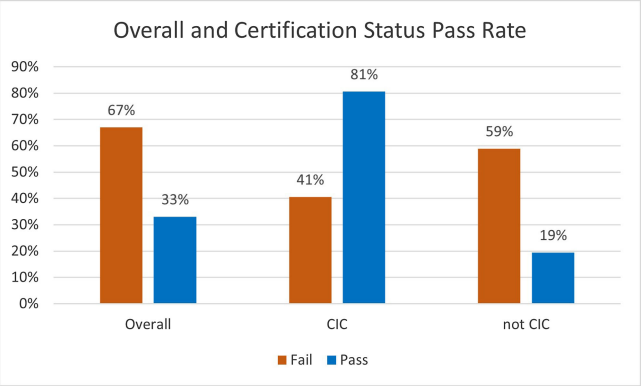

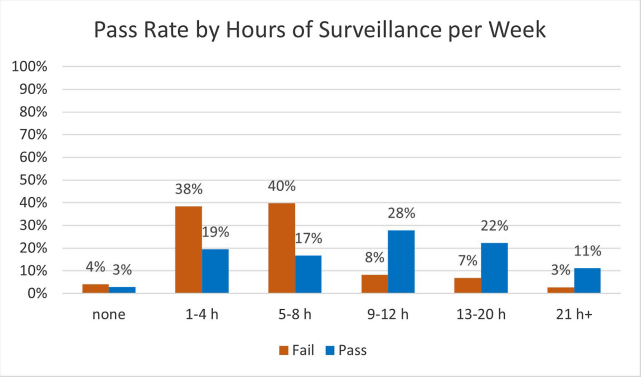

applying the National Healthcare Safety Network (NHSN) surveillance definitions (5,6). **Methods:** Case study scenarios determined to have high item discrimination were added to an online test bank and distributed annually to Ips of varying experience levels and care settings as part of a mandatory training program (5). The test bank currently consists of forty-two validated questions. Each year, the participants receive approximately thirty questions, including twenty randomly selected from the test bank and ten beta scenarios under development. Only validated test bank scenarios are used to calculate the passing score of 85%. Participants are blinded to which questions are test bank scenarios versus beta scenarios. Additional information was gathered at the beginning of the test to determine CIC status, years of experience, and weekly hours spent doing surveillance. Data was analyzed for passing score on the first attempt for testing years 2019, 2021, 2022, and 2023. **Results:** Thirty-six Ips passed the IRR test on the first attempt (33%). Of those who passed on the first attempt, twenty-nine (81%) were certified and twenty-two (61%) reported at least nine hours a week performing surveillance. Of the seventy-three Ips (67%) who did not pass on the first attempt, thirty were certified (41%) and sixty (82%) reported performing surveillance for 8 hours or less per week. **Conclusion:** The first-time pass rate for certified and non-certified Ips was 33%, markedly lower than the self-reported proficiency rate of 60%. The majority of Ips who passed on the first attempt were certified and spent at least nine hours per week performing surveillance. certified and non-certified Ips who did not regularly perform surveillance as part of their weekly job tasks were less likely to pass the test on the first attempt. Given the first-time pass rate among all participants is below optimal, establishing inter-rater reliability systems and ongoing surveillance education for Ips is crucial to ensure accuracy of publicly reported data.

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Subject Category: Surveillance

Comparison of COVID-19 Sentinel Surveillance and COVID-19 School Absentee Surveillance in Japan

