Measles and Rubella Global Update
April 2025

World Health Organization | IVB

Distribution list

This report is posted on the WHO Immunization data portal (https://immunizationdata.who.int/global?topic=Provisional-measles-and-rubella-data&location=) and distributed by email on a monthly basis.
To join the distribution list, please send an email to Sebastien Antoni (antonis@who.int)

Disclaimer

Please note that all data contained within is provisional. The number of cases of measles and rubella officially reported by a member state is only available by July of each year (through the joint WHO UNICEF annual data collection exercise). If any numbers from this provisional data are quoted, they should be properly sourced with a date (i.e. "provisional data based on monthly data reported to WHO (Geneva) as of April 2025"). For official data from 1980-2023, please visit our website.

Data sources and limitations

The Global Measles and Rubella Report is based on surveillance data reported by Member States to the regional offices weekly or monthly. The regional compilation is reported to HQ monthly. Data are to be reported from the regions on the 1st Friday of the month, and HQ attempts to release the monthly report by the 3rd Monday of the month.

Please note:
- Numbers of cases might differ from the official numbers reported annually as part of the WHO/UNICEF Joint reporting process (JRF). The difference can be due to the time lag as the annual data might not be complete at the time of reporting.
- In addition, the difference can be due to multiple surveillance systems at country level. In these cases, the monthly data are extracted from the case based surveillance system while the annual data can be from the aggregated system.

Epidemiologic Data: Case-based and/or Aggregate Reporting to WHO
- Epidemiologic data comes from Member States in one of two forms
  - Case-based data, which is our recommendation, is provided by most member states.
    At WHO HQ, we collect a limited set of variables, including, age, date of onset, country reporting, 1st/2nd administrative unit of residence, vaccination status (by recall), date related to specimen collection/testing, and final classification. Regions might or might not collect more data than this. Often suspected cases with recent date of onset are not classified; however, at HQ we classify pending cases as clinically compatible and update the data if/when new data are provided to HQ. For AFR, we classify all cases that are rubella IgM+ as rubella laboratory-confirmed cases.
  - Aggregated data on number of suspected, lab-confirmed, epi-linked, and clinically compatible cases of measles/rubella, by month/year of onset, and by subnational area (though some member states do not provide this level of disaggregation).
    - Source for zero-reporting from some member-states though this is not a consistent process.
- A few member states send us both case-based and aggregated data as they have two different surveillance systems in the country.
  - If both aggregate and case-based data are sent to HQ, numbers from aggregate surveillance are considered case counts for the country, while case-based data are used for the national slides to show age distribution, proportion vaccinated, and age-specific incidence.

Limitations
- Reporting delays: It can take 2-3 months from the time a case is reported to public health in a member state to the time the data are provided to WHO HQ.
  - Some of this is due to normal reporting delays that are expected as it takes time to get information from a health center to Geneva based on reporting frequencies set by various levels
  - We are working to decrease the delays in reporting.
- Underreporting/lack of reporting
- Case definitions for suspect, epidemiologically linked and clinically compatible cases may vary between countries.
- Completeness of the data reported to WHO is unknown
- For this monthly update, pending cases are considered measles clinically compatible.
  - These cases may later be discarded or confirmed based on laboratory testing in which case historical case counts may vary from one report to another.
  - This could lead to differences between the Global monthly report and Regional or National surveillance bulletins published by WHO Offices and National authorities.

ELISA Laboratory Data from the Global Measles and Rubella Laboratory Network (GMRLN)
- The Global Measles Rubella Laboratory Network laboratories report the number of samples received as well as the number of samples tested for IgM serology, as well as the number positive, negative and equivocal.
  - These aggregated data are collected to account for the inadequate linking between laboratory and epidemiological data in some countries.
  - Numbers of cases reported may differ from the number of samples tested positive for various reasons
    - Samples tested positive in a laboratory may not reported to the surveillance system
    - IgG screening results are inappropriately included in the surveillance database
    - Inconsistent reporting from laboratories.
    - This is based on the number of SAMPLES tested, not the number of CASES tested. One case can have multiple samples being tested (e.g. different specimen types, repeat specimen collection based on timing of collection).

Limitations
- Data are only from network laboratories
- Non-network laboratories are not included
- Some laboratories don't report
- IgG results are sometimes inappropriately reported

Genotyping Data
Genotyping data are obtained from the MeaNS2 (https://who-gmrln.org/means2) and RubeNS2 (https://who-gmrln.org/rubens2).

Limitations
- Inadequate sample collection for genotyping challenges interpretation of the data
- Underreporting
  - WHO recommends that Member States submit genotyping data to these databases, but it is not currently a requirement so there is underreporting
- Genotype data can't be linked to epidemiologic data at the global level

Measles

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Number of reported measles cases by WHO Region

2025

Region	Member States*	Suspected MR cases	Measles cases	Clin	Epi	Lab	Date Received
AFR	37/47	19,678	10,623	2,882	3,238	4,503	2025-04
AMR	24/35	3,339	1,267	0	185	1,082	2025-04
EMR	19/21	19,062	12,867	6,210	382	6,275	2025-04
EUR	43/53	9,747	6,841	1,592	2,048	3,201	2025-04
SEAR	11/11	24,486	5,498	2,863	624	2,011	2025-04
WPR	22/27	5,756	2,185	687	2	1,496	2025-04
Total	156/194	82,068	39,281	14,234	6,479	18,568	

Region	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AFR	4,400	4,528	1,695	0	0	0	0	0	0	0	0	0
AMR	120	383	738	26	0	0	0	0	0	0	0	0
EMR	6,522	4,367	1,974	4	0	0	0	0	0	0	0	0
EUR	4,076	2,723	42	0	0	0	0	0	0	0	0	0
SEAR	2,150	1,717	1,631	0	0	0	0	0	0	0	0	0
WPR	1,247	938	0	0	0	0	0	0	0	0	0	0
Total	18,515	14,656	6,080	30	0	0	0	0	0	0	0	0

2024

Region	Member States*	Suspected MR cases	Measles cases	Clin	Epi	Lab	Date Received
AFR	43/47	153,308	86,127	15,884	51,811	18,432	2025-04
AMR	33/35	18,893	462	0	53	409	2025-04
EMR	20/21	161,413	96,618	52,179	6,207	38,232	2025-04
EUR	52/53	149,027	127,406	21,831	20,130	85,445	2025-04
SEAR	11/11	157,033	36,881	12,296	6,952	17,633	2025-04
WPR	25/27	67,239	11,972	3,853	652	7,467	2025-04
Total	184/194	706,913	359,466	106,043	85,805	167,618	

Region	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AFR	13,630	15,801	19,233	11,624	7,782	4,419	2,969	2,331	2,501	2,270	2,207	1,360
AMR	23	49	103	47	18	19	41	38	37	33	44	10
EMR	13,496	15,461	15,725	10,904	10,910	7,071	5,074	3,558	3,838	3,690	3,269	3,622
EUR	29,072	24,210	20,536	15,698	12,923	9,449	5,179	2,413	1,501	1,391	2,019	3,015
SEAR	3,899	3,793	4,731	3,451	2,873	1,915	2,040	2,811	3,182	3,671	2,710	1,805
WPR	1,015	1,040	1,236	1,163	994	634	739	755	764	960	1,339	1,333
Total	61,135	60,354	61,564	42,887	35,500	23,507	16,042	11,906	11,823	12,015	11,588	11,145

Notes: Based on data received 2025-04 - This is surveillance data, hence for the last month, the data may be incomplete. * Member States Reporting / Total Member States in Region
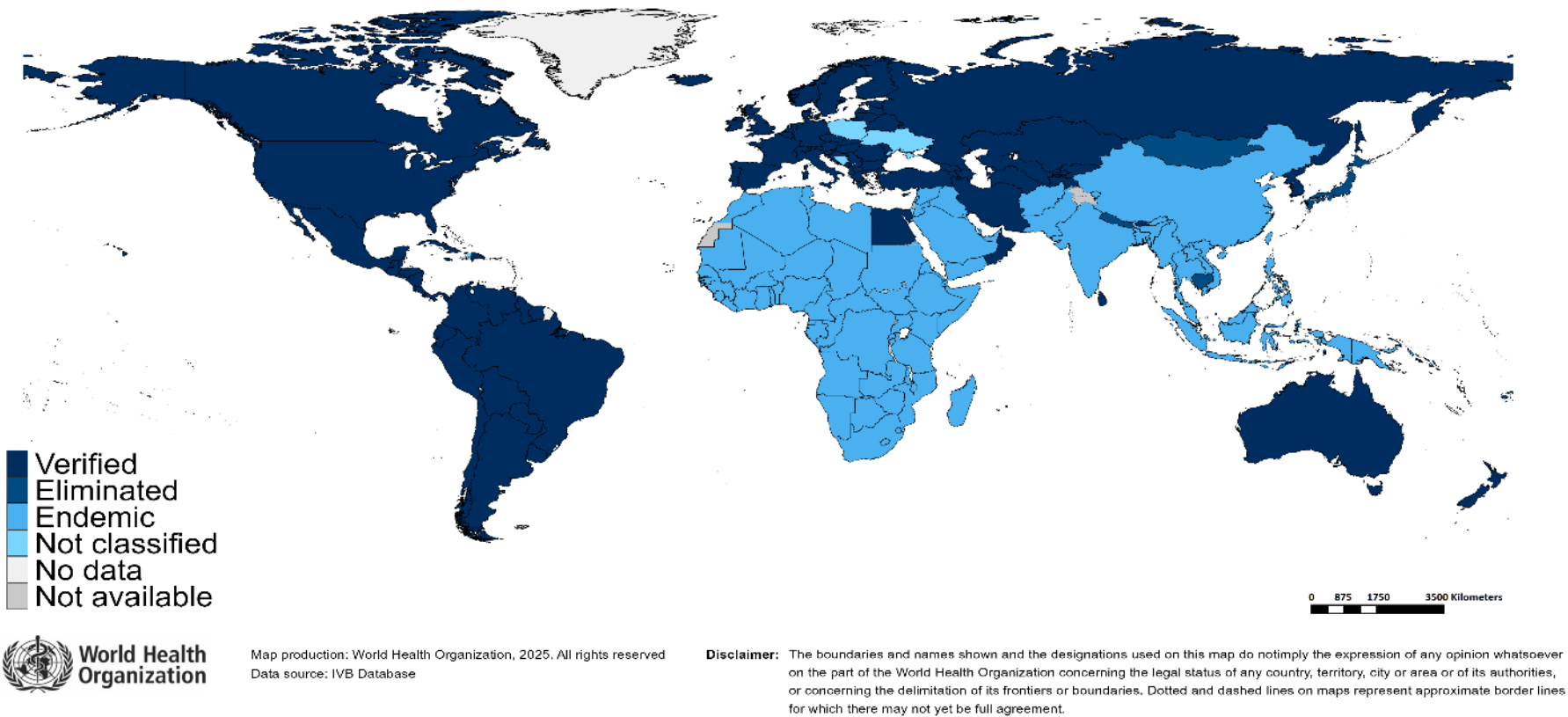
Measles/rubella verification of elimination

Measles

Region	Member States	Verified	% Verified	Eliminated	Endemic	Not classified
AFR	47	0	0	0	47	0
AMR	35	34	97	0	0	1
EMR	21	4	19	0	17	0
EUR	53	33	62	8	11	1
SEAR	11	4	36	0	7	0
WPR	27	6	22	15	6	0
GLOBAL	194	81	42	23	88	2

Verified
Eliminated
Endemic
Not classified
No data
Not available

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Data source: IVB Database

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Rubella

Region	Member States	Verified	% Verified	Eliminated	Endemic	Not classified
AFR	47	0	0	0	47	0
AMR	35	34	97	0	0	1
EMR	21	4	19	0	17	0
EUR	53	49	92	0	0	4
SEAR	11	5	45	1	5	0
WPR	27	5	19	16	6	0
GLOBAL	194	97	50	17	75	5

