Crafting Effective and Transparent Institutional COVID-19 Data Dashboards

To supplement the efforts of New Jersey’s institutions of higher education in responding to the ongoing COVID-19 pandemic, the Office of the Secretary of Higher Education (OSHE) is offering best practice recommendations for creating effective and transparent institutional COVID-19 data dashboards. While circumstances may differ from one institution to another, these practices can aid institutions in communicating public health information to stakeholders in the higher education community.

Institutions should recognize that their COVID-19 dashboard is likely the first place that students and other stakeholders will go to locate public health trends specific to that campus community. With this in mind, institutions should provide transparent, accurate, and easy-to-read information via user-friendly dashboards.

For more information on the state’s COVID-19 Information Hub, please visit: https://covid19.nj.gov/

General Practices for Institutional COVID-19 Data Dashboards

- House the COVID-19 dashboard on the institution’s COVID-19 information webpage so it can be found easily by all stakeholders.
  - Ensure that the dashboard is compliant with accessibility rules and regulations (for example, ensuring screen readers can access the dashboard).
- Partner with the institution’s local health department for feedback and recommendations.
  - If possible, show local health department information and at-large community trends to provide more context to campus cases.
- Ensure the dashboard is visually easy to read and the information provided is as digestible as possible.
  - Start with the most relevant information first. This may be the number of “active cases” or the number of most recent “new” or “current” cases.
  - Prioritize data visualization, for example, using line or bar graphs to show cases confirmed over time.
- Ensure consistency in how data is presented in each dashboard update. It may be helpful to clearly explain how the data is counted and labeled.
- The dashboard should be updated frequently and in consistent intervals (daily, weekly, etc.) to ensure that the same period of time has passed between each report update. Information about how often the dashboard is updated should be clearly present.
- Display trends over time in addition to a snapshot of daily infections (for example, showing seven-day averages over a longer period of time).
- Include a testing summary along with the dashboard, which may include:
  - Description or explanation of your institution’s approach to COVID-19 testing;
  - Information on the source of the dashboard’s data (for example, is the data provided from the institution’s testing program directly, the local health department, a third-party testing provider, or some combination of the above);
  - Information on the frequency of testing and the populations that are tested.
- Display the institution’s instructional and operational modes along with the percentage breakdowns associated with each mode (mostly in-person, mostly hybrid, mostly remote, etc.).
• Explain any data limitations by providing well-reasoned and stated caveats about the COVID-19 data dashboard.
  o Sharing these limitations can help the viewer interpret and use the dashboard and provide any additional context that may be necessary.
• Include breakout data for major campus locations, especially if institutions have multiple campuses located in different geographic locations (i.e., different cities and/or counties).
• Include information for users to download the COVID Alert NJ exposure notification app and encourage community members to "Take the Call" and cooperate with institutional and state contact tracers.
• Match the dashboard metrics to key institutional decision points about campus operations so that stakeholders have additional context to interpret updates and institutional decision-making.

**Standard Fields to Consider Including in the Institutional COVID-19 Dashboard**

• Date the dashboard was last updated.
• Total number of cumulative positive cases since pandemic began in March 2020, broken down by:
  o Population (i.e. student vs. employee);
  o Student category (i.e. off-campus vs. on-campus cases or residential vs. non-residential, gender, race/ethnicity); and
  o Staff category (i.e. working on- or off-campus) and faculty category (i.e. full- or part-time, adjunct, etc.)
• Total number of cumulative tests administered, broken down by positive and negative test results.
• Positivity rate, which can be compared to the general state positivity rate or local calculations to provide additional context for the institution.
• Total number of students and employees in isolation and quarantine.
• Charts and/or tables that display trends in cases over a set period of time (for example, a rolling seven-day or average chart).
• Data glossary, which clearly defines any key terms, such as “active cases”, “recovered cases”, “current cases”, “isolation”, “quarantine”, etc.
• Frequency of testing or reporting from testing provider.
• Summary of the campus operating status (mostly in-person, mostly hybrid, mostly remote, etc.), specifically for instruction and housing (if applicable).

**Additional Fields to Consider**

• City or county COVID-19 data or hyperlinks to those data, as institutions should be collaborating with their local health departments.
• Population totals along with disaggregating by various important sub-populations. This could include showing numbers of cases by different student populations (on-campus, off-campus, gender, race/ethnicity), staff (working on- or off-campus), and faculty (full- or part-time, adjunct, etc.).
• Test turnaround time (length of time it typically takes for people to get results of a COVID-19 test) if testing is being provided on-campus.
• In addition to providing the total number of students, faculty, and staff that are self-isolating or quarantining and, if available, disaggregate by the reason; positive test result, confirmed contact
with a person who was positive, or possible contact with person(s) believed to potentially be positive. Ensure privacy is maintained through information collection and data does not allow for the identification of personal information.

Dashboard Examples

Below are examples of institutions with dashboards that exemplify some, but not all, of the recommendations listed above by being transparent, accurate, easy-to-read, and expressing reporting limitations.

- Monmouth University: https://www.monmouth.edu/covid-19/dashboard/
- Rowan University: https://www.rowan.edu/returntorowan/confirmed-covid-cases.html
- Rutgers University: https://coronavirus.rutgers.edu/health-and-safety/testing-program-dashboard/
- Seton Hall University: https://www.shu.edu/health-intervention-communication/reported-cases.cfm
- Union County College: https://www.ucc.edu/coronavirus/
- William Paterson: https://www.wpunj.edu/covid19/dashboard.html