Comprehensive review of notifiable conditions in Vanuatu: 2024 update

Wendy Williams,[a,b] Caroline van Gemert,[b] Joanne Mariasua,[a] Jenny Stephens,[a] Nellie Ham,[a] Prudence Rymill,[a] Wesley Donald,[a] Florita Toa,[a] Kevin Carter,[a] Renata Amos,[a] Mali George Kalo[a] and Philippe Guyant[c]

Correspondence to Wendy Williams (email: wendy.williams@burnet.edu.au or wwilliams@vanuatu.gov.vu or mizwilliam7@gmail.com)

The 1994 Vanuatu Public Health Act lists 38 conditions and syndromes that must be notified to public health officers. Despite occasional amendments, including adding influenza A(H1N1) in 2019 and severe acute respiratory syndrome coronavirus 2 in 2021, the list of notifiable conditions is inconsistent with current and emerging infectious disease threats in Vanuatu. In 2024, a review was undertaken to amend the list of notifiable conditions using a simplified review process based on Australian and Canadian criteria. A total of 54 conditions were included in the prioritization exercise, which incorporated additional conditions identified for this review based on current global, regional and national health security threats. Each condition was scored on six criteria (communicability, severity, requirement for or likelihood of initiating a public health response, emergence, vaccine preventability and importance), with scores ranging from 0 to 4 for each criterion, for a maximum score of 24. The scores were then summed, and the conditions were ranked. A cutoff score of 8 was used to determine inclusion in the proposed update to the list. The rankings were subsequently reviewed by a local advisory committee. Among the existing 38 conditions and syndromes, it was recommended that 19 should be retained, 10 be excluded, seven be renamed, one be consolidated into another, and one be separated into three distinct conditions. Twelve additional conditions were recommended for inclusion. The final list comprises 41 notifiable conditions. The methods used here are relevant to other Pacific island countries.

Diseases are designated as notifiable due to their transmissibility, severity and frequency.[1] Notifiable diseases are infectious diseases that must be reported to public health authorities to prompt timely interventions, control the spread of infections, and improve information on disease burden and distribution.[2]

In Vanuatu, disease surveillance includes sentinel syndromic surveillance, laboratory surveillance, event-based surveillance, vaccine safety surveillance and enhanced surveillance during mass gathering events.[3–6] However, Vanuatu's surveillance programmes lack robust case-based surveillance for newly detected notifiable diseases, including emerging, re-emerging and outbreak-related cases, relying largely on aggregated reporting rather than on ongoing case monitoring of individuals.[6] Case-based surveillance involves reporting individual, newly detected cases of notifiable diseases with detailed information on exposure, the epidemiological features of the disease and the potential for onward transmission. Barriers include limited awareness among health-care workers about which diseases are notifiable, low awareness about the importance of notifications, and unclear reporting and communication channels.[6,7]

The Vanuatu Public Health Act of 1994 lists 38 conditions and syndromes that must be notified by heads of families, medical practitioners or nurses.[8] However, the list has not undergone review since being enacted and does not reflect current and emerging infectious disease threats. The aim of this review is to enhance disease notification and public health response by assessing the list of notifiable conditions in Vanuatu and making recommendations to update it.

[a] Ministry of Health, Port Vila, Vanuatu.
[b] Burnet Institute, Melbourne, Victoria, Australia.
[c] World Health Organization Country Liaison Office for Vanuatu, Port Vila, Vanuatu.
Published: 18 November 2026
doi: 10.5365/wpsar.2026.17.4.1347

METHODS

In 2024, a systematic, four-stage process was undertaken to review the list of notifiable conditions in Vanuatu. The review was overseen by a local advisory committee comprising representatives from the Vanuatu Ministry of Health, the Australian Burnet Institute and the World Health Organization (WHO).

Stage 1: Define criteria

The first step was to define criteria for the inclusion and exclusion of notifiable conditions. There is limited guidance on the criteria that should be used for this purpose in legislation. In Australia and Canada, national committees have endorsed protocols for revising lists of notifiable conditions using consistent criteria to guide the assessment of the need for inclusion of a disease.[9,10] In Australia, the criteria include: (1) requirement or likelihood of initiating a public health response; (2) utility and significance of notification for prevention programmes; (3) vaccine preventability, based on the existence of an effective vaccine and its availability; (4) importance for Indigenous health; (5) emerging or re-emerging disease; (6) communicability and potential for outbreaks; (7) severity and socioeconomic impacts; (8) preventability; (9) level of public health concern and/or political interest; (10) definability of a case; (11) likelihood of data completeness; and (12) availability of alternative surveillance mechanisms.[9] In Canada, the criteria are broadly similar to those used in Australia, reflecting a shared emphasis on public health relevance, disease severity and the feasibility of surveillance, although specific prioritization may vary by jurisdiction.[10]