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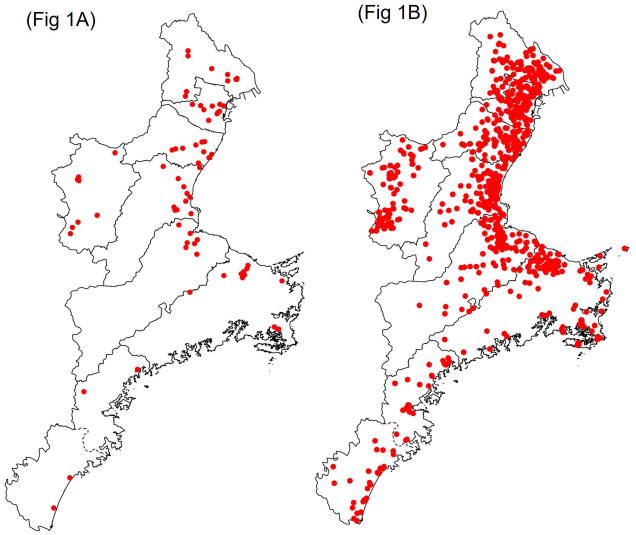
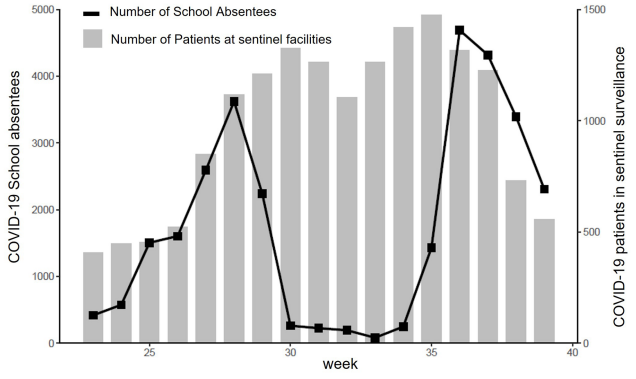
Background: In Japan, notifiable infectious disease surveillance ended and was replaced by sentinel surveillance following the COVID-19 reclassification in May 2023. Since COVID-19 sentinel surveillance is integrated into seasonal influenza surveillance, the number of reported cases varies depending on the extent to which sentinel facilities provide COVID-19 care. Therefore, we compared COVID-19 sentinel surveillance with school absentee surveillance, which is limited to high school equivalent age or younger, but provides reliable information on absences in the target population. **Method:** The 17-week period from week 23 (June 5 to June 11) to week 39 (September 25 to October 1) of 2023 was used as the target period. The number of weekly COVID-19 reports from 72 sentinel sites in Mie Prefecture (Population 1.7 million) as for sentinel surveillance and the number of COVID-19 absentees at a total of 998 facilities (401 kindergartens and nursery schools, and 597 elementary, junior high, and senior high schools) registered for school absentee surveillance in Mie Prefecture as for school absentee surveillance were compared across Mie Prefecture and eight health centers (Fig 1). **Result:** Except for the summer vacation period from week 29 to 35, sentinel surveillance and school absentee surveillance showed a significant positive correlation. During the summer vacation period, a decrease in the number of COVID-19 absentees was observed, especially in the elementary, junior high, and senior high school groups of the school absentee surveillance, compared to the sentinel surveillance (Fig 2 and 3). When compared by health center, no regional differences

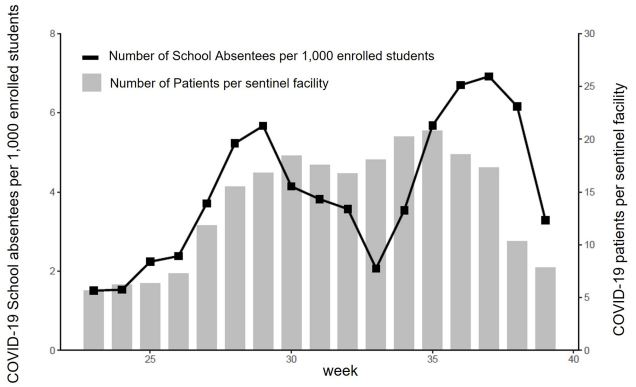


(1A) indicates the 72 sentinel sites in COVID-19 and seasonal influenza sentinel surveillance, and (1B) indicates the 998 facilities participating in school absentee surveillance.

