

During ongoing public health events (natural disasters, HAZMAT events, outbreaks), ESSENCE can be an important source of new or confirmatory information. Any public health authority with ESSENCE access can create a situational awareness report. Please contact ESSENCE@dhss.mo.gov for help with accessing ESSENCE.

Step 1: Query ESSENCE

1. Refer to <http://www.dhss.mo.gov/ESSENCE/Training.html> for instructions on ESSENCE basics. These instructions assume a moderate level of ESSENCE ability.
2. Use the Query Portal to build your query.
3. Select the appropriate geographic area. ESSENCE may be queried by hospital location, county of patient residence, or zip code of patient residence. For example, emergency department (ED) visits may be important to track for residents of a certain area after a natural disaster, but for a workplace-based event, nearby hospitals should be searched because we cannot assume that people work in the same county where they reside.
4. Select the appropriate medical grouping system. ESSENCE parses all free text chief complaints into syndrome and subsyndrome categories. When it does this, it corrects spelling and groups like complaints together. Whenever possible, use these existing medical groupings because it will capture more visits than you may be able to think up on your own. However, avoid selecting more than one syndrome or subsyndrome at a time since ESSENCE will give you one record per category you request, and if a person is in two categories at once (fever and cough), they will appear twice in your list. If none of these categories fit the situation, then use "Chief Complaints" which will allow you to perform a free text query.
5. The most important tip on free text querying is: follow the instructions provided on the query screen in ESSENCE!
6. When performing a free text query, use your imagination to think of all the terms possibly associated with the event you are monitoring. One tip is to not spell out terms completely: for example, use `^therm^` instead of hypothermia because you might miss visits that misspell hypothermia or say "hypothermic".
7. You can narrow down age, sex, and date ranges for better results.
8. ESSENCE will produce a variety of nice figures like a time series and pie charts on demographics. You can use "Graph Options" to rename these and "Save Image" to save as a pdf. These can be inserted into your report.
9. You can also download data into Excel for extra analysis.
10. The ESSENCE Map Portal is another tool for reporting.

Step 2: Create a Report

1. ESSENCE is a unique system that contains a very specific type of data with specific limitations, which should be noted up front in any report on ESSENCE findings. You should say that only specific hospitals report to ESSENCE and you can refer them to a current map on the DHSS ESSENCE web page. Also, ESSENCE does not include physician office visits, urgent care, etc.. Chief complaint data are just the admission reason given at the ED and do not constitute a final diagnosis.
2. Please be clear to say, "there were 10 ED visits in the Fever syndrome on date x among y county residents detected in ESSENCE", rather than "there were 10 cases of fever in y county".
3. Typically, only aggregate numbers are reported. It is your responsibility to comply with ESSENCE Policies and Procedures, which means to be careful not to divulge any information that could potentially identify a patient or a hospital.
4. Use figures and tables from ESSENCE. The time series helps to put recent events in perspective, with either the last 90 days or a year-to-date range depicted.
5. Feel free to give your interpretation on the trends you observe using words like "this suggests" or "may be attributable to".

Step 3: Share as Appropriate

1. Identify your audience early on and write with them in mind. Avoid inflammatory language whenever possible since ESSENCE data are preliminary at best!
2. Put final report into pdf so it cannot be altered easily.
3. Check with your supervisory before distributing too widely beyond the Bureau of Communicable Disease Control and Prevention.