For this project, the researchers simplified the Australian and Canadian criteria and ranked each condition according to six criteria: communicability/potential spread to the population; severity; requirement for or likelihood of initiating a public health response; the potential for emergence or re-emergence in the Pacific; vaccine preventability (based on the existence of an effective vaccine and its availability within Vanuatu); and the importance of surveillance data for prevention programmes (**Table 1**). The selected criteria were designed to capture information about the disease burden and reporting feasibility, including aspects such as assessing severity, transmissibility, outbreak potential and the availability of alternative surveillance mechanisms because reliable case counts were not obtainable for all conditions.

Stage 2: Consultation and scoring

Public health programmes within the Vanuatu Ministry of Health were invited to review the existing list of 38 conditions, focusing on those relevant to their areas of responsibility, and to suggest additional conditions where appropriate. The additional conditions included emerging and re-emerging infections of international concern, selected syndromic or non-infectious conditions, and hepatitis A, B and C, which were assessed separately. Where conditions represented updated nomenclature or synonymous terms for an existing condition in the 1994 schedule, they were consolidated and assessed as a single condition rather than scored separately. For example, acute anterior poliomyelitis was considered equivalent to poliomyelitis and was therefore reviewed under the existing poliomyelitis category.

The National Surveillance Unit worked with each public health programme to apply the criteria and score each condition through a team-based assessment process. For each condition, scores were assigned across the six criteria and then combined to generate a final total score. Each criterion was scored on a 4-point scale, and the scores were then summed and ranked. A maximum score of 24 was possible. WHO technical advisers were asked to review the scoring and provide advice in line with global health security guidance.

Stage 3: Consolidation and classification

Once all conditions had been scored, the local advisory committee reviewed the distribution of scores, paying particular attention to conditions with scores close to the median, where decisions regarding inclusion or exclusion were less clear. Based on this review, a cutoff score of 8 was selected as the threshold for inclusion in the proposed list of notifiable conditions. Conditions scoring 7 and below were excluded. The cutoff score was used to guide the development of the proposed final list, with the advisory committee confirming inclusion based on the scoring outcomes.

Table 1. **Criteria and scoring descriptions for the review of existing and potentially new notifiable conditions in Vanuatu, 2024**

Score	Description
Criterion 1: Communicability/potential spread to the population	
0	Not communicable with no potential to cause outbreaks
1	Low communicability with very low potential to cause outbreaks (human-to-human or vector-borne) OR not environmentally stable
2	Medium communicability (close contact or sexual transmission) OR enteric pathogen that can be transmitted in high doses by food and water, potential to cause small, infrequent human-to-human outbreaks
3	Highly communicable via casual contact (droplet transmission) OR enteric pathogen that can be transmitted in low doses by food and water OR vector-borne disease, potential for large or frequent outbreaks
4	Highly communicable (via aerosol transmission) with potential to cause large, widespread, ongoing, devastating outbreaks
Criterion 2: Severity	
0	Not applicable
1	Short-term illness AND/OR complete recovery in most cases
2	Short- or long-term illness AND/OR lengthy recovery in some cases AND/OR low case fatality rate
3	Severe illness with long-term disability AND/OR recovery rare AND/OR moderate case fatality rate
4	Severe illness with high-case fatality rate without treatment
Criterion 3: Requirement for or likelihood of initiating a public health response	
0	Not important for public health to know about a case
1	Case reporting important only for describing trends
2	Case reporting important for identifying outbreaks that require investigation
3	Case reporting important for detecting outbreaks and identifying contacts for public health action
4	A single case can be considered an outbreak and requires immediate follow-up
Criterion 4: Potential for emergence or re-emergence in the Pacific	
0	Not detected in Vanuatu to date
1	Stable or declining in the past 5 years
2	Slowly re-emerging or increasing prevalence
3	Risk of emergence due to ecological changes OR epidemiological changes OR importation
4	New, rapidly emerging disease OR internationally notifiable as per IHR (2005)
Criterion 5: Vaccine preventability (scored using a modified scale that excludes scores of 1 and 3)	
0	No vaccine
2	Vaccine available, but no national immunization programme
4	Vaccine available, national immunization programme in place
Criterion 6: Importance of surveillance data for prevention programmes	
0	Not important to collect surveillance data
1	Surveillance data used to establish burden of illness only for priority setting, with no prevention programme in place
2	National prevention and control programmes in place, and surveillance data are required to monitor programmes
3	WHO regional targets for elimination or eradication, and surveillance data are required to monitor programmes
4	WHO global targets for elimination or eradication, and surveillance data are critical for monitoring prevention programmes

IHR (2005): International Health Regulations (2005); WHO: World Health Organization.