(Fig 2A)

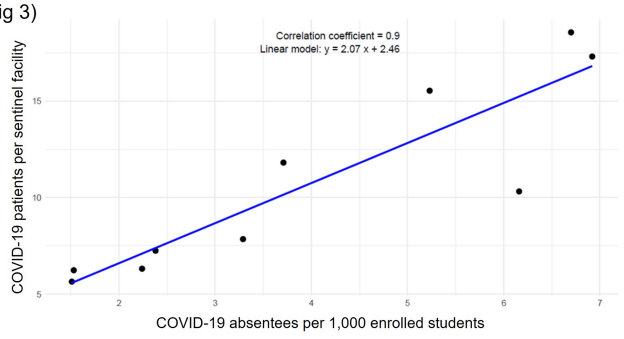


(Fig 2B)



(2A) indicates COVID-19 school absentees and patients reported by sentinel facilities from week 23 to week 39 in 2023.
(2B) indicates COVID-19 absentees per 1,000 enrolled students and the number of COVID-19 patients per sentinel facility from week 23 to week 39 in 2023.

(Fig 3)



The correlation between COVID-19 absentees per 1,000 enrolled students and number of COVID-19 patients per sentinel facility except for weeks 29-35, 2023.

were observed in school absentee surveillance, but in sentinel surveillance, some health centers reported significantly more cases than others. **Conclusion:** The results of this study suggest that although COVID-19-based school absentee surveillance has some drawbacks, such as the limited number of subjects and the difficulty of evaluation during the summer vacation when schools are closed, it has the advantage of being able to evaluate the entire community without being affected by medical institution practice bias, and can be used to monitor trends in infectious diseases. It was considered important to combine and evaluate multiple surveillance indicators in order to accurately monitor epidemiologic trends of infectious disease over time.

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Trends in Hospital Antibacterial Consumption in Belgium (2017-2021): Evaluating the Impact of the COVID-19 Pandemic

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This study aimed to evaluate the impact of the COVID-19 pandemic on antimicrobial consumption (AMC) in Belgian hospitals from 2017 to 2021, using data from the European Surveillance of Antimicrobial Consumption Network (ESAC-Net) and the Belgian Hospitals Surveillance of Antimicrobial Consumption (BeH-SAC). Antimicrobial volume was quantified in Defined Daily Doses (DDDs), and AMC was expressed in DDDs/1000 inhabitants/day (DIDs), DDDs/1000 patient days and DDDs/1000 admissions. Linear regressions were employed to analyze 5-year trends for the ATC J01 group, at the ATC-3 level and for broad-spectrum antimicrobials. Broad-spectrum antibiotics included combinations of penicillins, incl. beta-lactamase inhibitors (J01CR), second-generation cephalosporins (J01DC), third-generation cephalosporins (J01DD), macrolides, lincosamides and streptogramins (J01F, excluding erythromycin J01FA01), and fluoroquinolones (J01MA). The compound annual growth rate (CAGR) calculated for the years preceding the pandemic was used to forecast 2020 and 2021 AMC, enabling a comparison with the actual use. Hospital AMC measured as DIDs decreased by 12% from 2019 to 2020. In contrast, when expressed as DDDs/1000 patient days and DDDs/1000 admissions, a 5% and 7% increase was observed, respectively. Antibacterials for systemic use (J01) showed a significant decrease over the 5 years only when expressed in DIDs. Notable trends included a negative trend for quinolone antibacterials (J01M) when expressed in the three incidence units, as for amphenicols (J01B) when using hospital denominators only. Positive trends were observed for sulfonamides and trimethoprim (J01E) using hospital denominators and for other beta-lactam antibacterials (J01D) with the 'patient days' denominator. While the consumption of all J01 antimicrobial subclasses deviated negatively from predicted use both in 2020 and 2021 when expressed in DIDs, positive deviations were recorded using hospital denominators, except for macrolides (J01F). The use of broad-spectrum antimicrobials showed a notable decrease between 2017 and 2021 when expressed in DIDs. However, when using hospital denominators, the observed use of broad-spectrum antimicrobials exceeded the forecasted values in 2020, to regress below the forecasted levels in 2021 (Figure 1). Contrary to results obtained using the widely applied country's population as the denominator, a notable surge in AMC, particularly for broad-spectrum antimicrobials, was observed in 2020 when using hospital-specific denominators. This increase coincided with the onset of the COVID-19 crisis. These findings emphasize the need for a national hospital surveillance system that uses denominators that accurately represent the specific population being monitored. Implementing robust hospital-specific surveillance mechanisms would improve the precision