Vaccine Indicators and Data Visualization Best Practices
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1. Phase: Current phase of vaccination, including who is eligible to be vaccinated now
2. Supply: Percentage of population that could be fully vaccinated with doses distributed
3. Supply: Percentage of doses administered
4. Coverage: Percentage of population partially vaccinated
5. Coverage: Percentage of population fully vaccinated

Full vaccine indicator report available here: https://preventepidemics.org/covid19/indicators/
Visualization Best Practices
**Indicator 1**

Current phase of vaccination, including who is eligible to be vaccinated now

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**Recommendations**

- Keep it simple and link to detailed eligibility descriptions
- Indicate the timing for future phases, if possible
- If phase varies by county, add a map
- Provide visualization and explanatory text in multiple languages
- Provide links to how and where those eligible can be vaccinated

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**Who is included in this phase?**

1a. Healthcare workers and nursing home residents

1b. Persons age 75 and older and frontline essential workers

1c. Persons 65-74 and persons 16-64 with high-risk medical conditions, and essential workers not included in 1b

**Note:** Phases may not be 100% complete before new phases are opened.

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*ACIP guidelines shown as an example; state specific phases should be shown.*

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**Examples and Resources**

- [Arizona (map)]
- [Arkansas (detailed flyer on website)]
Indicator 2

Percentage of population that could be fully vaccinated with doses distributed

Recommendations

- Use a simple graphic for a simple message: this indicator tells us how much vaccine supply we have compared to how much we need
- As shown here, this indicator can also be shown in combination with the percentage of the population fully vaccinated (indicator #6)
- Update weekly

Examples and Resources

- Massachusetts (map)
Indicator 3
Percentage of doses administered*

Recommendations
- Indicate a goal for timely distribution of doses on the visualization
- Show data week-by-week to monitor for improvements over time
  - Could also be shown daily and monthly
- Enable user to filter by provider to track where support may be needed to get doses off of shelves and into arms

Examples and Resources
- Minnesota (administration data)

*May only include doses distributed via public health
Indicator 4
Percentage of population partially vaccinated*

Recommendations
- Use a map to show variation in coverage by location
- In addition to cumulative visuals like these, show trends over time (see “Visualizing Equity”)

Examples and Resources
- NYC dashboard
- North Dakota (time trends by age)

*Received one dose of a two-dose vaccine regimen
Indicator 5

Percentage of population fully vaccinated*

Recommendations

- Enable users to filter data by location (e.g., view coverage in a single county)
- Note where data are missing or unavailable
- Make data (counts and percentages) available for download

Examples and Resources

- Washington (map and vaccine data integrated into COVID-19 dashboard)
- North Carolina (county-level)

*Completed vaccine regimen (e.g., two doses of mRNA vaccine or single dose of Janssen vaccine)
Visualizing Equity
Visualizing Equity

Critical to:

- Increase accountability and transparency
- Inform decision-making to optimize equitable distribution strategies
Visualizing Equity

Vaccination coverage by race and ethnicity over time

15.6M Vaccines administered

% of population fully vaccinated

- Overall: 37%
- White: 45.9%
- Black: 26.2%
- Asian: 43.4%
- Hispanic: 28.2%
- AI/AN: 31%
Visualizing Equity

Recommendations

- Show proportion of total or eligible population compared to proportion of vaccinated population
- Week-to-week updates are essential to monitor progress
- Can also use line graph to show trends for multiple groups

Examples and Resources

- Washington (stratification overall and among age 65+)
- North Carolina (demographic data over time)
- Minnesota (race and ethnicity by age)
Visualizing Equity
Mapping coverage and comparing with other key equity indices

Recommendations
● Consider presenting with other ‘equity maps’ most relevant to the context, for example:
  ○ Access to primary care provider, hospitals or pharmacies
  ○ Distance from vaccination provider
  ○ Social vulnerability indices

Examples and Resources
● NYC maps
● Social vulnerability index (CDC)
● Surgo Ventures Vaccine Coverage Index