Stage 4: Endorsement and communication

The proposed final list of notifiable conditions was submitted to the Vanuatu Ministry of Health Executive for formal endorsement. In parallel, the list was shared with key stakeholders, such as provincial health offices, government and private health facilities, and WHO technical advisers, to ensure it aligned with existing frameworks and to facilitate support for implementation.

Following approval, a communication strategy was developed to disseminate the revised list, along with associated guidance and training materials. These included updates to health-care worker information sheets and training sessions for health-care workers on the eNotification system process.[11] These activities aimed to support implementation of the revised list and promote consistency in reporting across health facilities.

RESULTS

Consultation process

A total of 20 public health officers, clinicians and technical advisers participated in the consultation and scoring processes. Participants were selected based on their technical expertise in disease surveillance, and clinical management and public health roles within the Ministry of Health. Participants collaboratively reviewed and scored the notifiable conditions based on the six defined criteria. The process was coordinated by the National Surveillance Unit, with input from the Burnet Institute and WHO advisers. Final reviews and validations were conducted by Ministry of Health medical officers to ensure clinical relevance and alignment with national public health priorities.

Final list of notifiable conditions

Among the existing list of notifiable conditions, the condition with the highest summary score was measles at 21 and the lowest score was malnutrition at 1. The median score across all conditions was 10.0, and the mean score was 10.7 (**Table 2**).

Out of the original list of 38 conditions and syndromes, 19 were recommended for retention, 10 were excluded, seven were renamed to align with updated terminology and standard case definitions, one (acute anterior poliomyelitis) was consolidated into another (poliomyelitis), and one (hepatitis) was separated into specific related viruses (A, B and C). It was recommended that 12 additional conditions be added, bringing the final list of recommended notifiable conditions to 41, inclusive of the International Health Regulations (2005) notifiable diseases (**Table 2**).

Based on the scores in **Table 2**, the final list was created and categorized into practical groupings and aligned, where appropriate, with existing surveillance programmes, including vaccine-preventable disease surveillance, to facilitate notification and direction to relevant public health offices (**Box 1**).

DISCUSSION

The comprehensive review and scoring of notifiable conditions in Vanuatu has produced an updated list that better reflects current and emerging public health threats. This list is intended to inform revisions to the Public Health Act of 1994, which remains under review. The conditions included in the updated list require vigilant surveillance and prompt public health response. The removal of some conditions and the addition of new ones ensure the effectiveness of the list in guiding public health interventions. Crucial to the enhancement of the national disease notification system, they will have a significant impact on public health policy and practice in Vanuatu.

The methodology used in this study, adapted from established frameworks in Australia and Canada, demonstrated a strong relevance to Vanuatu's unique context and was feasible and appropriate for application within the local public health system. By simplifying the criteria to suit local needs, the approach ensures that the list of notifiable conditions is both relevant and practical for Vanuatu. The scoring and ranking systems, which consider factors such as communicability, severity and the need for data to inform national public health programmes and decision-making, provide a robust framework for evaluating public health threats. This approach can serve as a model for other Pacific island countries facing similar health-care challenges, offering a structured and evidence-based approach to developing their own list of notifiable conditions. A coordinated

Table 2. **Final scores of existing and potentially new notifiable conditions in Vanuatu, based on defined criteria, 2024 (inclusive of the International Health Regulations [2005] notifiable diseases)**

Disease	Score
Measles	21
Poliomyelitis[a]	17
Tuberculosis[b]	17
Hepatitis B virus infection	16
Mpox[c,d]	16
SARS-CoV-2 infection[c,d]	16
Yellow fever	16
Pertussis	15
Smallpox	15
Diphtheria	14
HIV[b]	14
Meningitis, bacterial or viral[b]	14
Rubella[c]	14
Chikungunya virus infection[c]	13
Dengue virus infection[b]	13
Hepatitis	13
Human influenza virus (new subtype) infection[c,d]	13
Malaria	13
Plague	13
Zika virus infection[c]	13
Antimicrobial-resistant infections[c]	12
Hepatitis C virus infection	12
Rabies	12
Respiratory syncytial virus infection[c,d]	12
Tetanus	12
Typhus[b]	12
Yaws	12

