

Attachment 6b

Surveillance for Pandemic Influenza Hospitalizations and Hospital Deaths

Purpose

Surveillance for influenza-associated hospitalizations and deaths during an influenza pandemic will be essential to help monitor the pandemic's impact on morbidity and mortality, including the identification of populations most severely affected.

Background

- During the 2003-04 “moderately severe” (“Fujian strain”) influenza season in Colorado, approximately 13,000 positive tests for influenza were reported by hospitals; these numbers overwhelmed some parts of the disease-reporting network.
- The 2004-05 “mild” influenza season in Colorado was the first season for which influenza-associated hospitalization (rather than all positive tests) was a reportable condition. Approximately 1,000 hospitalizations were reported (peak of 140 per week and ≥ 100 per week x 4 weeks); the reporting system was very capable of handling this reporting volume.
- Based on federal projections (HHS Pandemic Influenza Plan, November 2005; Part 1, Strategic Plan, p.18), a “moderate” influenza pandemic similar to 1957-58 and 1968-69 could result in 13,000 hospitalizations in Colorado; whereas, a severe pandemic similar to 1918 could result in 153,000 hospitalizations in Colorado.

Assumptions

- The disease-reporting system (hospitals and public health agencies) based on individual case reporting to Colorado Electronic Disease Reporting System (CEDRS) could adequately handle a volume of hospitalized influenza cases up to 300-400 per week; therefore, current case reporting methods would be adequate during the “early” stage of a pandemic.
- Individual case-based reporting of hospitalized influenza cases would not be feasible during the “full-blown” stage of a pandemic; therefore, alternatives to individual case reporting are needed for this phase based on “aggregate” reporting and the minimum “necessary” information.
- The Colorado Department of Public Health and Environment (CDPHE) and organized local health departments have staff that could be assigned to large and medium size hospitals to perform surveillance and reporting of influenza cases and deaths during the most active phase of a pandemic.
- Due to the expected limited laboratory testing capability for the pandemic strain during the pandemic phase, it is assumed that most pandemic-related hospitalizations will not be lab-confirmed. Hospitalized case ascertainment, therefore, will need to be based primarily on syndromic criteria (i.e., admitting diagnosis) rather than lab criteria.
- Hospital admissions offices can provide daily lists of admitting complaints/admitting diagnoses during a pandemic.

“Early Phase” Surveillance Methods

- Hospitals should report individual cases of influenza-associated hospitalization similar to regular flu season reporting, by CEDRS (preferred), or by fax or phone the state or local health dept.
- CEDRS will be modified as needed to add additional data fields.
- Hospitals should determine methods for identifying deaths among persons admitted for influenza-associated illness and update CEDRS reports or hard-copy reports accordingly.
- Hospitals should determine methods for obtaining and using “admissions” data (e.g., admissions for “influenza” or “pneumonia”) to assist with identifying influenza-associated hospitalizations.
- Based on the availability and performance characteristics of testing resources (rapid and confirmatory) to identify illness associated with the pandemic strain, the State Health Department will provide guidance on whether to report only test-positive cases or all suspect cases (based on admitting complaints/diagnosis).

Transition from Early Phase to “Full-Blown” Phase Reporting

- CDPHE will monitor the frequency and rate of increase in early phase pandemic influenza hospitalization reports, as well as survey hospitals as to their ability to keep up with early phase reporting.
- Based on these parameters, and in conjunction with local public health agencies, the state health dept. will determine when it is necessary and appropriate to switch to “aggregate” reporting.
- This decision will be announced via Health Alert Network (HAN) communication.

“Full-Blown Phase” Surveillance Methods

- Hospitals should report aggregate numbers of influenza-associated hospitalizations based primarily on admitting diagnosis, stratified by specified demographic characteristics (e.g. age group)
- Hospitals should report numbers of deaths among persons admitted for influenza-associated hospitalization.
- An “aggregate data-reporting screen” will be available in CEDRS (see next page) to accommodate aggregate reporting of hospitalization and mortality data; reports may be entered directly into CEDRS or faxed to the state or local health department.
- Large and medium size hospitals should request as needed a state or local health department person to perform the surveillance and reporting function when this can no longer be adequately be performed by hospital staff.
- Large and medium size hospitals should report hospitalizations and deaths on a daily basis.
- Small hospitals should report hospitalizations and deaths on a daily basis to the extent possible; however, less frequent reporting (e.g., weekly or twice weekly) may be necessary and acceptable.

- Regional Epidemiologists should develop a plan in conjunction with each small hospital for surveillance and reporting; Regional Epidemiologists should assist small hospitals with surveillance and reporting to the extent necessary and possible.
- Hospitals should determine methods for obtaining and using “admissions” data (e.g., admissions for “influenza” or “pneumonia”) to assist with identifying influenza-associated hospitalizations.
- Hospitals should determine methods for insuring reporting of unduplicated numbers of influenza-associated hospitalizations and deaths (e.g., by maintaining line lists on-site).

CEDRS Aggregate Reporting Screen



The navigation bar features the Colorado state flag logo on the left, followed by the text "Colorado" in red. To the right, "Department of Public Health and Environment" is displayed in white on a blue background. Below this, a red bar contains six white buttons: "Main Menu", "Find a Case", "Report a Case", "Line List", "Messages", and "Help", followed by a "Logout" button on the far right.

[Click here to submit CEDRS problems or suggestions](#)

CEDRS : Aggregate Reporting:

Enter the numbers of new cases and new deaths since the last report for: **Pandemic Influenza**

Facility

Age Group: < 5 5-17 18-55 55+ Total

New Cases:

New Deaths:

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