Verified
Eliminated
Endemic
Not classified
No data
Not available

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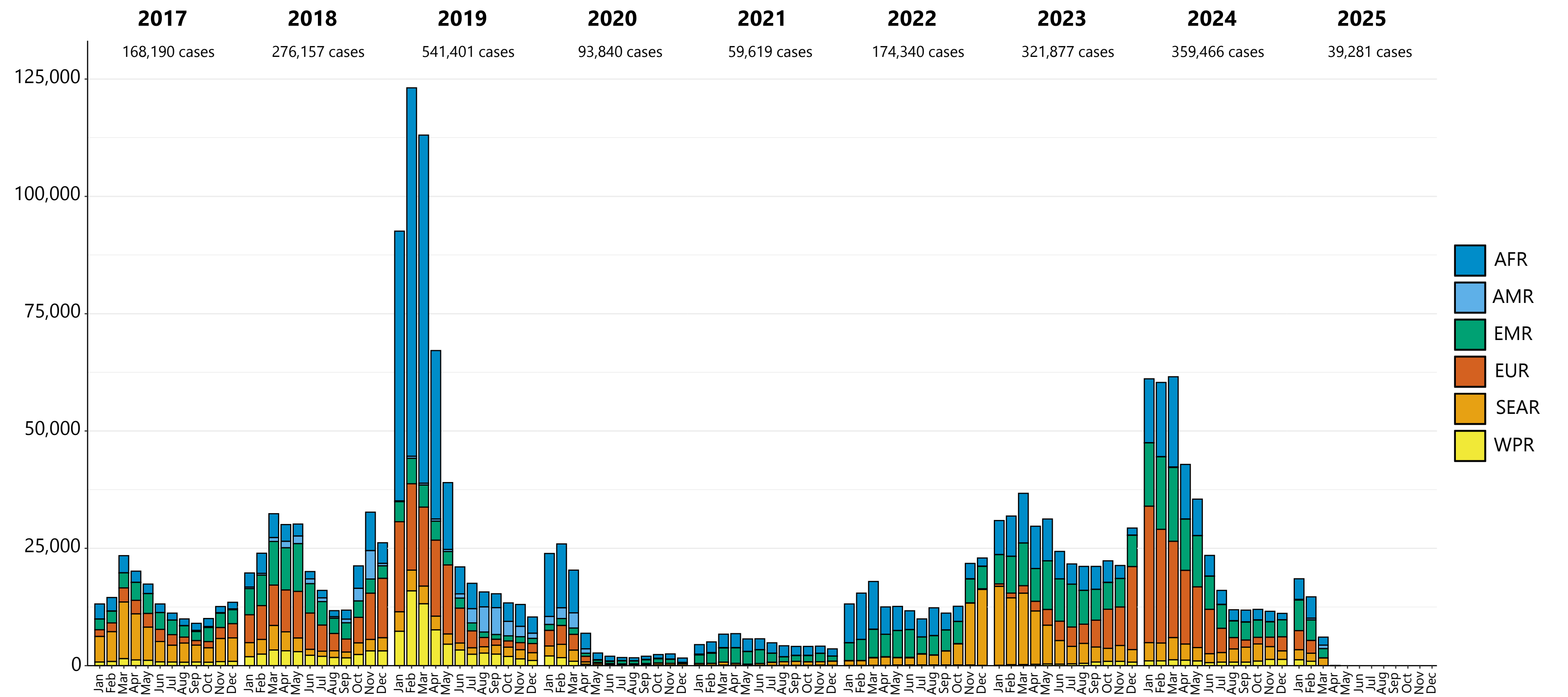
Notes: Based on data available at WHO HQ as of 2025-04-10 . Terms used on this slide refer to the global framework for the verification of measles and rubella elimination. These terms might differ from those used by WHO Regional Offices. Verified = Elimination verified by Regional Verification Commitee (RVC); Eliminated = Eliminated transmission but no RVC verification yet.

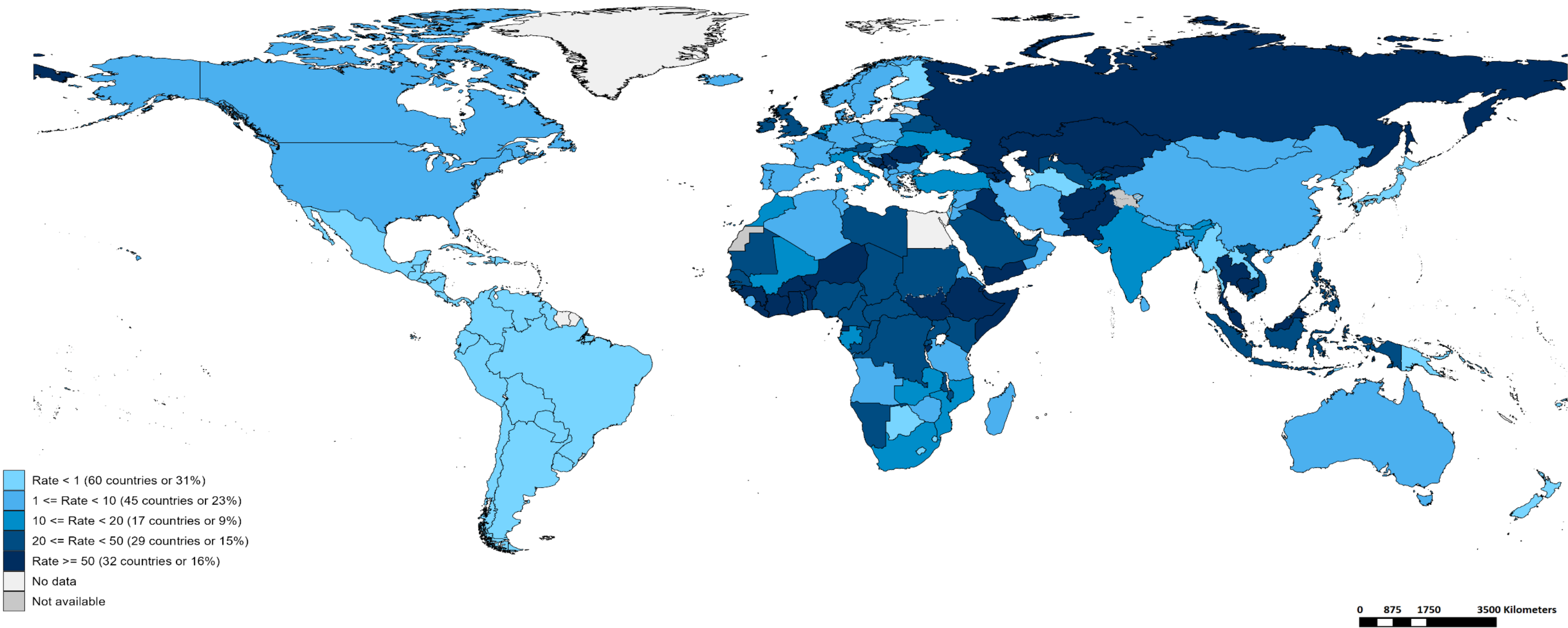# Measles case distribution by month and WHO Region (2020-2025)
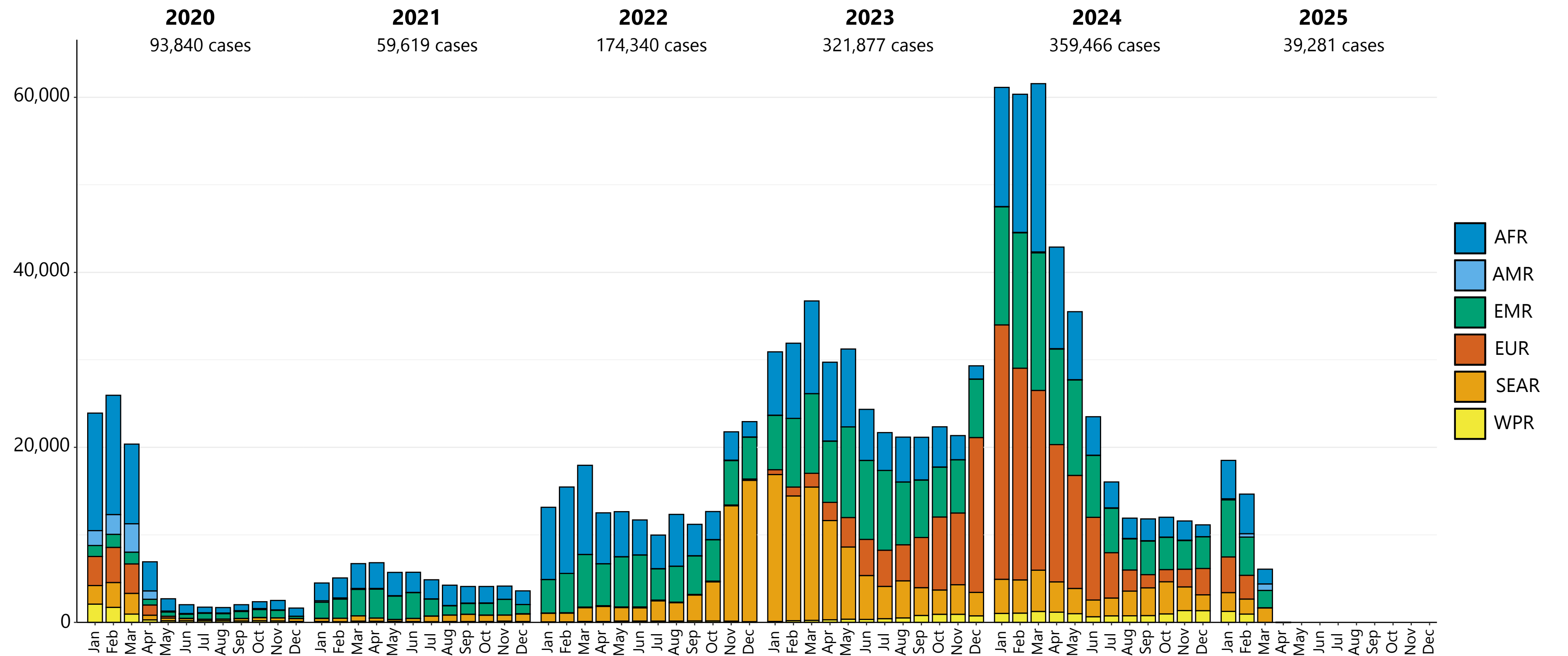
| **2020** | **2021** | **2022** | **2023** | **2024** | **2025** |
| 93,840 cases | 59,619 cases | 174,340 cases | 321,877 cases | 359,466 cases | 39,281 cases |

Legend:
- AFR
- AMR
- EMR
- EUR
- SEAR
- WPR

Measles case distribution by month and WHO Region (2017-2025)

2017	2018	2019	2020	2021	2022	2023	2024	2025
168,190 cases	276,157 cases	541,401 cases	93,840 cases	59,619 cases	174,340 cases	321,877 cases	359,466 cases	39,281 cases

Legend: AFR, AMR, EMR, EUR, SEAR, WPR

Measles Incidence Rate per Million (12M period)

Highest incidence rates

Country	Cases	Rate
Kyrgyzstan	12030	1,674.09
Romania	23980	1,261.10
Kazakhstan	11930	579.34
Yemen	22737	560.26
Bosnia and Herzegovina	1300	410.84
Iraq	17139	372.25
Azerbaijan	3612	349.44
Liberia	1572	280.07
Afghanistan	11033	258.70
Burkina Faso	5162	219.20