Disease	Score
Hepatitis A virus infection	11
Syphilis	11
Ciguatera fish poisoning[b]	10
Leprosy	10
Leptospirosis	10
Lymphatic filariasis[c,e]	10
SARS[c]	10
Varicella (chickenpox)[c]	10
Cholera	9
Influenza[c,f]	9
Gonorrhoea	8
Ross River virus infection	8
Salmonella infection	8
Shigellosis[b]	8
Typhoid	8
Brucellosis	7
Diarrhoea, presumed infectious	7
Acute respiratory infections	6
Amoebiasis	6
Coxsackie virus infection[f]	6
Encephalitis	6
Chlamydia[g]	5
Relapsing fever (epidemic louse-borne)	4
Conjunctivitis	3
Pesticide poisoning	3
Rheumatic fever, acute	3
Malnutrition	1

SARS: severe acute respiratory syndrome; SARS-CoV-2: severe acute respiratory syndrome coronavirus 2.
Green background: Included for scoring based on historical inclusion in the Public Health Act of 1994.
Blue background: Added for scoring to ensure a comprehensive assessment.
Orange background: Historically included in the Public Health Act of 1994 but separated into three specific viruses (purple background) for scoring.
Gray text: Not included in the final list of notifiable conditions.
[a] Acute anterior poliomyelitis was listed separately in the Public Health Act of 1994 but was considered synonymous with poliomyelitis and therefore was not scored independently.
[b] Condition name or disease grouping was updated from that used in the Public Health Act of 1994.
[c] Newly added to the final list of notifiable conditions.
[d] Included due to their epidemic/pandemic potential and importance for respiratory and emerging infectious disease surveillance.
[e] Included for scoring to support ongoing elimination and monitoring activities.
[f] Included for scoring to strengthen surveillance of diseases with outbreak potential and public health significance.
[g] Included for scoring due to its burden as a sexually transmitted infection and the need to inform prevention and control programmes.

approach to disease notification across countries is increasingly recognized as important in strengthening regional health security. By promoting a harmonized regional strategy for disease notification, countries can enhance collective epidemic preparedness through improved data-sharing, timely detection and coordinated

Box 1. **Final list of 41 notifiable conditions in Vanuatu, grouped by epidemiological category, 2024**

Respiratory infections	Vector-borne diseases	Sexually transmitted infections and blood-borne viruses
Influenza Leprosy Meningitis, bacteria or viral Respiratory syncytial virus infection SARS-CoV-2 infection Tuberculosis	Chikungunya virus infection Dengue virus infection Lymphatic filariasis Malaria Plague Ross River virus infection Zika virus infection	Gonorrhoea Hepatitis B virus infection Hepatitis C virus infection HIV Syphilis
Vaccine-preventable diseases	**Water- and foodborne diseases**	**Other diseases**
Diphtheria Measles Pertussis Poliomyelitis Rabies Rubella Tetanus Varicella (chickenpox)	Cholera Ciguatera fish poisoning Hepatitis A virus infection Leptospirosis Salmonella infection Shigellosis Typhoid	Antimicrobial-resistant infections (e.g. MRSA, ESBL) Mpox Typhus Yaws IHR (2005) notifiable diseases • Human influenza virus (new subtype) infection • SARS • Smallpox • Yellow fever

ESBL: extended spectrum β-lactamases; IHR (2005): International Health Regulations (2005); MRSA: methicillin-resistant *Staphylococcus aureus*; SARS: severe acute respiratory syndrome; SARS-CoV-2: severe acute respiratory syndrome coronavirus 2.

outbreak response, as well as more efficient use of limited resources. The success of this methodology in Vanuatu demonstrates its potential applicability across the Pacific, encouraging regional collaboration and strengthening overall public health security.

Limitations

The methodology used in this study is subject to some limitations. The scoring system, while robust, is inherently subjective and may be influenced by the perspectives of the reviewers. Therefore, WHO technical advisers and Ministry of Health medical officers reviewed the scores to increase objectivity and ensure consistency between disease classifications. Their role was to provide technical guidance and ensure alignment with global health security frameworks.

Recommendations for future research and practice

Future research should focus on continually updating the criteria and scoring system to reflect new scientific evidence and emerging public health threats. Regular reviews and updates to the notifiable conditions list are essential in maintaining its relevance and effectiveness.

Public health authorities in Vanuatu should prioritize the implementation of the updated list, ensuring that health-care providers are adequately trained and equipped to report these conditions. The strengthening of the national surveillance system will support more timely and consistent reporting, improve data quality and enable more effective public health decision-making across all levels of the health system.

Conclusion

This comprehensive review and update of the notifiable conditions list in Vanuatu aimed to enhance disease notification and public health response. By reflecting current and emerging threats from infectious diseases, the updated list will facilitate more effective monitoring, prevention and control measures, ultimately improving public health outcomes in Vanuatu by enhancing the ability of the health system at all levels to detect and respond early to outbreaks.

