaccine for children and adolescents ages 6 months—5 years and 6—17 years.

- Vaccine safety, immunogenicity and efficacy data—including both immunobridging and laboratory-confirmed direct efficacy—for the Pfizer-BioNTech COVID-19 vaccine for children and adolescents ages 6 months—4 years.

- COVID-19 epidemiology and outcomes in children ages 6 months—5 years.

- Post-authorization vaccine effectiveness of COVID-19 vaccines in children and adolescents ages 5—17 years.

- Grading of Recommendations, Assessment, and Evaluation (GRADE) and Evidence to Recommendations Frameworks for both Moderna and Pfizer-BioNTech COVID-19 vaccines for children ages 6 months—5 years.
Agenda: Friday June 17, 2022

- Epidemiology of COVID-19 in young children  Dr. Fleming-Dutra (CDC)
- COVID-19 vaccine effectiveness in children and adolescents  Dr. Link-Gelles (CDC)

Break

- Safety and immunogenicity of Moderna 2-dose primary series in children ages 6 months—5 years  Dr. Das (Moderna)
- Safety and immunogenicity of BNT 162b2 3-dose primary series in children ages 6 months—4 years  Dr. Gruber (Pfizer)
- mRNA COVID-19 vaccines in young children: Summary and Work Group interpretation  Dr. Oliver (CDC)

- PUBLIC COMMENT
Work Group members

ACIP members
- Matthew Daley (chair)
- Beth Bell
- Grace Lee
- Keipp Talbot
- Oliver Brooks

Ex-officio/government members
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- NIH: Chris Roberts
- IHS: Uzo Chukwuma
- DOD: Bryan Schumacher
- CMS: Jeff Kelman
- BARDA: Christine Oshansky
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- ACP: Jason Goldman
- ADS: Emily Kahn
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- AIM: Rob Shechter (primary), Jane Zucker (alternate)
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- NACI: Matthew Tunis (primary), Kelsey Young (alternate)
- NFID: Bill Schaffner (primary), Marla Dalton (alternate)
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- Yon Yu
Thank you!

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.