COVID-19- Topics

• Current Delaware/National Data
• The Delta Variant
• Vaccine comparisons
• Children/ Pregnancy
• “Long Haul” and post COVID syndromes
• Vaccine safety, masking, social distancing
• Current Delaware Judiciary Protocols
76.1% Delawareans 18+ With at Least 1 Vaccine Dose

Data Source - CDC

1,116,666 Vaccines Administered

1,880 Total Deaths

378 New Cases 7-day Average

220 Current Hospitalizations

7.4% Positive Tests 7-day Average
Source: DPH 9/6/21
<table>
<thead>
<tr>
<th>Date Range</th>
<th>New cases rate (per 100,000 people)</th>
<th>Percent of tests that are positive</th>
<th>Avg. daily hospitalizations (per 100,000 people)</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/21/2021 - 08/27/2021</td>
<td>255.4</td>
<td>7.2</td>
<td>20.4</td>
</tr>
<tr>
<td>08/14/2021 - 08/20/2021</td>
<td>235.7</td>
<td>7.2</td>
<td>14.4</td>
</tr>
<tr>
<td>08/07/2021 - 08/13/2021</td>
<td>170.6</td>
<td>6.6</td>
<td>10.4</td>
</tr>
<tr>
<td>07/31/2021 - 08/06/2021</td>
<td>117.2</td>
<td>5.1</td>
<td>5.6</td>
</tr>
<tr>
<td>07/24/2021 - 07/30/2021</td>
<td>68.5</td>
<td>3.9</td>
<td>3.6</td>
</tr>
</tbody>
</table>
Current Hospitalizations

Data are current as of 6pm the previous day. Last update: 09/06/2021

Source: DPH 9/6/21
Estimated infections are the number of people we estimate are infected with COVID-19 each day, including those not tested.

Graph showing the daily infections with different scenarios: Current projection, Worse, and Universal masks.
Hospital resource use indicates how equipped a location is to treat COVID-19 patients for the Current projection scenario. Select All beds or ICU beds for descriptions of each measure.
Covid-19 Management

- Monoclonal Ab infusion
  - Combination agents
  - < 10 days post assay
- Remdesivir
- Steroids
- Immune blocking agents
  - Block inflammatory response
  - Supply issues
Currently, four variants are classified as a variant of concern (VOC). The distribution chart shows the percentage of each variant from May 16, 2021, to August 21, 2021.

### USA

<table>
<thead>
<tr>
<th>WHO label Lineage</th>
<th>Type</th>
<th>%Total</th>
<th>95% PI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha B.1.1.7</td>
<td>VOC</td>
<td>0.2%</td>
<td>0.0-0.7%</td>
</tr>
<tr>
<td>Beta B.1.351</td>
<td>VOC</td>
<td>0.0%</td>
<td>0.0-0.2%</td>
</tr>
<tr>
<td>Gamma P.1</td>
<td>VOC</td>
<td>0.1%</td>
<td>0.0-0.5%</td>
</tr>
<tr>
<td>Delta B.1.617.2</td>
<td>VOC</td>
<td>98.8%</td>
<td>97.6-99.1%</td>
</tr>
<tr>
<td>AY.2</td>
<td>VOC</td>
<td>0.2%</td>
<td>0.0-0.7%</td>
</tr>
<tr>
<td>AY.1</td>
<td>VOC</td>
<td>0.1%</td>
<td>0.0-0.5%</td>
</tr>
<tr>
<td>Eta B.1.525</td>
<td>VOI</td>
<td>0.0%</td>
<td>0.0-0.2%</td>
</tr>
<tr>
<td>Iota B.1.526</td>
<td>VOI</td>
<td>0.0%</td>
<td>0.0-0.2%</td>
</tr>
<tr>
<td>N/A B.1.621</td>
<td>VOI</td>
<td>0.3%</td>
<td>0.0-0.7%</td>
</tr>
<tr>
<td>B.1.621.1</td>
<td>VOI</td>
<td>0.1%</td>
<td>0.0-0.5%</td>
</tr>
<tr>
<td>B.1.628</td>
<td>VOI</td>
<td>0.1%</td>
<td>0.0-0.5%</td>
</tr>
<tr>
<td>Other Other</td>
<td>Other</td>
<td>0.1%</td>
<td>0.0-0.5%</td>
</tr>
</tbody>
</table>

- Enumerated lineages are VOI/VOC or are circulating >1% in at least one US region during at least one two week period; remaining lineages are aggregated as "Other".
- ** These data include Nowcast estimates, which are modeled projections that may differ from weighted estimates generated at later dates.
- # Sublineages of P.1 and B.1.351 are aggregated with the parent lineage and included in parent lineage's proportion. AY.3-AY.12 are aggregated with B.1.617.2
Children/Covid-19 (< 12 y old)

• 4.8 million children infected
• August 9% increase in children
• 11-20 % total
• 1.6-3.6 % of hospitalized
• 0.24 % of deaths

• AAP August 2021
Children/Covid-19

• unvaccinated adolescents- 10x higher admission rate
• 20 % ICU admissions < 17 years old
• admissions – up 5 fold since July
• 23 % adolescent admissions to ICU
• 9.8 % of admissions require mechanical ventilation
• No affect on mortality
• No clear predisposing “long Covid” events