Rate < 1 (60 countries or 31%)
1 <= Rate < 10 (45 countries or 23%)
10 <= Rate < 20 (17 countries or 9%)
20 <= Rate < 50 (29 countries or 15%)
Rate >= 50 (32 countries or 16%)
No data
Not available

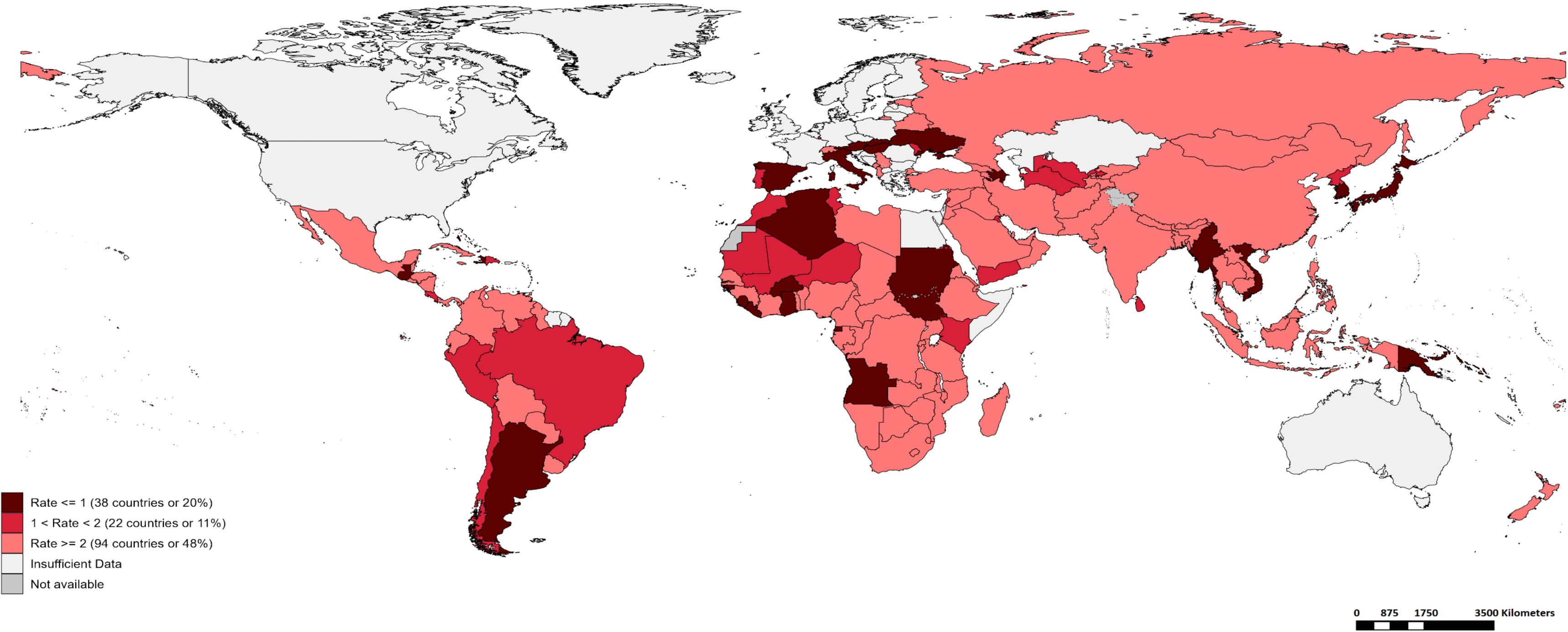0   875   1750   3500 Kilometers

Map production: World Health Organization, 2025. All rights reserved
Data source: IVB Database

Disclaimer: The boundaries and names shown and the designations used on this map do notimply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Notes: Based on data received 2025-04 - Surveillance data from 2024-03 to 2025-02 - Incidence: Number of cases / population * 1,000,000 - Population data: World population prospects, 2019 revision

Number of Reported Measles Cases (Last 6 months)
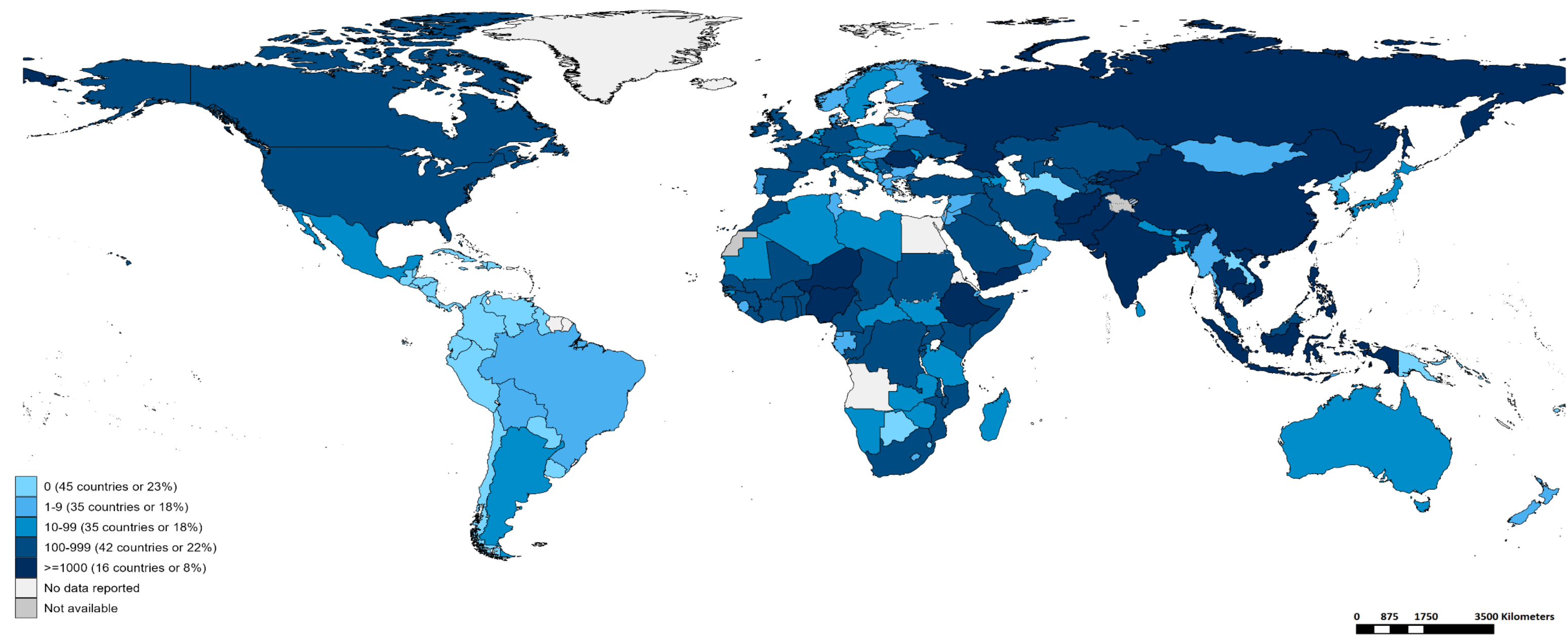
Country	Cases*
Yemen	10,794
India**	7,201
Pakistan	6,217
Ethiopia	5,309
Afghanistan	5,236
Thailand	5,142
Kyrgyzstan	4,502
Romania	4,077
Indonesia	2,751
Nigeria	1,892

Legend:
- 0 (45 countries or 23%)
- 1-9 (35 countries or 18%)
- 10-99 (35 countries or 18%)
- 100-999 (42 countries or 22%)
- >=1000 (16 countries or 8%)
- No data reported
- Not available

0   875   1750   3500 Kilometers

World Health Organization

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Notes: Based on data received 2025-04 - Surveillance data from 2024-09 to 2025-02 - * Countries with highest number of cases for the period - **WHO classifies all suspected measles cases reported from India as measles clinically compatible if a specimen was not collected as per the algorithm for classification of suspected measles in the WHO VPD Surveillance Standards. Thus numbers might be different between what WHO reports and what India reports.

Surveillance sensitivity reporting rate of measles and rubella (12 months, discarded cases* per 100,000 population)

Legend:
- Rate <= 1 (38 countries or 20%)
- 1 < Rate < 2 (22 countries or 11%)
- Rate >= 2 (94 countries or 48%)
- Insufficient Data
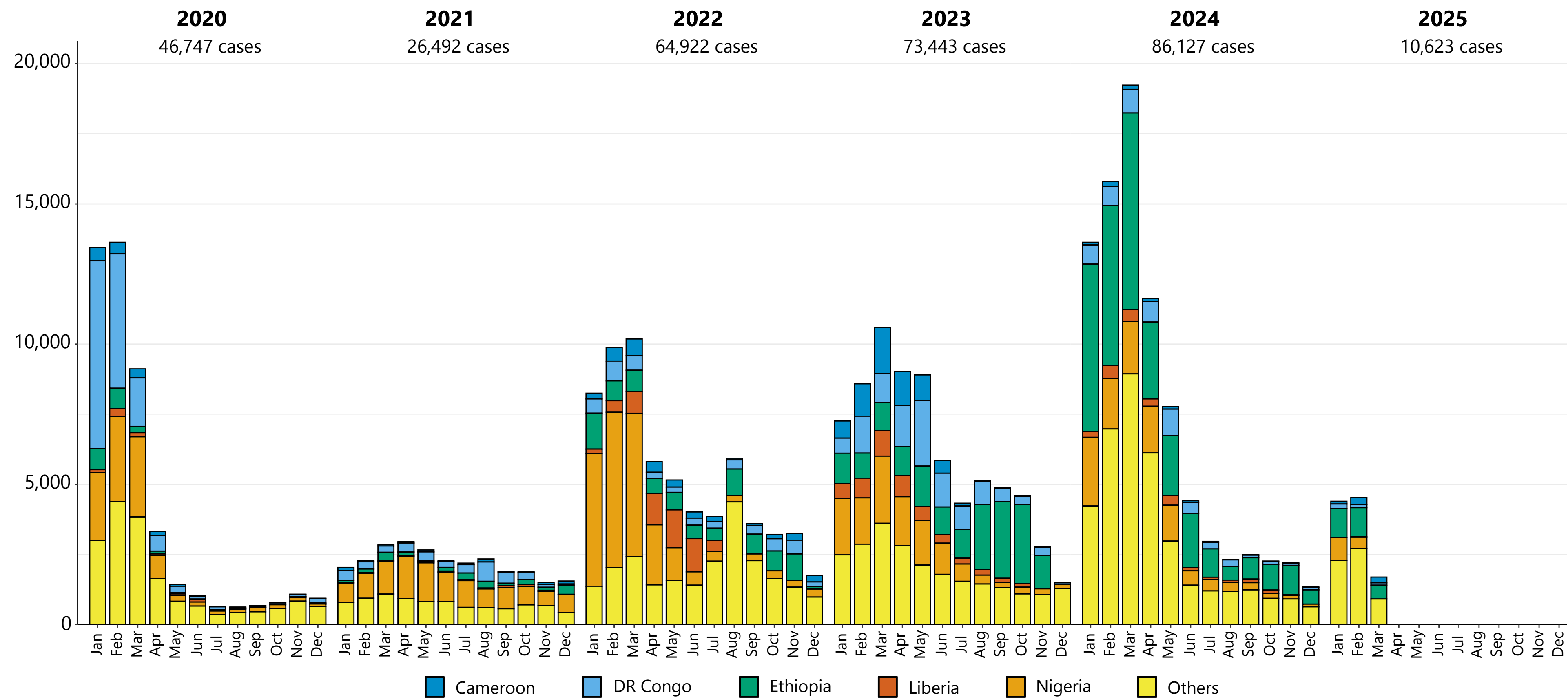- Not available

