Information topic	Details
Indicator name	Overseas infectious diseases of priority concern to New Zealand
Domain and topic	Border Health
Indicator definition and units	Annual global distribution of border health priority disease outbreaks* (classified as a Public Health Emergency of International Concern (PHEIC) and priority notifiable respiratory and vector-borne diseases) with focus on the Asia- Pacific region.
	*Disease priorities identified by annual risk assessment
Temporal coverage	 2000-2022: Poliovirus 2011-2022: MERS and Non-seasonal Influenza 2022: Mpox 2000-2021: Measles 2013-2021: Dengue Fever 2020-2022: COVID-19
Spatial coverage	- Global, Asian-Pacific focus All countries and territories around the world who reported cases to the WHO or PPHSN.
Numerator data sources	 MERS and Non-seasonal Influenza: World Health Organization. Disease Outbreak News (DONs): <u>https://www.who.int/emergencies/disease-outbreak-news</u> Polio: World Health Organization. Extranet polio database: <u>https://extranet.who.int/polis/public/CaseCount.aspx</u> Measles: World Health Organization. The Global Health Observatory: <u>https://www.who.int/data/gho/data/indicators/indicator- details/GHO/measlesnumber-of-reported-cases</u> COVID-19: World Health Organization. Coronavirus Dashboard: <u>https://covid19.who.int/</u> Mpox (Monkeypox): World Health Organization. Outbreak: Global Trends: <u>https://worldhealthorg.shinyapps.io/mpx_global/</u> Dengue: Pacific Public Health Surveillance Network. Personal contact.
Numerator limitations	 Data utilises cases reported to WHO by national health organisations and may be subject to under-reporting. As has been suggested for multiple global epicentres of COVID-19 (Lau 2021). No currently available regional Asian outbreak reporting system. International under-reporting of diseases is expected, particularly among developing countries. Currently data on Dengue is only available for the Pacific Islands. Alternative data sources are needed to expand this.
Denominator data source	- Global population: United Nations. Data portal, Population Division: <u>https://population.un.org/dataportal/home</u>

Methodology	 DONs: Global outbreak alerts were extracted for each alert for priority diseases. Extraction included: disease, country of reported outbreak, earliest reported date of symptom onset for index case (outbreak date if symptom onset not reported). WHO datasets: data extracted from the WHO databases and included country, year and total cases in tabular formats. Rates: WHO country case lists were matched to the UN country population list. Where countries did not match, alterations were made ensure accurate reporting. These include: WHO classifies Taiwan, Hong Kong and Macao as part of China. These regions populations have been combined in the UN dataset. WHO classifies Western Sahara as part of Morocco. These regions populations have been combined in the UN dataset. WHO reports counts for Bonaire, Saint Eustatius and Saba individually. The UN reports these as one population. Therefore, cases have been combined in the WHO dataset. WHO reports counts for Pitcairn Island and the United Kingdom individually. The UN reports these as one population. Therefore, cases have been combined in the WHO dataset. A range of regions had different names in the UN and WHO datasets. The WHO naming conventions have been retained in all circumstances.
Limitations of indicator	- Diseases were prioritised in the annual review. Therefore, the indicator may not detect a new or emerging disease which become a priority threat after this review date.
Reference(s)	Lau H, Khosrawiour T, Kocbach P et al. 2021. Evaluating the massive underreporting and undertesting of COVID-19 cases in multiple global epicenters. Pulmonology: 27(2): 110-115. DOI: https://doi.org/10.1016/j.pulmoe.2020.05.015 (accessed 20 July 2022)