Acknowledgements

The review of the Vanuatu notifiable conditions was part of phase 1 of the broader project titled, "A pilot study to evaluate the feasibility and acceptability of electronic notification of confirmed cases of infectious diseases in Vanuatu, 2023–2024," and was made possible through the contribution of the Review Advisory Committee comprised of representatives from the following organizations:

- Vanuatu Ministry of Health: Renata Amos, Kevin Carter, Wesley Donald, Nellie Ham, Mali George Kalo, Joanne Mariasua, Minado Paul, Prudence Rymill, Simon Samson, Helina Tabimuel, Annie Taisets, Orelly Thyna, Florita Toa Sale Tamata Vurobaravu, Wendy Williams.
- Burnet Institute: Caroline van Gemert, Wendy Williams.
- World Health Organization Country Liaison Office for Vanuatu: Philippe Guyant, Syed Muhammad Faizan ul Haq, Fasihah Taleo.
- University of Melbourne: Jonathan Liberman.

Conflicts of interest

The authors have no conflicts of interest to declare.

Ethics statement

Ethical clearance for this study was obtained from the Vanuatu Health Ethics Committee on 28 September 2023 and the WHO Research Ethics Review Committee in the Western Pacific Region on 13 November 2023.

Funding

The project was funded by the 2023–2024 Joint WHO Western Pacific Region/TDR Impact Grants for Implementation Research for Regional Priorities.

References

1. Notifiable disease [website]. Atlanta (GA): United States Centers for Disease Control and Prevention; 2024. Available from: https://www.cdc.gov/nchs/hus/sources-definitions/notifiable-disease.htm, accessed 10 April 2025.
2. Murray J, Cohen AL. Infectious disease surveillance. In: Quah SR, editor. International Encyclopedia of Public Health, 2nd edition. Oxford: Academic Press; 2017:222–9. Available from: https://www.sciencedirect.com/science/chapter/referencework/pii/B9780128036785005178, accessed 13 October 2025.
3. Pacific Public Health Surveillance Network [website]. Nouméa: The Pacific Community. Available from: https://www.pphsn.net/, accessed 13 October 2025.
4. Worwor G, Harries AD, Merilles OE Jr, Viney K, Rory JJ, Taleo G, et al. Syndromic surveillance in Vanuatu since Cyclone Pam: a descriptive study. Western Pac Surveill Response J. 2011;7(4):6–11. doi:10.5365/wpsar.2016.7.3.009 pmid:28246576
5. Craig AT, Kama M, Samo M, Vaai S, Matanaicake J, Joshua C, et al. Early warning epidemic surveillance in the Pacific island nations: an evaluation of the Pacific syndromic surveillance system. Trop Med Int Health. 2016;21(7):917–27. doi:10.1111/tmi.12711 pmid:27118150
6. Williams W, van Gemert C, Mariasua J, Iavro E, Fred D, Nausien J, et al.; Vanuatu Ministry of Health's National Health Emergency Operations Centre. Challenges to implementation and strengthening of initial COVID-19 surveillance in Vanuatu: January–April 2020. Western Pac Surveill Response J. 2021;12(2):57–64. doi:10.5365/wpsar.2020.11.2.012 pmid:34540314
7. Toa F, Williams W, Yapa C, Cornish M, Binihi M, van Gemert C. High SARS-CoV-2 attack rates in areas with low detection after community transmission established in Port Vila, Vanuatu, April 2022. Western Pac Surveill Response J. 2024;15(1):1–9. doi:10.5365/wpsar.2024.15.1.1078 pmid:38500774
8. Public Health Act [Chapter 234], Act 22 of 1994. Consolidated Edition 2006. Port Vila: Government of Vanuatu; 2006. Available from: https://www.paclii.org/vu/legis/consol_act/pha126/, accessed 13 October 2025.
9. Protocol for making a change to the National Notifiable Diseases List (NNDL) in Australia: revision history. Canberra: Australian Centre for Disease Control; 2015. Available from: https://www.cdc.gov.au/resources/publications/protocol-making-change-national-notifiable-diseases-list-australia, accessed 10 April 2025.
10. Doherty JA. Final report and recommendations from the National Notifiable Diseases Working Group. Can Commun Dis Rep. 2006;32(19):211–25. pmid:17076030
11. Surveillance [website]. Port Vila: Ministry of Health, Government of Vanuatu; 2023. Available from: https://moh.gov.vu/index.php/updates/surveillance, accessed 19 July 2026.