0   875   1750   3500 Kilometers

Notes: Based on data received 2025-04 - Surveillance data from 2024-03 to 2025-02 - Target: >= 2 discarded cases* / 100,000 population** - * Suspected cases investigated and discarded as non-measles non-rubella using laboratory testing and/or epidemiological linkage to another etiology ** World population prospects, 2019 revision
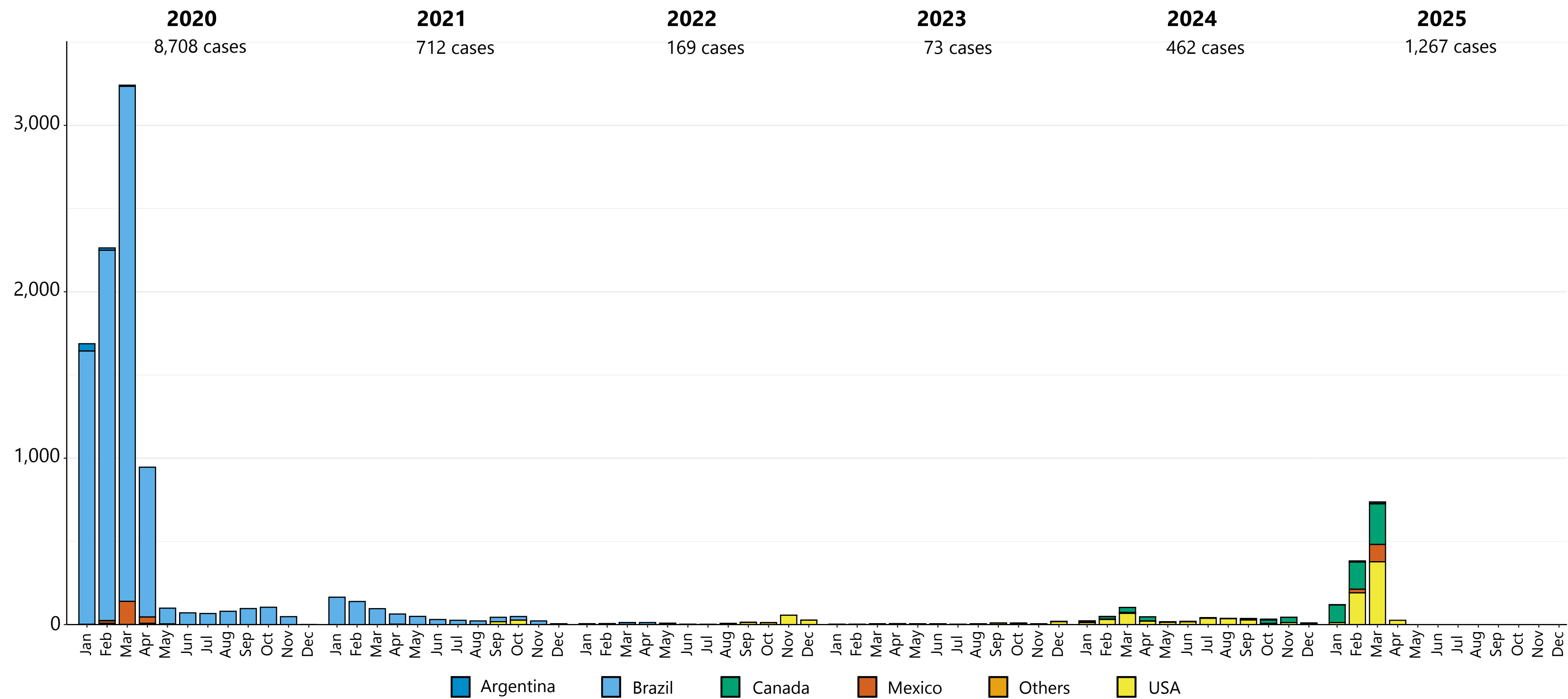
Disclaimer

This document contains data provided to WHO by member states. Note that some member states only provide aggregate data to WHO, and for these, we are unable to generate a country profile. Some member states report all cases at one time point for the entire year, and thus epidemiologic curves generated are not accurate and a reporting artifact. For some countries, cases are reported by age category, not by exact age in months and/or years. Thus, age distribution/incidence is approximate. Cases classified as pending by countries are classified at WHO as clinically compatible at this time, and thus numbers might different between data shown here and provided by the member state or WHO country/regional offices.
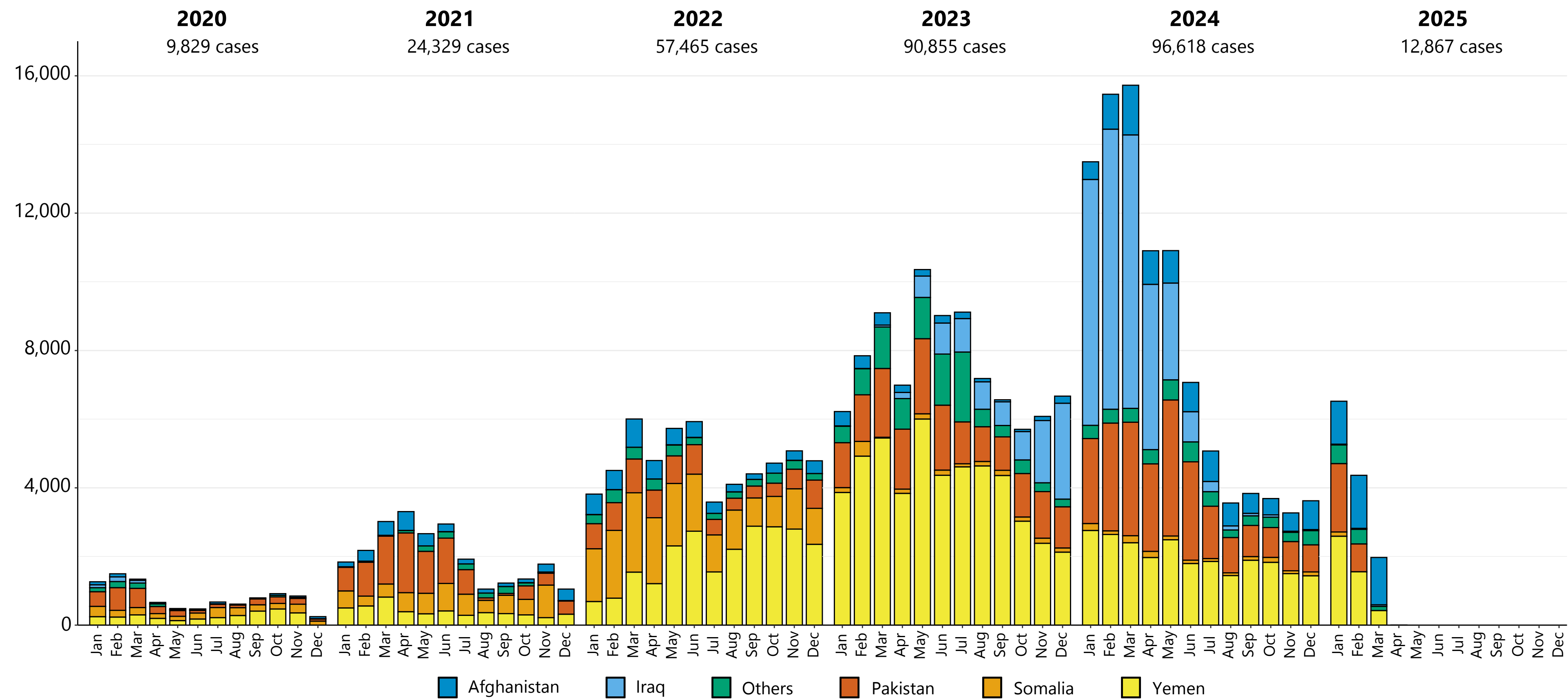*UN population data is used as the denominator for calculating incidence.
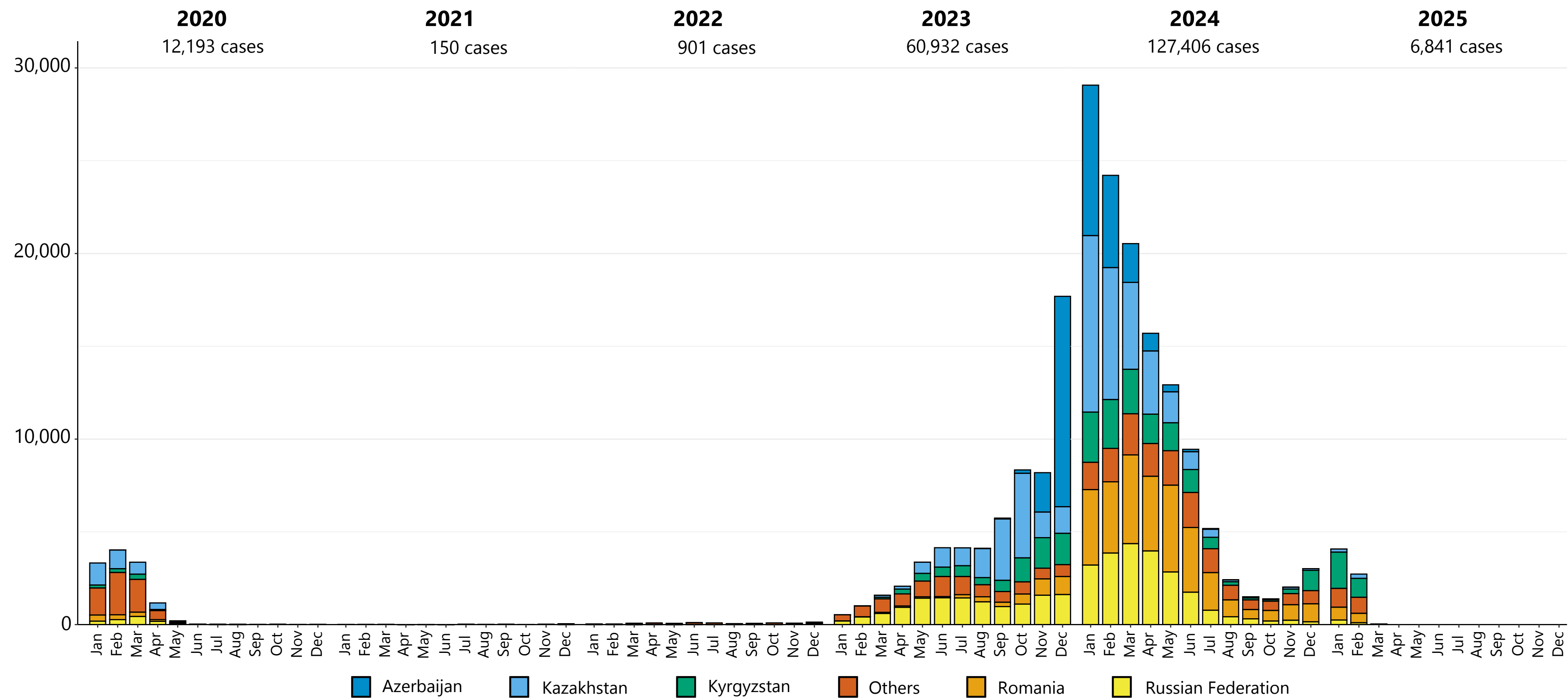
Measles case distribution (AFR), 2020-2025