• CDC (2 STUDIES)
Children / Covid -19 (<12 y old)

• Mild disease, asymptomatic
• Easily transmit without symptoms
• Co-illness- similar to adults
  • Obesity, asthma,
  • Down’s, congenital diseases
• Multisystem inflammatory Syndrome- Covid (MIS-C)
  • Rash (diffuse), fever, Nausea vomiting
  • Lungs, heart, kidneys
  • Weeks after disease
  • Typical recovery (slow

• AAP August 2021
Vaccine Efficacy

• Measure vaccine success
  • Neutralizing antibody studies – test blood vs virus in test tube
  • Epidemiology – rates of illness compared by vaccine received
  • Measure antibody levels in patients post vaccine

• Hospitalizations
  • 90-98% of hospitalized are unvaccinated
  • Review “breakthrough” cases hospitalized
Vaccine Efficacy - Delta

• "Moderna makes twice the Antibodies as Pfizer"
• 6-8 months post vaccine titers drop - both mRNA
• J and J – Ab levels remain high 8-12 months
• Goal- prevent severe dz, hospitalizations, death
• Overall- clinical , prevent illness
  • J and J 67%
  • Moderna 66-95 %
  • Pfizer 42-96 %
• Mortality remains < 1% in all vaccinated humans
Vaccine Safety

• General malaise, fever, myalgia
• Multiple days
• 369 million doses nationwide
• Thrombosis syndrome – women 18-49
• Anaphylaxis – rare allergic
• GBS – rare neurologic reaction (< influenza)
• Myocarditis (mRNA vax)
• Death – unreported?
• Booster reactions?
Pregnancy/Covid- 19

- 105,000 pregnant women infected
- 18,000 hospitalized (17 %)
  - 6 fold more likely to be hospitalized
  - High percent critically ill
  - Induced labor- reduce maternal stress/optimize birth
- 25% ICU
- 124 deaths
- No increased miscarriages ( first 6-10 weeks)
  - CDC August 2021
Pregnancy /covid - 19 vaccination

• 35,691 pregnant vax recipients
  • Myalgia, fever, pain locally

• 3958 vaccine recipients followed
  • 827 completed pregnancy
  • 13.9 % loss ( same as non-vax population)
  • 9.4 % preterm birth ( typically 7.5% nonvax)
  • 3.4 % Small gestational size (same as general population)

• NEJM April 2021
Pregnancy/Covid -19

- No evidence of harm to fetus/baby with SARS-Cov -2
- No evidence of transmission mother to fetus
- SARS Cov2 associated with preterm delivery (3x)
- Pregnant woman 62% more likely to need ICU

- Nature  March 2021
Post Covid Syndrome

• “long Haulers”
• 10-30 % of Covid-19 patients
• NOT related to severity of disease
• Fatigue, dizziness, breathing issues, memory loss
• Etiology and factors not defined
• Months post disease
  
  • CDC August 2021
Vaccine – Booster

• Immunosuppressed
  • 4 weeks post last dose
• Ab levels decline
  • 6 vs 8 months?
• J and J vaccine titers remain high
• Awaiting guidance –
• Pfizer likely approved Sept 20, 2021
School/Work covid exposure

• Vaccinated individual
  • No quarantine unless symptoms
  • Testing day 5, quarantine if positive

• Unvaccinated individuals
  • 14 days quarantine
  • Return work/school 14 days or
  • Return day 7 if negative rapid test day #5 post exposure

• CDC.GOV
Covid testing

• PCR – detects the RNA of virus –
  • 24 hour
  • Highly sensitive
  • “gold standard”
• “antigen” test-AKA rapid test
  • Surface proteins
  • 15 minute
  • Excellent for screening
  • 30% false negative rate
Covid-19 infected persons

- Isolate 10 days from first symptoms
- Do not need a negative test
- If immune disease/cancer isolate 20 days
- Natural disease Ab levels lower than vaccine levels
- Get vaccinated--- 4-6 weeks post disease
Covid- activities of risk

• Dining out- the highest risk event -50 % of new cases
  • Outdoors best
  • Indoors-masks, vaccinated only
  • Low numbers

• Air travel- moderate risk
  • Mask, hand washing/solutions, no eating

• Events
  • Outdoors ideal
  • Refrain from large indoor events
  • “only vaccinated” –still risk, lower
Covid -19

- Disease of the unvaccinated and children
- Vaccinated remain at risk for disease-host issues
- Pregnancy clearly at high risk for progression of disease
- Vaccine extremely safe
- Vaccine likely approved for < 12 by December
- Long term effects of covid not known yet
Delaware Judiciary COVID-19 measures

• As of Aug. 16, 2021, mask use – covering nose and mouth – was restored as a requirement for all visitors and court staff in all court facilities. (The only exceptions are for individuals speaking in a courtroom as part of a court proceeding or for employees in their own office or a social distant work area.)

• Social distancing continues to be encouraged in court facilities along with the use of plexiglass barriers that were installed during the pandemic, particularly in areas where court staff interact with the public and in courtrooms.

• The Chief Justice has continued to urge the use of remote proceedings, developed during the pandemic, when appropriate and possible.

• As of Sept. 13, 2021, court employees must provide proof of vaccination or submit to weekly COVID-19 tests and provide negative result to supervisors.