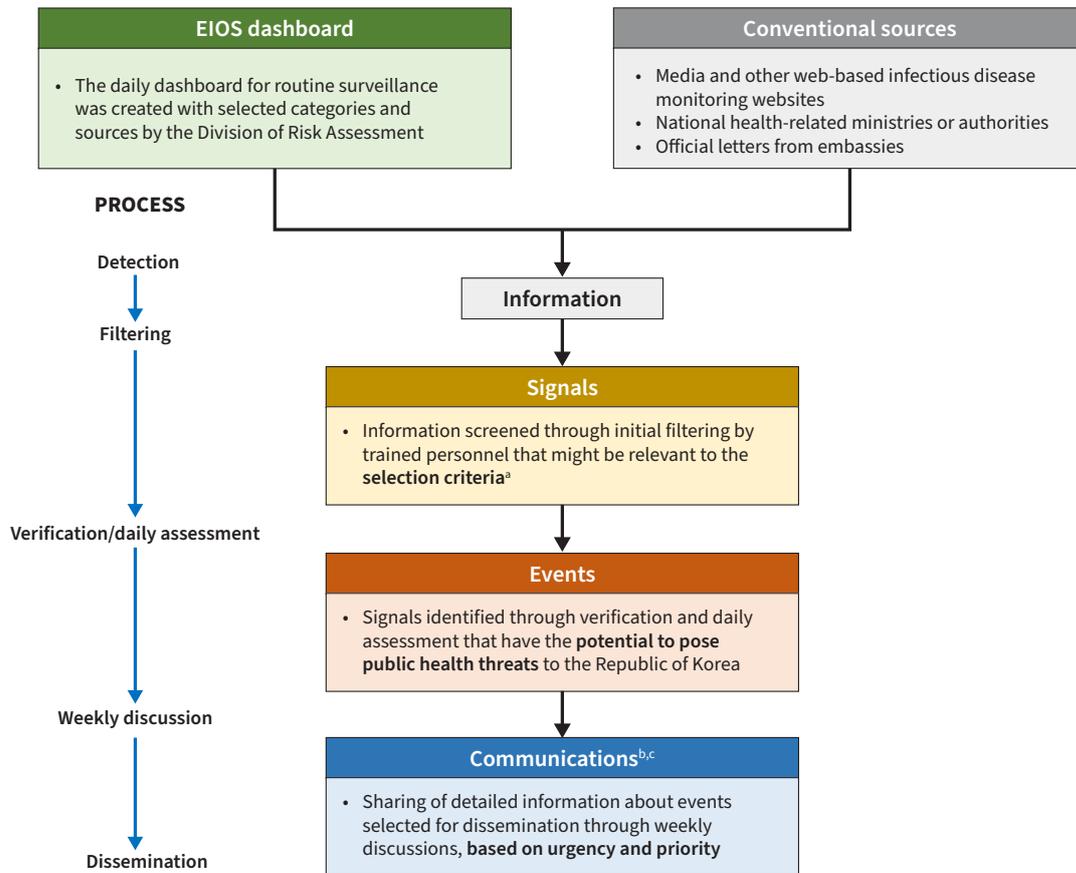


Event-based surveillance in the Republic of Korea: assessment of the effectiveness of Epidemic Intelligence from Open Sources

Supplementary Fig. 1. **Process of event-based surveillance activities using Epidemic Intelligence from Open Sources, Korea Disease Control and Prevention Agency**



EIOS: Epidemic Intelligence from Open Sources.

^a The selection criteria used for the initial filtering of information are presented in Supplementary Box 1.

^b Internal communication includes sharing brief situation analyses and weekly restricted reports about global infectious diseases with relevant divisions within the Korea Disease Control and Prevention Agency.

^c External communication includes weekly sharing of open-access reports about global infectious diseases (e.g. https://dportal.kdca.go.kr/pot/bbs/BD_selectBbsList.do?q_bbsSn=1009, in Korean) and monthly newsletters for health-care workers (e.g. <http://kdcanewsletter.or.kr>, in Korean), as well as updating online travel health advice platforms (e.g. see <http://xn--now-po71f48dism0ya109f.kr/nqs/oidnow/main.do>, in Korean)

Supplementary Box 1. Selection criteria used for initial filtering of information in event-based surveillance activities, Korea Disease Control and Prevention Agency

1. Unusual or unexpected event (e.g. atypical symptoms, specific population group, occurring outside of normal seasonal patterns, higher than the expected incidence or case–fatality rate)
2. Clustered morbidity and mortality
3. Event that could negatively impact imports and travel (e.g. an outbreak occurring at a popular tourist destination)
4. Outbreak spreading to one or more countries
5. Event that requires contact tracing
6. Unusual or unexpected hospital outbreak
7. Event with a new transmission route
8. Event that requires international travellers to be informed
9. Event occurring through a commercially available product (e.g. food)
10. Event with high media attention
11. Prioritized diseases among notifiable diseases, diseases that require quarantine measures and infectious diseases that need to be reported to the World Health Organization as per International Health Regulations (2005)

Class 1 Animal influenza infection in humans, Crimean–Congo haemorrhagic fever, Ebola virus disease, Lassa fever, Marburg haemorrhagic fever, Middle East respiratory syndrome, novel influenza virus, pests, Rift Valley fever, severe acute respiratory syndrome, smallpox, South American haemorrhagic fevers

Class 2 Cholera, measles, polio

Class 3 Chikungunya fever, dengue fever, West Nile fever, yellow fever, Zika virus infection

Others Nipah virus, unknown disease

Supplementary Table 1. **Original sources for events detected from both Epidemic Intelligence from Open Sources and conventional sources, by month, Korea Disease Control and Prevention Agency, June–October 2023 (*N* = 425)^a**

Original source	No. (%)
Global Public Health Intelligence Network (total)	313 (73.6)
Media	132 (31.1)
National health-related ministries or authorities	107 (25.2)
ProMED	12 (2.8)
International organizations or institutes	7 (1.6)
Other	55 (12.9)
ProMED (total)	42 (9.9)
National health-related ministries or authorities	13 (3.1)
Media	4 (0.9)
International organizations or institutes	1 (0.2)
Other	24 (5.6)
National health-related ministries or authorities not included above	37 (8.7)
International organizations or institutes not included above	23 (5.4)
World Health Organization Event Information Site for International Health Regulations National Focal Points	9 (2.1)
Other media not included above	1 (0.2)

^a Sources are classified by the primary source recorded in the Epidemic Intelligence from Open Sources dashboard. Subcategories (e.g. ProMED, national health-related ministries or authorities) indicate secondary sources from which the content was originally derived. For example, ProMED-originating events relayed via the Global Public Health Intelligence Network are classified under the Global Public Health Intelligence Network total.