2020
46,747 cases

2021
26,492 cases

2022
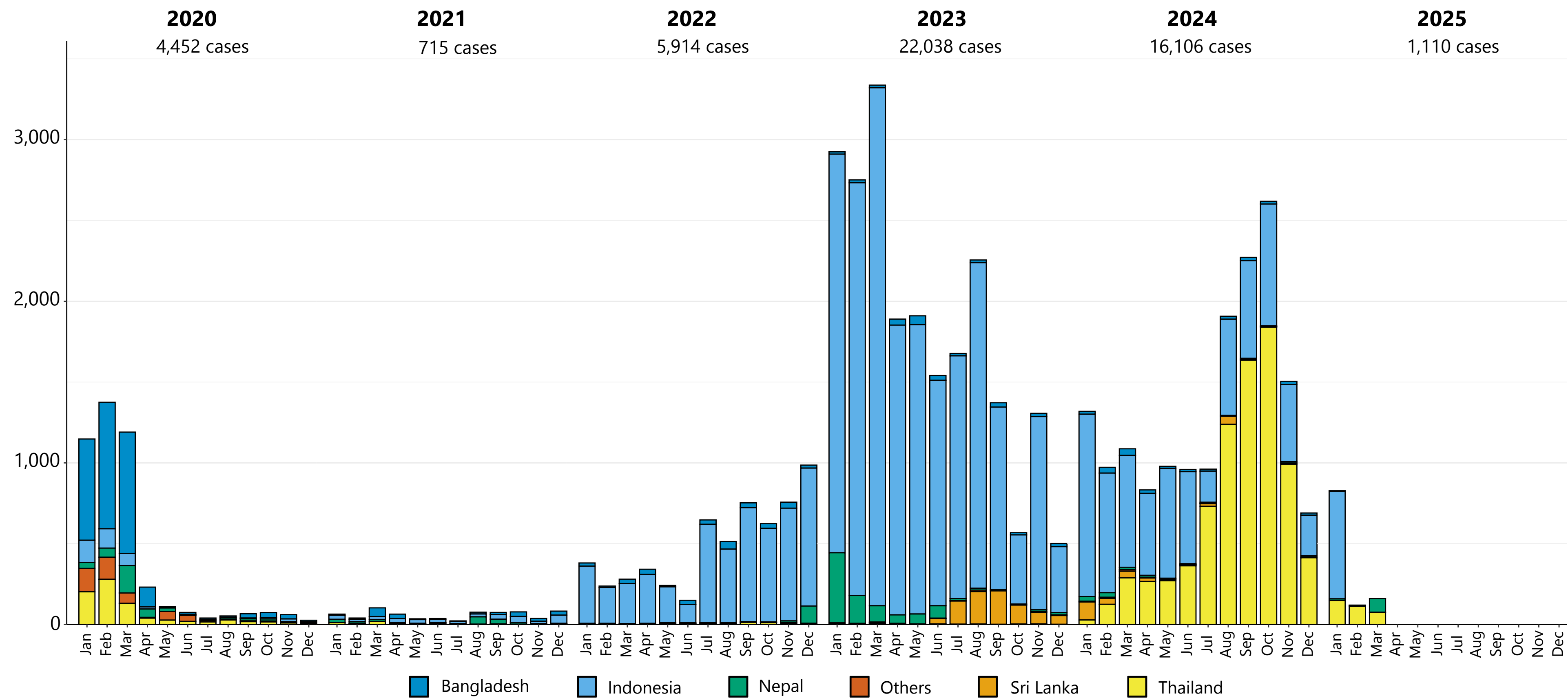64,922 cases

2023
73,443 cases

2024
86,127 cases

2025
10,623 cases

Cameroon DR Congo Ethiopia Liberia Nigeria Others

Based on data received 2025-04 - Data Source: IVB Database

Measles case distribution (AMR), 2020-2025

2020
8,708 cases

2021
712 cases

2022
169 cases

2023
73 cases

2024
462 cases

2025
1,267 cases

Legend: ■ Argentina ■ Brazil ■ Canada ■ Mexico ■ Others ■ USA

Measles case distribution (EMR), 2020-2025

2020	2021	2022	2023	2024	2025
9,829 cases	24,329 cases	57,465 cases	90,855 cases	96,618 cases	12,867 cases

Legend: Afghanistan, Iraq, Others, Pakistan, Somalia, Yemen

Based on data received 2025-04 - Data Source: IVB Database

Measles case distribution (EUR), 2020-2025

2020
12,193 cases

2021
150 cases

2022
901 cases

2023
60,932 cases

2024
127,406 cases

2025
6,841 cases

Legend: Azerbaijan, Kazakhstan, Kyrgyzstan, Others, Romania, Russian Federation

Measles case distribution (SEAR (excl. India)), 2020-2025

2020	2021	2022	2023	2024	2025
4,452 cases	715 cases	5,914 cases	22,038 cases	16,106 cases	1,110 cases

Legend: Bangladesh, Indonesia, Nepal, Others, Sri Lanka, Thailand

Measles cases: Indonesia

ELIMINATION STATUS: **ENDEMIC**

2021 — 290 cases
2022 — 5,362 cases
2023 — 19,879 cases
2024 — 7,191 cases
2025 — 666 cases

Number of measles cases

▲ SIA   ■ Discarded   ■ Clinical   ■ Epi   ■ Lab

Age distribution, vaccination status and incidence (last 12 months)

Number of cases / Incidence rate per M

Age at onset (in years): <1 yr, 1-4 yrs, 5-9 yrs, 10-14 yrs, 15-24 yrs, 25-39 yrs, 40+ yrs

— Incidence   ■ Unknown

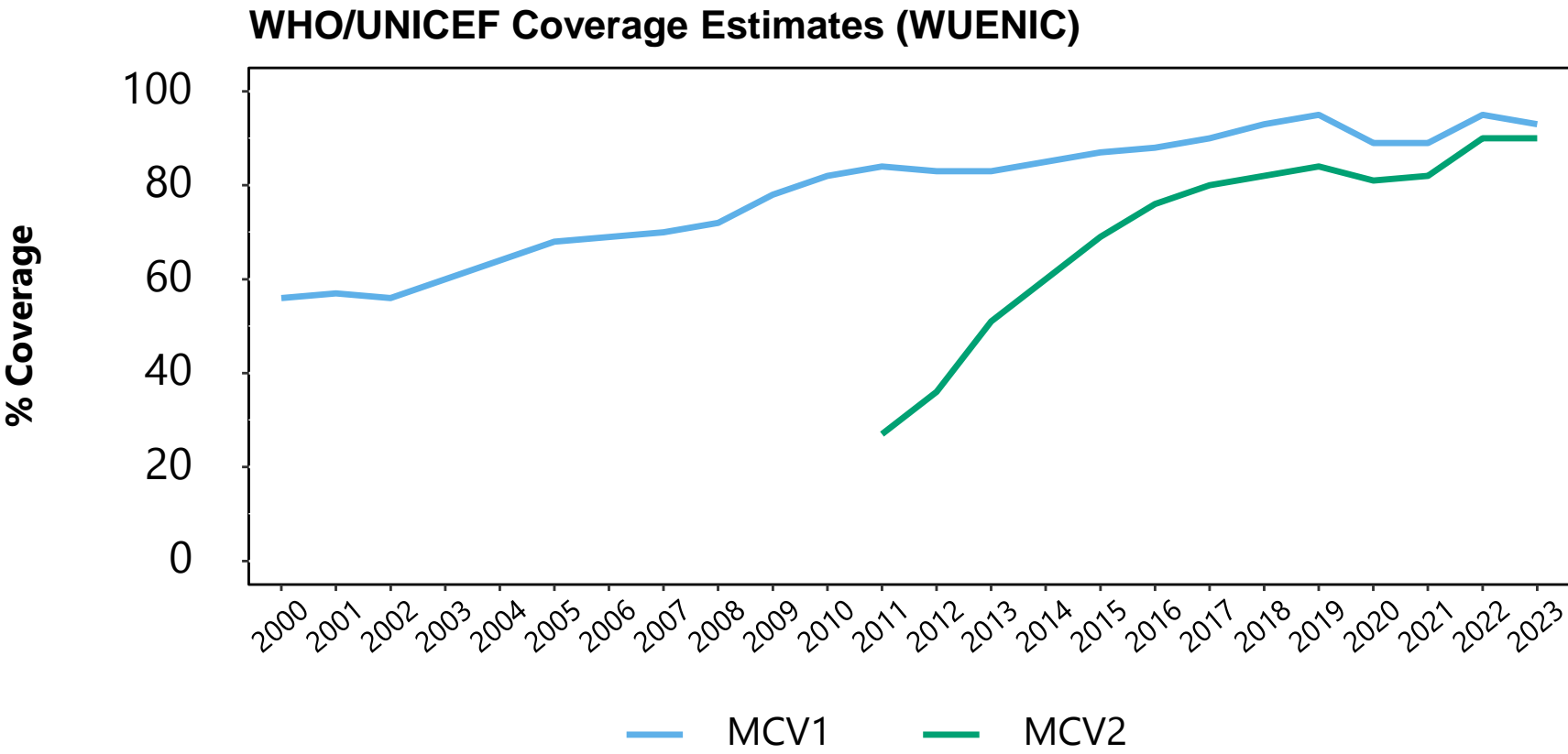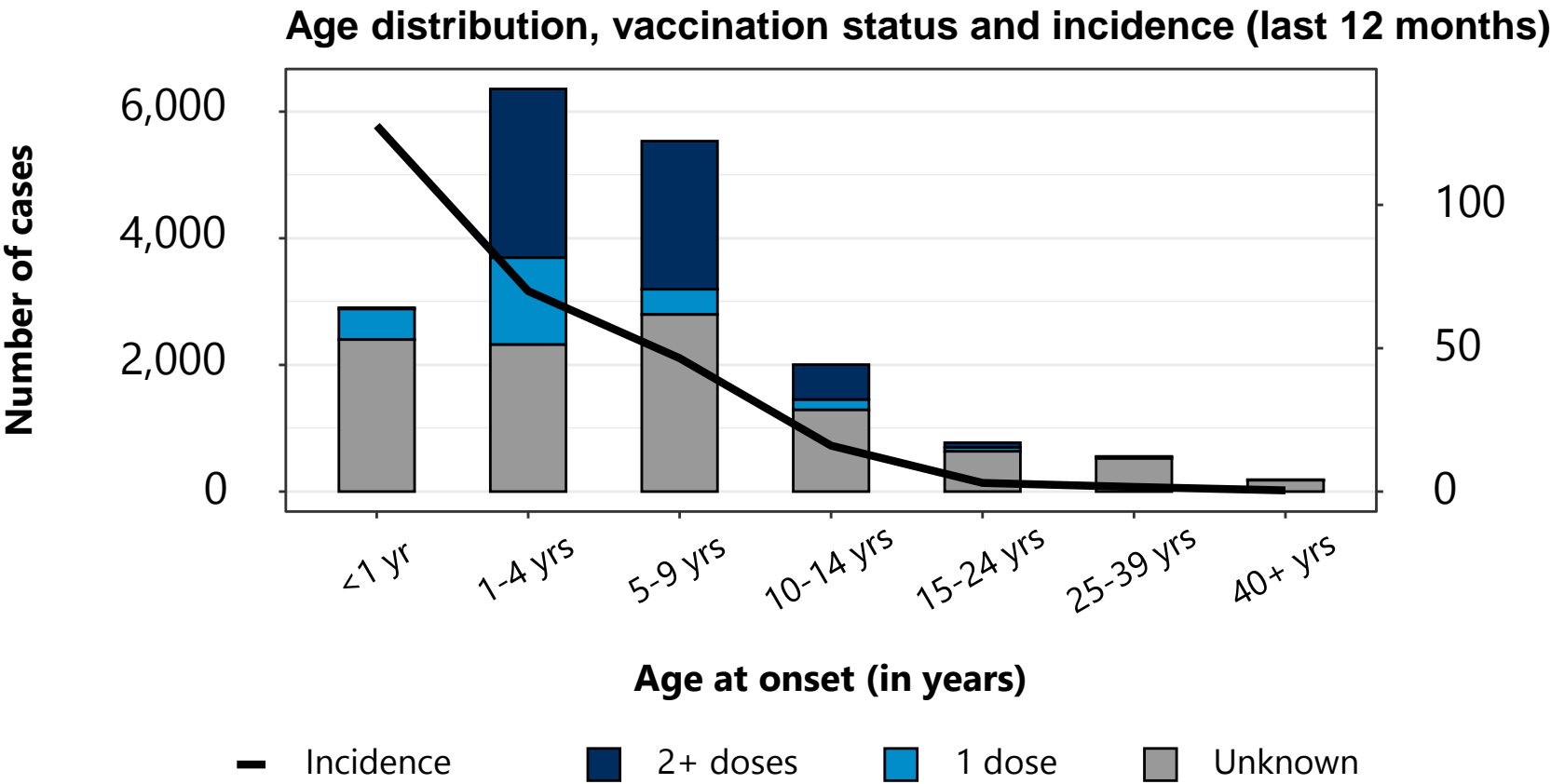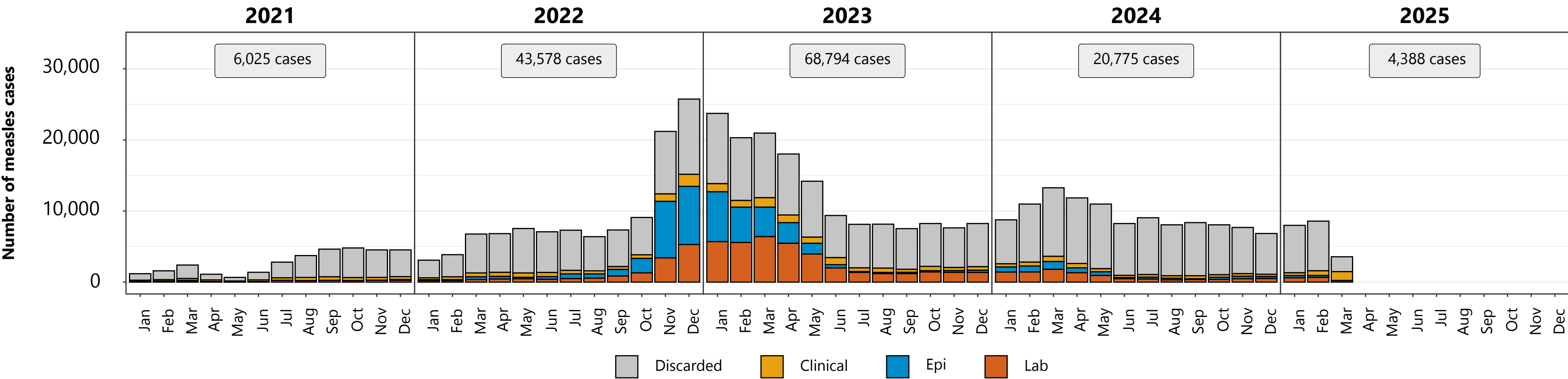**WHO/UNICEF Coverage Estimates (WUENIC)**

