



REGIONAL OFFICE FOR EUROPE

Qualitative indicators for surveillance: past, present, and future directions

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Influenza Qualitative Indicator History



- A joint WHO/EURO-ECDC Working Group established in 2012
 - Comprised of country and area experts
 - Aim to assess the feasibility and usefulness of quantifying the existing qualitative indicators (QI) collected as a part of regional surveillance activities
 - Concluded interest in quantifying the QI, (n.b. intensity and trend; some had established)
 - reservations re. completely automating indicators using TESSy data (removes capacity of countries and areas to report and/or change the reported QI)

Working Group re-established in 2017

- In light of the development of the Pandemic Influenza Severity Assessment indicators (opportunities to harmonise)
- Review existing definitions and usefulness of the five QI (Intensity, Trend, Geographic spread, Dominant virus, and Impact – based on 2012 working group's recommendations)
- Provide input on the need for revisions including definitions, and (semi-) quantification of indicators other than intensity
- (Review existing definitions/performance of start, peak and end of influenza activity at the regional level)

Influenza Qualitative Indicator History



2017 Working Group Recommendations:

Intensity of influenza

- $_{\odot}~$ Align number of categories with PISA transmissibility
- Add influenza virological component to definition (syndromic data only \rightarrow other viruses might drive indicator)
- Could be used to feed PISA transmissibility (meets definition)
- Ratified with network (again) in 2023 and implemented in 2024

Trend of influenza

- $\circ~$ Add influenza virological component to definition
- Wording change and multiple weeks of data to try and account for noise (non-restrictive allows for country level decision making)

Influenza Qualitative Indicator History



2017 Working Group Recommendations:

Geographic Spread of influenza

 Simplify by using virological data only (inclusion of syndromic data could be contradictory and lead to overlap with intensity)

Dominant Virus

- \circ $\,$ Sentinel data used preferentially where available $\,$
- $_{\odot}$ $\,$ Agreed to pilot a comparison between reported and calculated indicators $\,$
- \circ Automated in 2023/24
- (Impact introduced for A(H1N1)09, limited value, align with PISA impact to aid collection only)

Qualitative Indicators – Pandemic Influenza Severity Assessment (PISA) indicators

- Assess severity of current influenza relative to previous years by using historical data to set thresholds that then allow for the qualitative categorization of such activity.
- PISA indicators currently on TESSy:
 - Transmissibility of influenza
 - Seriousness of influenza
 - Impact of influenza
- Updated PISA guidance (June 2024) includes:
 - Splitting of "impact" indicator "morbidity and mortality" & "impact on healthcare capacity"
 - Option to report syndromic and/or influenza-specific assessments for selected indicators
 - Extended list of suggested PISA parameters
 - Additional guidance on threshold setting
 - All data to be publicly visualized on WHO/HQ platform



Pandemic influenza severity assessment (PISA)

A WHO guide to assess the severity of influenza in seasonal epidemics and pandemics, second edition





https://www.who.int/teams/global-influenzaprogramme/surveillance-and-monitoring/pandemicinfluenza-severity-assessment

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Metadata changes to reflect updated PISA guidance will be shared via email. PISA indicator data not to be shown on ERVISS in 2024/25 season but will be available for review on an WHO/HQ public facing platform (unless opt out)

Qualitative Indicators – Current (shown in ERVISS)



Intensity of influenza

Intensity is a measure of influenza activity within individual countries based on assessment of all available information.

Geographic spread of influenza

Geographic spread is a measure of the geographic distribution of reported detections of influenza viruses in specimens from sentinel or non-sentinel sources





Qualitative indicators -- future directions



Following the network webinar in May, ECDC launched a survey to collect additional network feedback:

- *Length*: 25 questions
- *Survey tool* : EU survey (link sent via email)
- Final Deadline: 7 June
- *Responses*: 32 responses
 - o 27 EU/EEA countries, Albania, Kosovo, Montenegro, North Macedonia and Serbia

A summary of the network feedback will be presented now. The survey results also guided the questions for the 50-minute break-out sessions which will take place following this presentation.

Survey results – added value



 Most respondents agree that Influenza qualitative indicators reported by countries adds value to the regional assessment in ERVISS.



Survey results – added value



 Most respondents agree that additional qualitative indicators for SARS-CoV-2 and RSV would add value to the regional assessment in ERVISS.





 Highlighted in the box are the data sources described in the definition of influenza intensity in the <u>TESSy reporting protocol.</u>





• Eight countries use only ILI/ARI rates without sentinel/non-sentinel virological data. The rest seem to use a combination of ILI/ARI rate with virological data.





• Eleven countries use measures of severity (e.g. SARI rates) as a data source in assessing influenza intensity.





• Very few countries use wastewater, participatory or event-based surveillance. Six countries reported that expert opinion influenced the assessment.



Survey results – Influenza Geographic Spread



• Diversity in the data sources used to determine geographic spread for Influenza. Four countries reported that expert opinion influenced the assessment.



Survey results – Influenza Trend



• Diversity in the data sources used to determine geographic spread for Influenza. Four countries reported that expert opinion influenced the assessment.



Influenza Trend

What data sources do you use to assess this indicator currently?

Survey results – Influenza qualitative indicators



- Limited standardization across region on what quantitative data is being used in weekly assessment
- Most data sources used are also reported in TESSy and displayed in the activity (& severity) section of ERVISS
- Only six countries reported that expert opinion influenced the weekly assessment
 - $_{\odot}~$ Is there a formal process for gathering expert opinion in your country?
 - What role does expert input play in other countries?



Survey results – Ability to report for SARS-CoV-2/RSV



For SARS-CoV-2 approximately 50% of countries would be able to report a new qualitative indicator.
For RSV, it is less than 50% of countries.



Survey results – Free-Text responses



- Heterogeneity in surveillance systems makes a uniform regional approach challenging
- Further guidance is needed on how to combine and interpret information from multiple surveillance sources (e.g. sentinel/non-sentinel)
- Diversity in opinion of value of expert manually reporting indicator
 - Numerical data allow for a more precise assessment of the epidemiological situation of respiratory infections
 - Preference for country's experts to manually report indicators, so that expert evaluation can be included in the analysis (e.g. school holidays, regional changes, etc.)
- Challenges to SARS-CoV-2 and RSV qualitative indicator
 - $\,\circ\,$ Lack of historic data to calculate thresholds
 - $_{\odot}~$ No clear seasonality currently challenges indicators
 - \circ Lack of data sources

Break-out session



- The survey results highlighted some key questions that we would like to discuss with you in breakout sessions:
 - $_{\odot}\,6$ break-out groups with one facilitator and rapporteur
 - $_{\odot}$ 50-minutes to discuss four questions
 - $_{\odot}$ Notes will be taken by the rapporteur
 - $_{\odot}$ There will be no feedback to plenary
 - Feedback will be sent via email after the meeting including a proposal on next steps (including update on metadata changes to reflect updated PISA guidance)

Break-out session





Would you like to raise concerns/questions/reflections about the survey results? How do you supplement your quantitative data with a qualitative assessment each week?

If we were to introduce qualitative indicator(s) for RSV/ SARS-CoV-2, please rank intensity, geographic spread and trend, in order of usefulness useful.

What is driving the low agreement about being able to report qualitative indicators for RSV and/or SARS-CoV-2?

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If we were to introduce qualitative indicator(s) for RSV/ SARS-CoV-2, is there a need for a more standardised method (defined by ECDC/WHO) to calculate the quantitative component of these indicators?