ACES Newsletter

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Issue 4, Fall 2019

FOCUS ON DATA QUALITY

Over the past year, the ACES team shifted focus from recruiting hospitals to improving the quality of data received from participating hospitals. To measure data quality, comparisons of ACES data to NACRS and DAD data are calculated using 2 metrics: **% capture** and **% extra**. Both metrics compare ACES data to CIHI's NACRS and DAD validated datasets of acute care patient records—**% capture** estimates the proportion of patient visits/admissions that are recorded in the gold standard databases that are also captured by ACES, whereas **% extra** estimates the number of patient visits recorded in ACES that are not recorded in CIHI's data. Comparisons are made for individual sites and for all sites combined.

ED visits in FY 2018: % capture is 98.7% and % extra is 5.1%

The high value for **% capture** demonstrates ACES' validity (ability to represent true events). The average **% extra** reduces to about 2% when the data for a few hospitals that send multiple duplicates are removed from the calculation. For admissions, **% capture** is 85.4% and **% extra** is 2.4%. We have identified hospitals that are sending admissions to ACES that are not in the DAD database but in other CIHI repositories (OMHRS, Rehab, CCC). These comparisons have been factored in, which improves **% capture**.

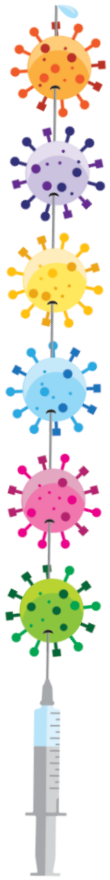
The ACES team are using these results to guide our path forward to improve data quality for each hospital. We categorized a few hospitals as "low" data quality due to multiple issues, such as missing data fields, duplicates, and obviously erroneous data. Also included in this category are those sites that transmit data via FTP-generated data files that are prone to missing and/or duplicated data fields—these hospitals need to be updated to HL7 data feeds. Some hospitals send "high" quality ED visit data but have deficiencies affecting their inpatient admissions data. Most hospitals—about 80%—have data quality compromised by only a missing data field such as CTAS or EMS arrival.

The 20% of hospitals with more than one issue or with a highly impactful transmission issue are **prioritized for action**. The ACES team has begun the process of reaching out to these hospitals, one at a time, and working with their IT teams to resolve the identified issues. A secondary priority for the ACES team is to increase the number of hospitals sending admissions data. A third priority is requesting all that hospitals to send discharge diagnosis to help us improve syndrome classification.

Please watch for future updates on our progress as we work to increase the validity and usefulness of ACES—we welcome your questions, suggestions, or general comments.

Our sincere thanks to each hospital for your ongoing participation and support.

USING ACES TO MONITOR FLU: A PRIMER



SYNDROMES: A number of ACES syndromes are useful for tracking the impacts of circulating respiratory viruses during Winter.

The **RESP** (respiratory) syndrome captures a wide range of symptoms such as—but not limited to—cough, congestion, earache, and sore throat. RESP is likely the most familiar syndrome for current users and follows a predictable pattern, with counts rising in September, peaking at the turn of the calendar year, and then levelling off by Spring.

Users can also monitor **ILI** (influenza-like illness), which is more specific and includes complaints of fever, influenza and/or flu.

Other, lesser-used syndromes that can be monitored include **BRONCH**—created to proxy RSV—which captures complaints such as bronchiolitis and bronchitis, and **CROUP**, which captures instances of barky or croupy cough.

One final syndrome to review during the respiratory season is **PN** (pneumonia)—its usefulness is generally limited to the inpatient admissions data, however it can occur in ED visits.

SYNDROMES TO MONITOR

RESP (respiratory)

ILI (influenza-like illness)

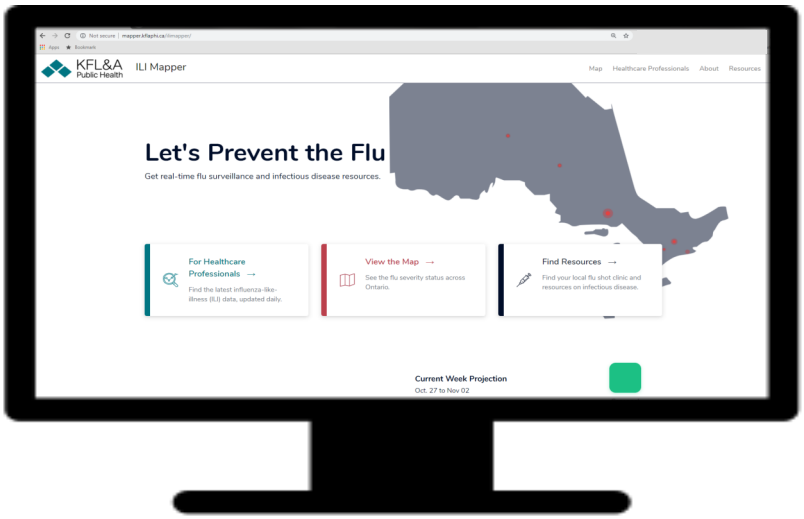
BRONCH (bronchiolitis, RSV)

