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Evidence-based Tool for Triggering School Closures during Influenza Outbreaks

To the Editor: I read with interest the recent article by Sasaki et al., “Evidence-based Tool for Triggering School Closures during Influenza Outbreaks, Japan” (1), which describes an algorithm for determining the optimal timing of school closures to control influenza outbreaks. The published information is a helpful guide for predicting influenza outbreaks in school settings. However, no data are presented to show the efficacy of school closures after the detection of such outbreaks. As such, the title “Evidence-based Tool for Predicting Influenza Outbreaks, Japan” would more accurately describe the article.

The findings presented by Sasaki et al. (1) could be used to help make a decision for school closure or dismissal in places like Japan, but no information is provided on whether this approach is effective in preventing further influenza virus transmission. This is an important distinction and should not change the current school response guidance published by the Centers for Disease Control and Prevention (CDC) (2). In general, CDC guidance suggests that during an influenza outbreak, policymakers should weigh the advantages and disadvantages of school dismissals or school closures before making a decision.

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In Response: Vogt (1) correctly points out that our article (2) did not present data on the effectiveness of school closures to control influenza outbreaks. However, public health agencies continue to support school closure as a nonpharmaceutical response to the ongoing outbreak of pandemic (H1N1) 2009 (3) despite little evidence for the appropriate timing of closures, even though it is known that timely action is critical. As the title of our article reflects, our algorithm was designed as an evidence-based tool for supporting the timing of school closures.

In our article, we pointed out that evaluating the impact of school closures is a critical research question. Before April 2009, decision-making regarding school closure in Japan was left to individual schools, 98% of which are public. Since then, recommendations for public school closure have been made according to standardized rules set by the Japanese School Health and Safety Law, leaving final decision-making authority up to local education boards. Our next study will evaluate the effectiveness of this early, standardized timing of school closure in Japan.

On September 24, 2009, the Japanese Ministry of Health, Labor and Welfare presented a school closure plan for use in the different stages of an influenza outbreak; the plan is based on World Health Organization

recommendations (3). In the early periods of an outbreak, when infection is not widespread, a “proactive school closure plan” will be put into effect; school closure for 5–7 days will be implemented as soon as the first infection is detected in a school. If the outbreak is already spreading through the community, “reactive school closure” is considered sufficient. This closure has been performed during seasonal influenza outbreaks in Japan, closing classes when many students were absent from school. Most schools now close when >10% infection-related absenteeism is reached. Our study, which provides a refinement of thresholds predictive of serious outbreaks in schools, may support this plan in Japan and provide schools worldwide

with an approach to considering the timing of school closures.

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ANOTHER DIMENSION

Personal Log, Stardate 42552.6

Curi Kim

Awaiting the alien delegation from Sarona VIII
To scan them for communicable space disease,
I think of history and can’t help but now speculate
If our ancestral officers in duty were at ease
At their own quarantining stations, earthbound ports of entry,
There watchful for all ancient scourges crossing borders
(tuberculosis ... measles ... influenza ... coxsackie),
Assessing travelers sans medical tricorders,
But using only judgment and with epi skills equip’d
To help determine meaning in a cough, a rash;
And knowing what they saw was barely the berg’s tip
Considering all the infected travelers they didn’t “catch”—
Ah, the delegates just beamed aboard to be met;
Let’s see what interstellar parasites we detect!

Dr Kim is a quarantine medical officer at the CDC Detroit Quarantine Station, Detroit, Michigan. Her primary research interest is traveler’s health.

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