

Trends in Measles-Rubella Immunization Coverage and Determinants in a Primary Health Care, Mataram 2022–2025

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BACKGROUND & OBJECTIVES

Measles-rubella (MR) remains a global health threat. WHO reported a decline in global measles immunization coverage from 86% (2019) to 83% (2023). In Indonesia, coverage dropped from 92% (2018) to 87.8% (2023), below the 95% WHO target, raising the risk of outbreaks and hindering MR elimination. This study aims to determine the coverage trends and determinants of MR1 immunization in a Primary Health Care in 2022–2025.

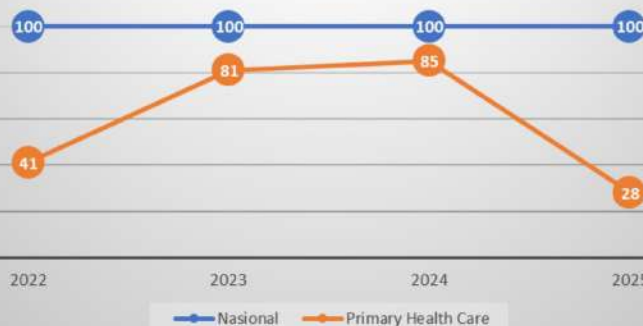
METHODS

A descriptive case study with a mixed-methods approach. Quantitative data were derived from routine MR immunization reports (2022–2025), while qualitative data were obtained through in-depth interviews with program managers, officers, and community cadres. Quantitative data were analyzed descriptively, and qualitative data thematically.

RESULTS

MR1 coverage fluctuated: 41% (2022), 81% (2023), 85% (2024), and decreased to 28% (August 2025). Coverage remained below the 95% national and global target. Determinants included parental refusal influenced by traditional beliefs and misinformation, shortage of health workers, delayed care-seeking, and vaccine logistics issues. Strategies implemented were home visits, cadre strengthening, social media promotion, and cross-sectoral collaboration, but sustaining achievements was challenging.

MR1 Coverage Achievement Trends 2022–2025



CONCLUSION

MR1 coverage increased in 2022–2024 but declined sharply in 2025, remaining below national and global targets. Optimizing community engagement, digital literacy, home visit strategies, and mobile reminders proved effective in building trust and preventing outbreaks. Achieving target coverage is vital for MR elimination and strengthening Global Health Security through compliance with IHR (2005) and cross-border surveillance.

References

- WHO. Immunization-Coverage @ Www Who Int [Internet]. 2024. Available from: <http://www.who.int/news-room/fact-sheets/detail/immunization-coverage>
- Andriani Y, Rismil K, Akber IB. Pendidikan Kesehatan Intimasi Campak-Rubella Menggunakan Video Animasi dan Pesan Teks Melalui WhatsApp. 2020;36:65–70.
- RI K. ktb-campak-meningkat-kemenkes-tingkatkan-pentingnya-immunisasi-lengkap @ kemenkes.go.id [Internet]. 2025. p. Kemenkes. Available from: <https://kemenkes.go.id/id/ktb-campak-meningkat-kemenkes-tingkatkan-pentingnya-immunisasi-lengkap>
- Thompson KM. The Health and Economic Benefits of United States Investments in Measles and Rubella Control and Elimination. *Vaccines*. 2024;12(11).
- Jusuf H, Rachmi CN, Amin MR, Dnyes M, Sitohang V, Untung ASB, et al. Factors affecting vaccination demand in Indonesia: a secondary analysis and multilevel national assessment. *BMJ Open*. 2022;12(8).
- Hermawan A, Irawan IR, Widayanti M, Rosnani R, Anif H. Association of socio-demographic factors with measles vaccination coverage among Indonesian children aged 12–23 months: a nationwide study. *Turk J Pediatr*. 2025;67(3):304–16.
- Rainis MO. The Effect of Mobile Phone and Home Visit on Childhood Vaccination Uptake in Rural Communities of Bayelsa State Nigeria : A Pragmatic Cluster Randomized Control Trial. 2025.
- Mugi Rahayu S, Adelfield Enisa M, Eva R. The Career's Role Analyze On Complete Basic Immunization Coverage At Kereng Bangkiri Posyandu, Working Area Of Kereng Bangkiri Health Centre, Palangka Raya. *Surya Med [Internet]*. 2021;7:197–203. Available from: <http://journal.unpalangkesya.ac.id/index.php/qjsm>
- MRL A, Mertajaya IM, Mahendri D. Buku Ajar Promosi Kesehatan. *Progr Stud Diploma Tiga Keperawatan Fak Vokasi UKI [Internet]*. 2020;1–107. Available from: <http://repository.uki.ac.id/2759/1/BUKUMODULPROMOSIKESEHATAN.pdf>