CROUP (croup-PIV)

PN (pneumonia)

Visit the ILI Mapper for Local, Regional and Provincial Influenza Activity

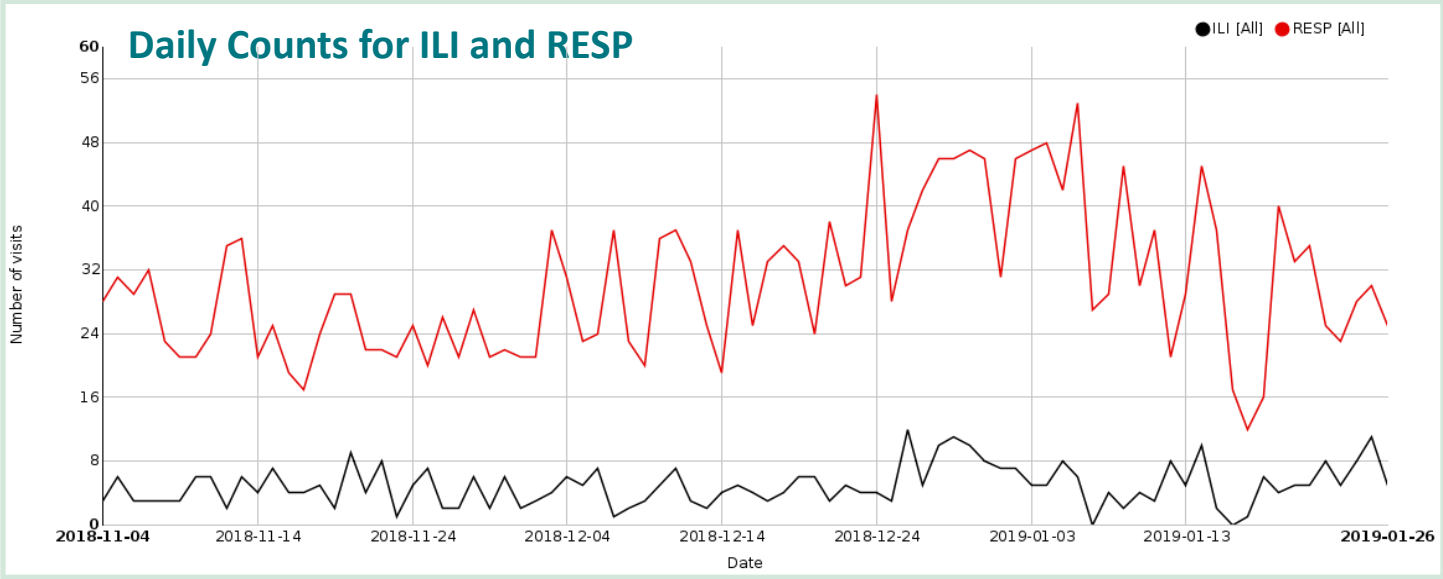
mapper.kflaphi.ca/ilimapper/

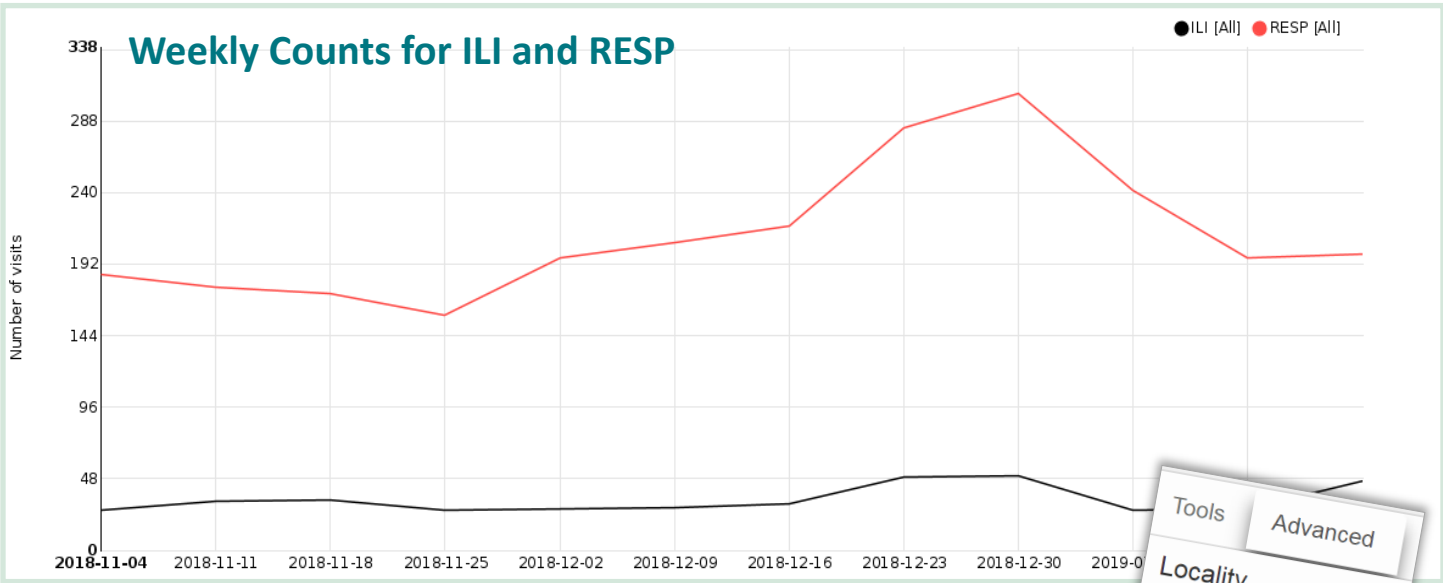


RESOURCES: In addition to monitoring visit volumes and specific syndromes, there are more resources available in ACES for monitoring seasonal influenza. ACES will continue to include influenza severity data this season as we have for the past two years. Our Ministry of Health partners will be extracting monthly counts for J09-J11 influenza-related ICD-10 codes from the NACRS and DAD databases. Visits, admissions, and death counts will be displayed—unsuppressed—by health unit and by age-range in chart format. Data is usually sent to the ACES team around the 15th business day of each month and will be posted in ACES a few days later, as is possible. These data can be found under the **Resources** tab. Hospitals are not required to submit these data to CIHI in any specific timeframe—therefore, influenza counts will likely be under-representative of true cases observed at some facilities. However, as each new month of data is made available to the ACES team, the past months' counts are also updated and will be reflected in the cumulative counts.

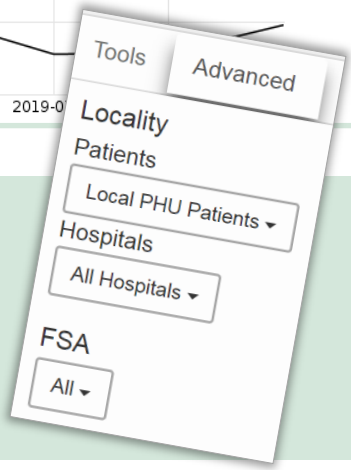
Tips For Using ACES During The Respiratory Season

DAILY VS WEEKLY COUNTS: Your review of local data may reveal low daily counts that make trend identification difficult. Choose the **date grouping** function and graph the data by **week** rather than the default choice, **day**. Below, the top graph shows **daily counts** for **ILI** and **RESP** recorded in a small public health agency during flu season and the bottom graph shows the same data aggregated to **weekly counts**. This may produce a more readable graph that is easier to interpret, and can also be directly shared with external stakeholders.