% Coverage

— MCV1   — MCV2
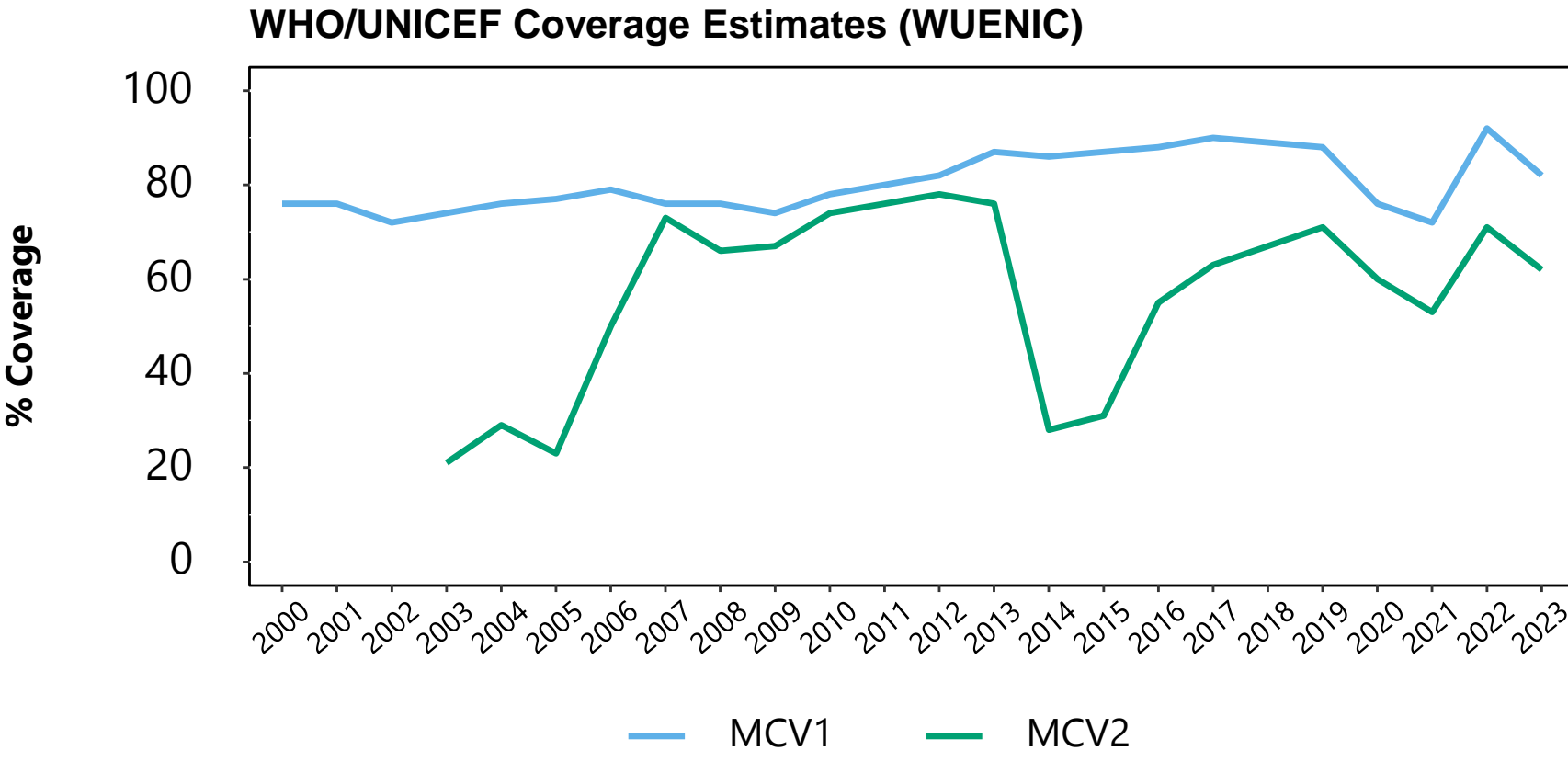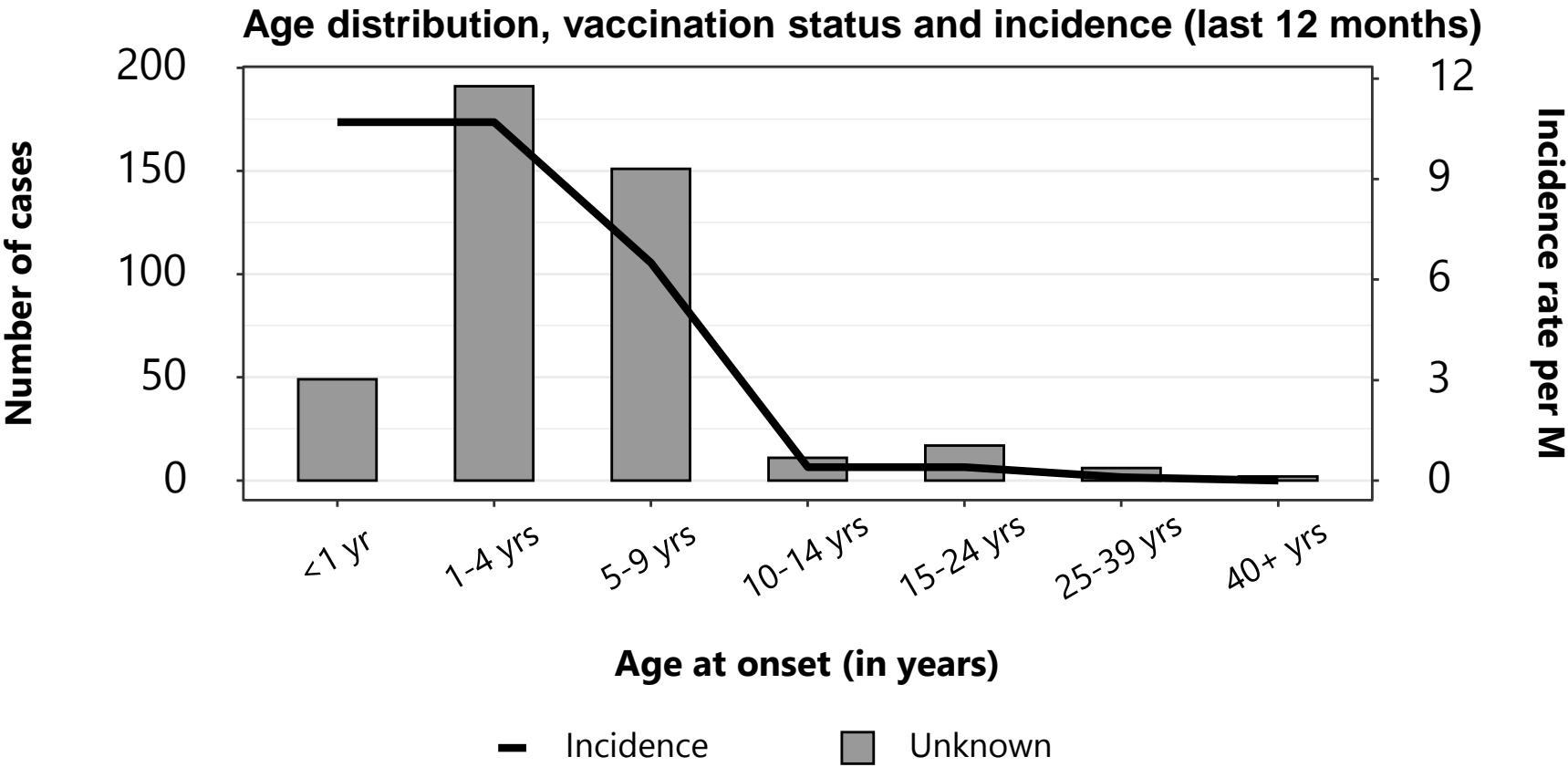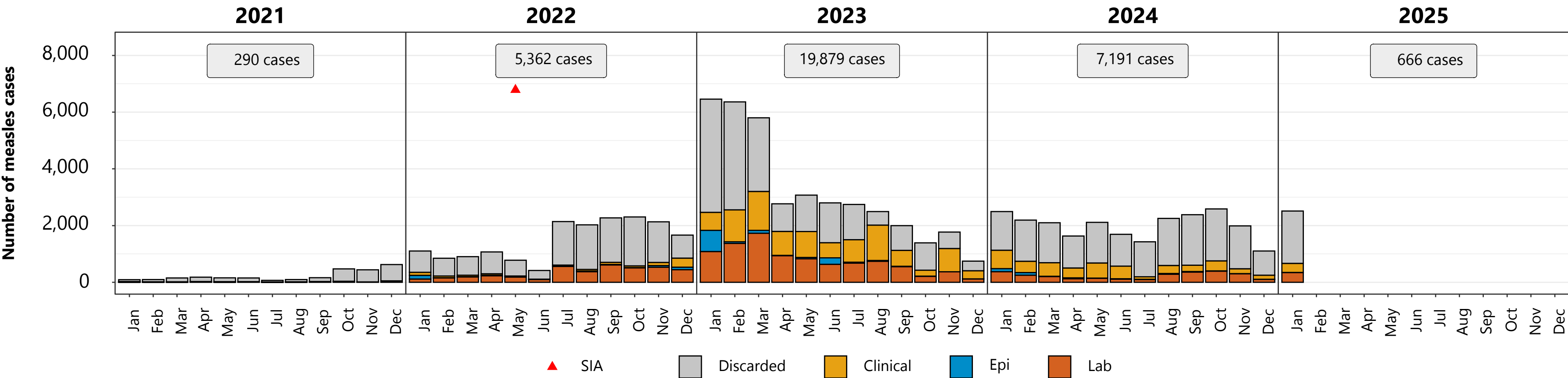
Based on data received 2025-04 - Data Source: IVB Database. Main epi curve was built using aggregate surveillance data. Age distribution curve was built using case-based surveillance data. Coverage data from WHO/UNICEF Estimates of National Immunization Coverage (WUENIC)

