COVID-19–Associated Hospitalizations among Adults — COVID-NET, 2023–2024

Advisory Committee on Immunization Practices (ACIP)
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COVID-NET: A RESP-NET population-based hospitalization surveillance platform

- RESP-NET: COVID-NET, RSV-NET, FluSurv-NET
- >300 acute-care hospitals
- 98 counties in 13 states
- In 9 of 10 HHS regions
- ~10% of U.S. population
- Positive SARS-CoV-2 within 14 days of or during hospitalization
- Screening or clinician-driven testing
- Clinical data: representative sample of COVID-NET patients
Epidemiology of COVID-19–associated hospitalizations among adults

March 1, 2020–January 27, 2024

October 2023–January 2024

Gray boxes indicate potential reporting delays. Interpretation of trends should be excluded from these weeks.

Rates highest in adults ages ≥75 years.
Percent of Weekly Hospitalizations by Age Group — COVID-NET, March 2020–January 2024

≥75: 46% of COVID-19 hospitalizations October 2023–January 2024

≥65: 67% of COVID-19 hospitalizations October 2023–January 2024

<65: 33% of COVID-19 hospitalizations October 2023–January 2024
Among adults ages ≥75 years during October 2022–November 2023, 25% of COVID-19-associated hospitalizations were residents of a long-term care facility.
An examination of death certificate data from March 2020–April 2022 found that among all deaths in adults with COVID-19-associated hospitalization, 67% occurred in-hospital and 33% occurred ≤30 days post-discharge.

Among adults ages ≥65 years who died in-hospital, 28% were residents of long-term care facilities.
Percent of COVID-19-Associated Hospitalizations with Immunocompromising Conditions*, by Age Group — COVID-NET, October 2022–November 2023

* Immunocompromising conditions include AIDS or CD4 count<200, complement deficiency, graft vs host disease, HIV, immunoglobulin deficiency, receipt of immunosuppressive therapy, leukemia, lymphoma, solid organ malignancy, bone marrow transplant, metastatic cancer, multiple myeloma, steroid therapy, solid organ transplant, and other conditions adjudicated by RESP-NET physicians to be immunocompromising in nature.
Percent of COVID-19-Associated Hospitalizations with Immunocompromising Conditions among All Adults Ages ≥18 Years, Overall and by Outcome — COVID-NET, October 2022–November 2023

* Immunocompromising conditions include AIDS or CD4 count<200, complement deficiency, graft vs host disease, HIV, immunoglobulin deficiency, receipt of immunosuppressive therapy, leukemia, lymphoma, solid organ malignancy, bone marrow transplant, metastatic cancer, multiple myeloma, steroid therapy, solid organ transplant, and other conditions adjudicated by RESP-NET physicians to be immunocompromising in nature.
Percent of Hospitalizations among Adults Ages ≥18 Years with Underlying Medical Conditions by Age Group, with Top 4 Conditions Highlighted — COVID-NET, October 2022–November 2023

<table>
<thead>
<tr>
<th>Condition</th>
<th>18–49 yrs</th>
<th>50–64 yrs</th>
<th>65–74 yrs</th>
<th>≥75 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic lung disease</td>
<td>23</td>
<td>36</td>
<td>45</td>
<td>34</td>
</tr>
<tr>
<td>Asthma</td>
<td>19</td>
<td>17</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>COPD/Bronchitis</td>
<td>3</td>
<td>16</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>Cardiovascular disease</td>
<td>20</td>
<td>47</td>
<td>61</td>
<td>67</td>
</tr>
<tr>
<td>CAD/CABG/MI</td>
<td>5</td>
<td>17</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>CHF/Cardiomyopathy</td>
<td>6</td>
<td>18</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Stroke/TIA</td>
<td>3</td>
<td>13</td>
<td>15</td>
<td>20</td>
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<tr>
<td>Diabetes</td>
<td>21</td>
<td>40</td>
<td>44</td>
<td>37</td>
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<tr>
<td>Immunocompromising condition</td>
<td>12</td>
<td>19</td>
<td>21</td>
<td>13</td>
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<tr>
<td>Neurologic condition</td>
<td>18</td>
<td>26</td>
<td>30</td>
<td>42</td>
</tr>
<tr>
<td>Dementia</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>29</td>
</tr>
<tr>
<td>Renal Disease</td>
<td>8</td>
<td>21</td>
<td>24</td>
<td>31</td>
</tr>
<tr>
<td>Obesity</td>
<td>42</td>
<td>43</td>
<td>39</td>
<td>23</td>
</tr>
</tbody>
</table>
COVID-19 Vaccination Status by Age Group among Adults Ages ≥18 Years Hospitalized with COVID-19 — COVID-NET, October–November 2023 (Preliminary)

No record of bivalent or updated monovalent dose: No recorded doses of COVID-19 bivalent or updated 2023-2024 monovalent dose. Bivalent booster, but no updated monovalent doses: Received COVID-19 bivalent booster vaccination but no record of receiving updated 2023-2024 monovalent booster dose. Updated monovalent dose: Received updated 2023-2024 monovalent dose. Persons with unknown vaccination status are excluded.
Acknowledgements

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