GEOGRAPHY SETTINGS: the default settings display data based on patient residential postal code and their relation to a health unit boundary. However, you can display patient volumes based on hospital location instead—change the geography setting using the **advanced** tab. For more information, see the ACES manual (click here) or the ACES Training videos (click here).



REMINDER: User Account Activity

Our user account policy requires that ACES accounts are used *actively*. For these purposes, *actively* means that accounts should be used more than once every **90 days**, after which the account will be disabled. This 90-day window resets with each new login—users that check the system regularly won't have their account disabled based on usage. The number of disabled accounts has decreased since we implemented our automated auditing check—now, users get an email reminder 5 days before their account is set to be disabled due to inactivity.

Some users may find the 5-day warning insufficient, but please note that most deactivations result in users requesting reactivation soon after they realize they are denied access to ACES. Likewise, this system has helped us identify accounts that are rarely used. We ask that you respond promptly to the email reminders to keep your accounts active to ensure that the ACES team can focus on maintaining this valuable public health tool.

Please try to log in to ACES before extended vacations or leave, and check your junk mail to ensure our emails are not being misclassified. Ideally, the email reminder would only be used for truly inactive accounts. If you are planning an extended absence, please let us know.

Please login regularly to maintain user access.

"ACES is an integral part of our health unit's flu surveillance system. With real-time data on emergency department visits for influenza-like illness (ILI) and fever, we can monitor the number of visits to our health unit area emergency departments on a daily/weekly basis."

– Anonymous ACES User

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