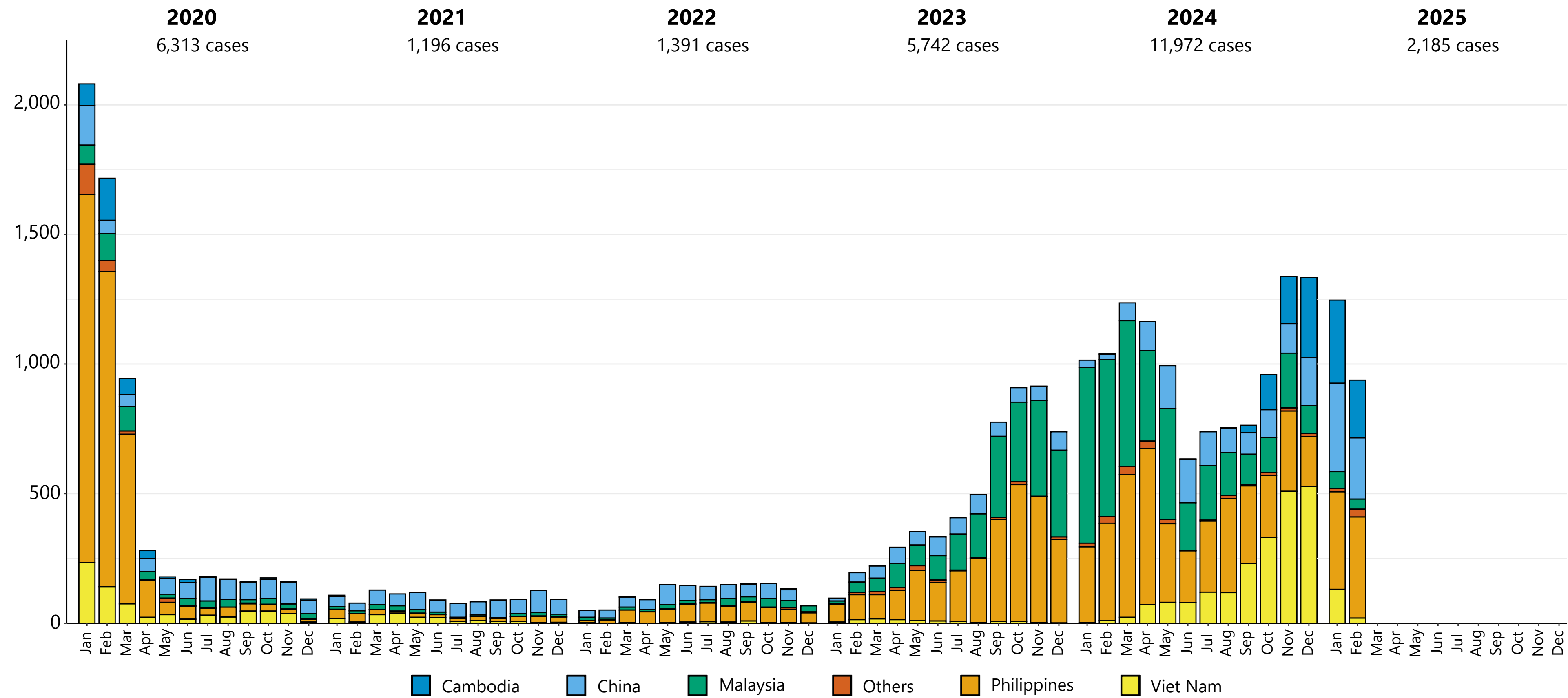# Measles case distribution (SEAR, India), 2020-2025
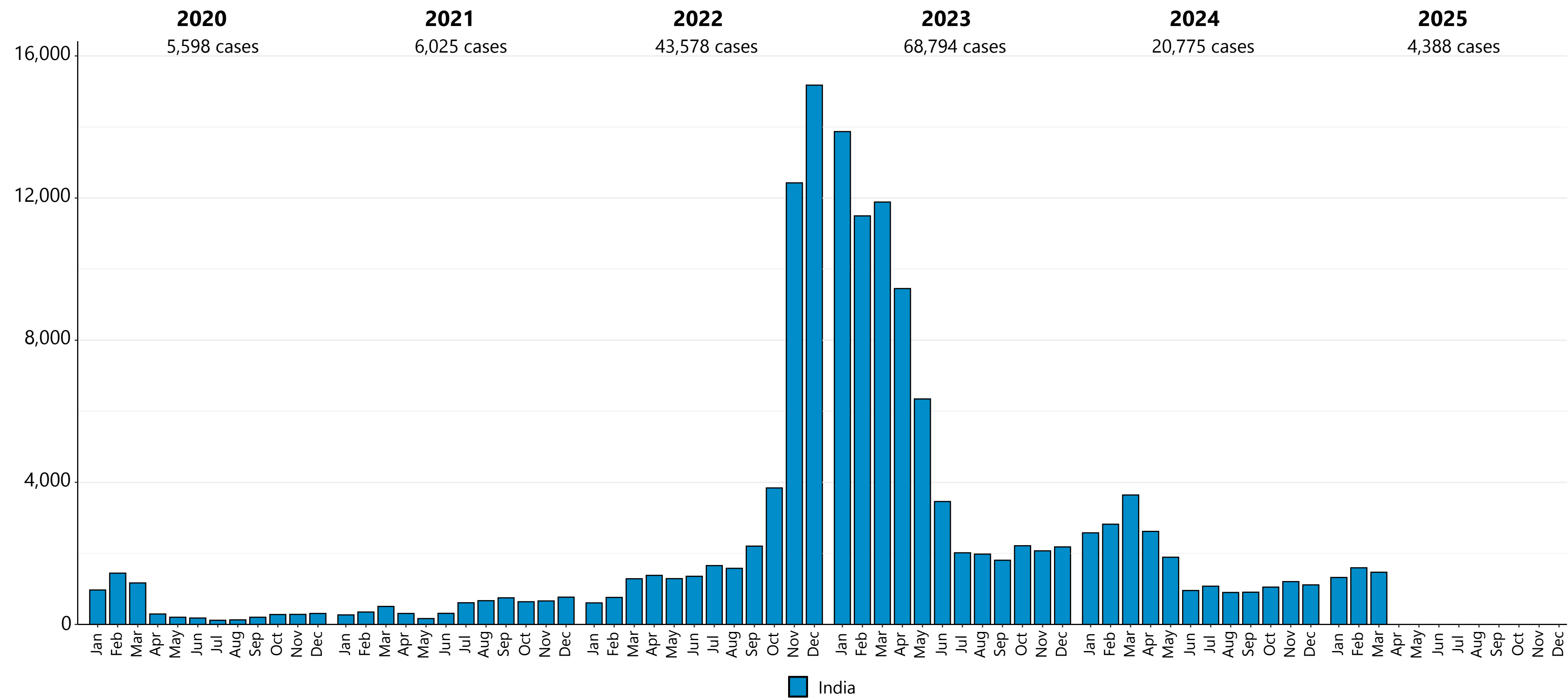
Measles cases: India

ELIMINATION STATUS: **ENDEMIC**

Number of measles cases (y-axis)

Year	Cases
2021	6,025 cases
2022	43,578 cases
2023	68,794 cases
2024	20,775 cases
2025	4,388 cases

Legend: Discarded, Clinical, Epi, Lab

Age distribution, vaccination status and incidence (last 12 months)

Age at onset (in years): <1 yr, 1-4 yrs, 5-9 yrs, 10-14 yrs, 15-24 yrs, 25-39 yrs, 40+ yrs

Legend: Incidence, 2+ doses, 1 dose, Unknown

WHO/UNICEF Coverage Estimates (WUENIC)
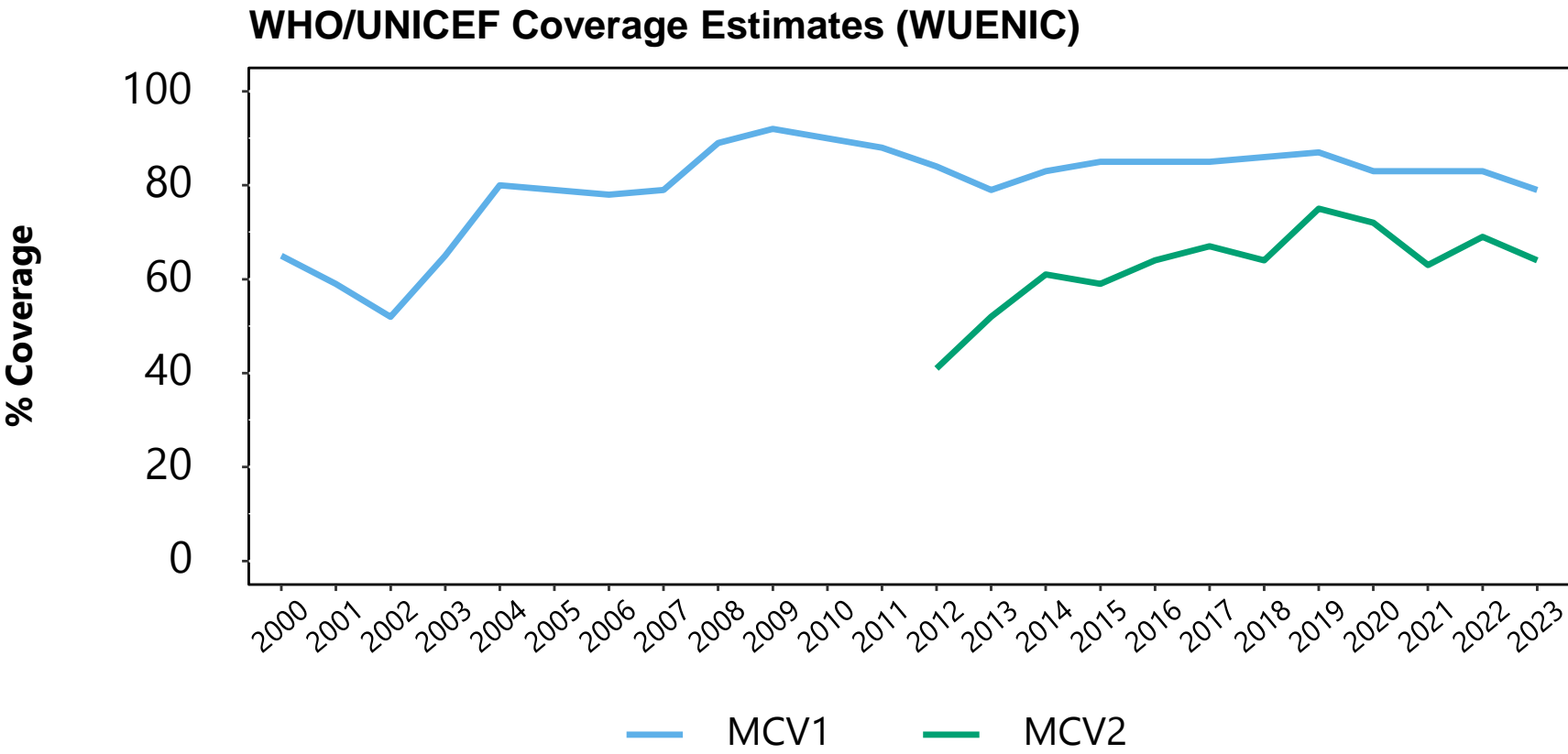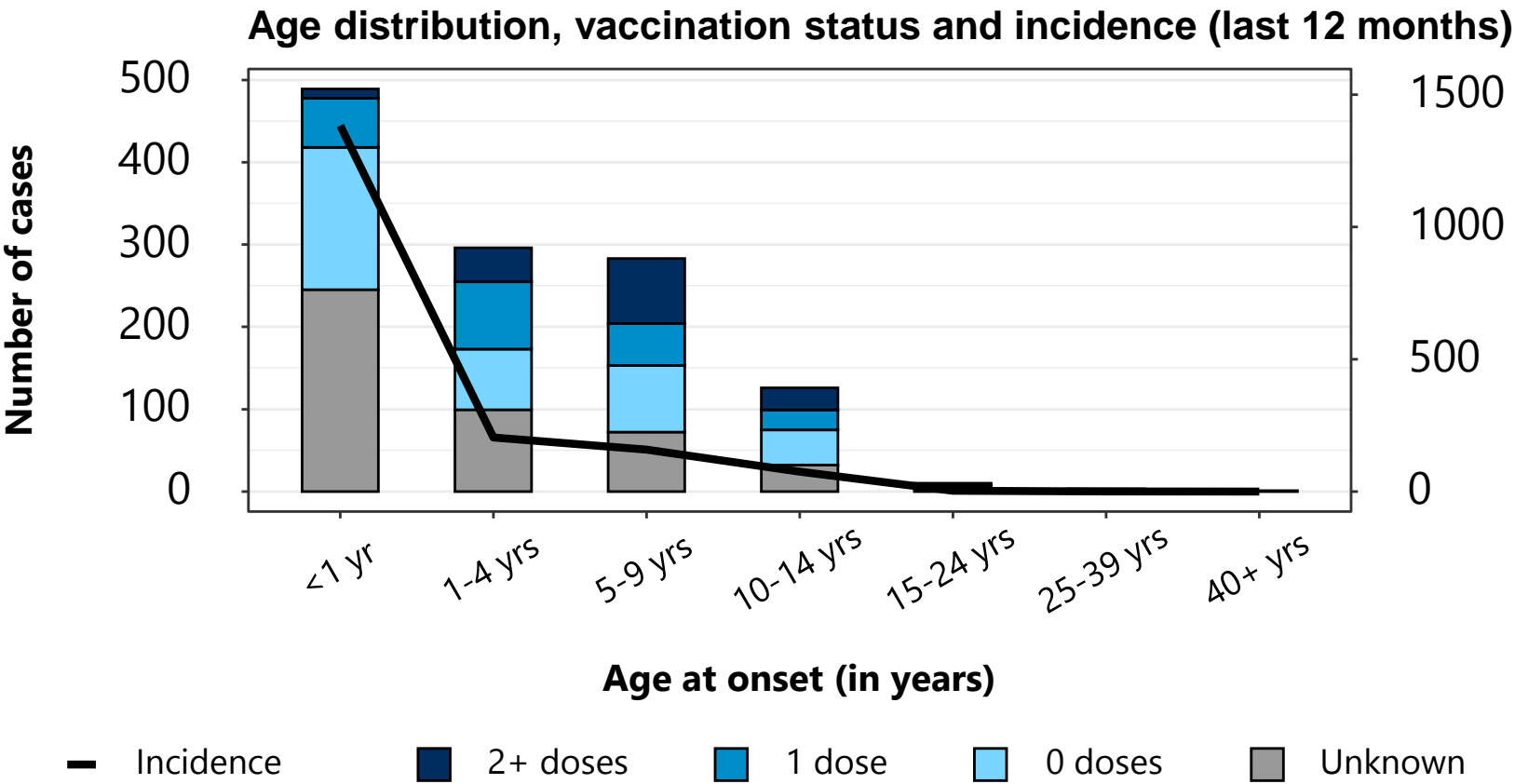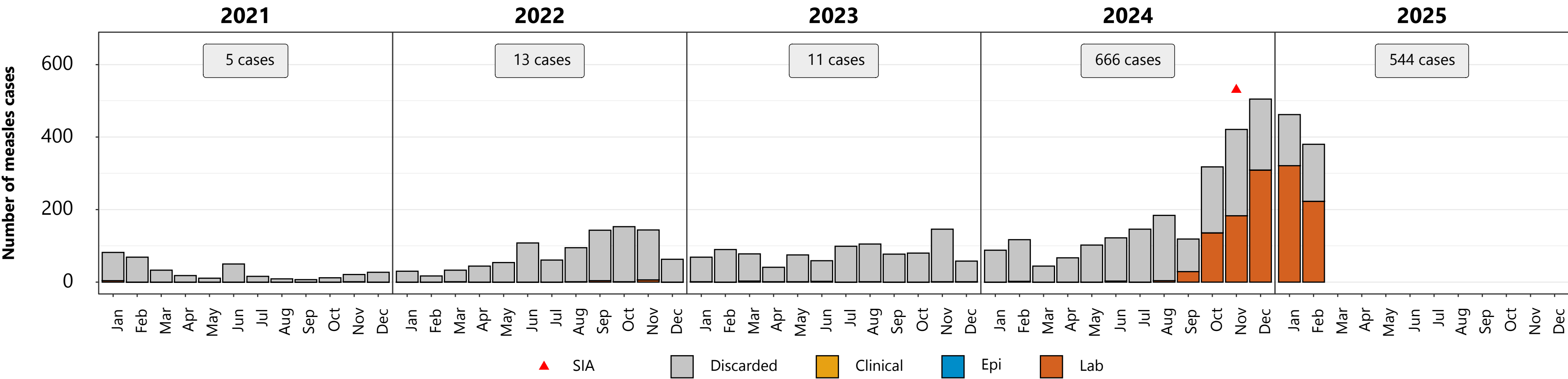
% Coverage (2000–2023)

Legend: MCV1, MCV2

Based on data received 2025-04 - Data Source: IVB Database. Main epi curve was built using case-based surveillance data. Age distribution curve was built using case-based surveillance data. Coverage data from WHO/UNICEF Estimates of National Immunization Coverage (WUENIC)

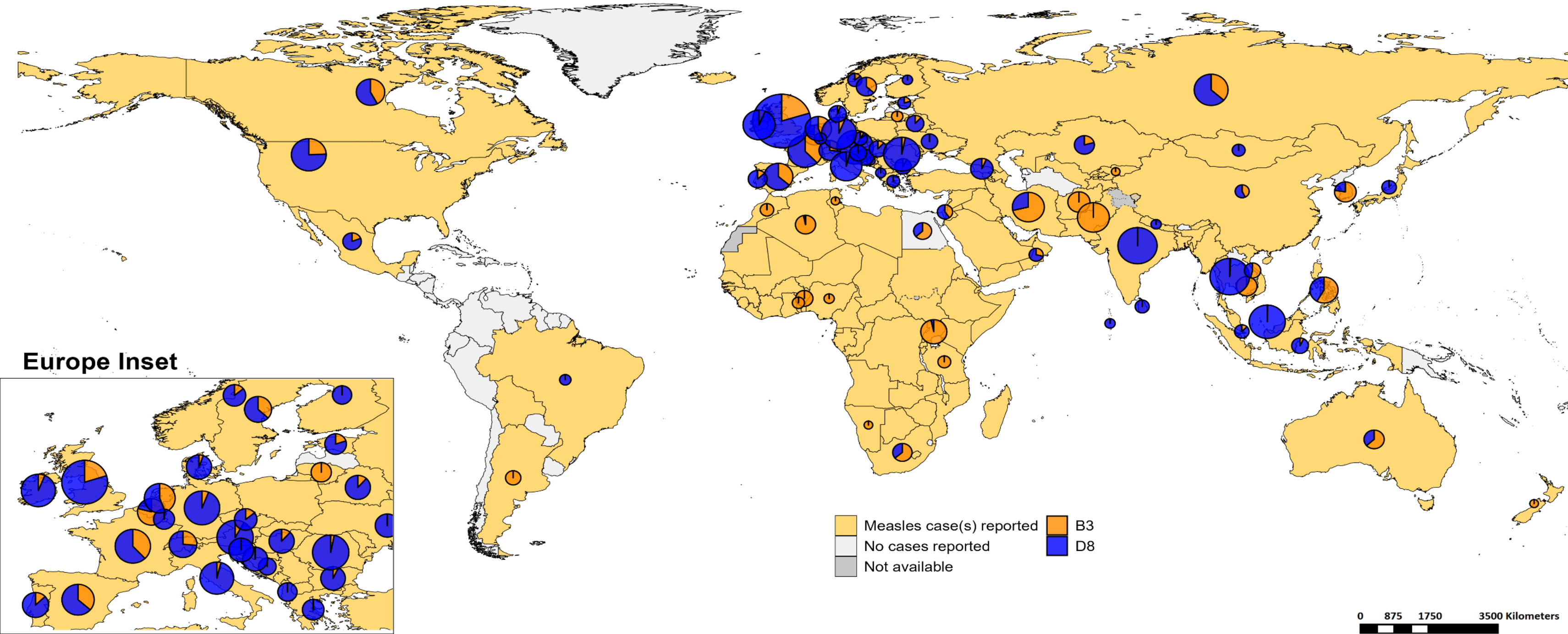# Measles case distribution (WPR), 2020-2025

Measles cases: Cambodia

ELIMINATION STATUS: **ELIMINATED**

Epi curve by month, 2021–2025:
- **2021**: 5 cases
- **2022**: 13 cases
- **2023**: 11 cases
- **2024**: 666 cases
- **2025**: 544 cases

Legend: ▲ SIA | ▬ Discarded | ▬ Clinical | ▬ Epi | ▬ Lab

Age distribution, vaccination status and incidence (last 12 months)

Legend: — Incidence | ▬ 2+ doses | ▬ 1 dose | ▬ 0 doses | ▬ Unknown

WHO/UNICEF Coverage Estimates (WUENIC)

Legend: — MCV1 | — MCV2

Based on data received 2025-04 - Data Source: IVB Database. Main epi curve was built using case-based surveillance data. Age distribution curve was built using case-based surveillance data. Coverage data from WHO/UNICEF Estimates of National Immunization Coverage (WUENIC)

Distribution of measles genotypes (last 12 months)

Europe Inset

Legend:
- Measles case(s) reported
- No cases reported
- Not available
- B3
- D8

0   875   1750   3500 Kilometers

World Health Organization

Map production: World Health Organization, 2025. All rights reserved
Data source: IVB Database

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WHO Bulletins and Newsletters

- AFR   (webpages under migration)

- AMR: PAHO measles and rubella weekly bulletin (published every Friday)

- EMR: EMRO measles home page

- EUR :   EURO EpiData update

- SEAR: (webpages under migration)

- WPR: WPRO measles-rubella monthly bulletin

(Switch to presentation mode if links are inactive)