



North Macedonia

WUENIC 2025 revision,
Published 15 July 2026



WHO/UNICEF Estimates of National Immunization Coverage (WUENIC), 2025 revision

Every year, WHO and UNICEF jointly review submissions from Member States on national immunization coverage, including annual administrative and official coverage, finalized survey reports and data from both published and grey literature. The data is triangulated with consideration of potential biases and local expert opinions to differentiate between accurately reflective empirical data and potentially misleading data, to assess the most likely coverage levels for each country.

WHO and UNICEF produce country-specific estimates by reviewing each country's data independently, without borrowing from other countries when data are missing. The estimates are not ad hoc adjustments to reported figures and may rely on a single empirical source, typically nationally reported coverage. When no data exist for a specific country-vaccine-year, earlier and later data are interpolated. If sources conflict or vary widely, the most plausible estimate is selected after considering potential biases.

This slide deck presents the latest WUENIC estimates (published 15 July 2026), using UNPD World Population Prospects (WPP 2024) for population-weighted averages and to derive absolute numbers of vaccinated and unvaccinated/zero-dose children.

Methods: • [Burton et al. 2009. WHO and UNICEF estimates of national infant immunization coverage: methods and processes.](#)

- [Burton et al. 2012. A formal representation of the WHO and UNICEF estimates of national immunization coverage: a computational logic approach.](#)
- [Brown et al. 2013. An introduction to the grade of confidence used to characterize uncertainty around the WHO and UNICEF estimates of national immunization coverage.](#)
- [Danovaro-Holliday et al. 2021. Compliance of WUENIC with Guidelines for Accurate and Transparent Health Estimates Reporting \(GATHER\) criteria.](#)

Definitions of immunization terms

Vaccine coverage

Percentage of infants (children under one year of age) who received certain vaccine-doses. For example, coverage of DTP3 is the percentage of infants who received all three doses of diphtheria, tetanus, and pertussis (DTP) vaccine.

Unvaccinated

An infant that did not receive the first dose of a vaccine series. The term zero-dose is used to describe children unvaccinated with DTP1.

Under-vaccinated

An infant who received some but not all the recommended vaccine-doses in the national schedule.

Vaccine-Doses

- Bacillus Calmette-Guerin (BCG): vaccine against tuberculosis
- Hepatitis B birth dose, given within 24 hours after birth (HepBB)
- Diphtheria, tetanus, and pertussis vaccine, first dose (DTP1) and third dose (DTP3)
- Hepatitis B vaccine, third dose (HepB3)
- Haemophilus influenzae type b vaccine, third dose (Hib3)
- Inactivated polio vaccine, first dose (IPV1) and last dose (IPVC)
- Measles containing vaccine, first dose (MCV1) and second dose (MCV2)
- Rotavirus vaccine, last dose (RotaC)
- Pneumococcal vaccine, last dose (PCVC)
- Yellow Fever vaccine (YFV)
- Meningococcal A vaccine (MengA)
- Human papillomavirus vaccine, first dose (HPV1) and last dose (HPVc): vaccine to protect against certain types of human papillomavirus that can lead to cancer or genital warts

The Immunization Agenda 2030 (IA2030)

The IA2030 is a global strategy endorsed by the World Health Assembly aiming to ensure everyone, everywhere, at every age benefits from vaccines for improved health and well-being by 2030. It focuses on increasing vaccine coverage, equity, sustainability and pandemic preparedness while promoting life-course immunization and integrating immunization with other health services.

Key concepts

- The World Health Organization (WHO) provides global vaccine recommendations, which are adapted by countries based on local needs. Only DTP, polio and measles-containing vaccines are used in all countries.
- DTP1 is a marker of access to routine immunization services, and when not received, serves as a proxy for identifying children who have not received any vaccinations, also known as "zero-dose" children. High DTP1 coverage indicates good access to immunization services, while low coverage suggests challenges in reaching children with essential vaccines.
- DTP3 is a widely used indicator of immunization programme performance. It reflects a country's ability to deliver routine immunization services and ensures children are protected against serious disease. DTP3 is tracked globally and serves as a key measure of a nation's vaccination efforts.
- DTP1-DTP3 drop-out measures the percentage of children who received DTP1 but not DTP3, and highlights where children are lost along the vaccination pathway, highlighting potential weaknesses in service delivery and follow-up.
- MCV1 (usually recommended between 9-12 months) assesses the ability to deliver vaccines later in infancy. It serves as a tracer for protection against measles and is a good indicator of health system performance.
- HPV vaccine protects against specific types of human papilloma virus (HPV), and is used to measure life cycle vaccination.
- Other key indicators include PCVC and MCV2, which are used to monitor the Sustainable Development Goals (SDGs).
- Together, these indicators provide a consistent and comparable way to track immunization progress, identify missed communities and monitor global targets, including those under the Immunization Agenda 2030 (IA2030) and Sustainable Development Goals (SDGs).

Key messages

- DTP1 coverage declined 4 percentage points from 93% in 2024 to 89% in 2025.
- DTP3 coverage declined 10 percentage points from 89% in 2024 to 79% in 2025.
- There were there were <1,000 more zero-dose children in 2025. This leaves 2,000 children without vaccination, vulnerable to vaccine-preventable diseases and a further 2,000 with incomplete protection.
- North Macedonia accounted for 0.5% of zero-dose children in Europe and Central Asia (ECAR) and <0.1% of zero-dose children globally.
- MCV1 coverage declined 10 percentage points from 73% in 2024 to 63% in 2025. There were 6,000 children who missed out on the first measles vaccination.
- MCV2 coverage increased 6 percentage points from 79% in 2024 to 85% in 2025.
- Last dose coverage of HPV vaccination (HPVc) among girls remained constant at 40% in 2025.

Vaccination schedule, 2025

Level	Vaccine	Dose number and age administered			
		1	3	2	4
National	BCG	Birth			
National	DTAPHIBHEPBIPV	2 months	6 months		
National	DTAPHIBIPV			4 months	
National	DTAPHIBIPV (booster)				18 months
National	HEPB (pediatric)	Birth			
National	HPV (females)	12 years		+6 months	
National	HPV (females and males)	12 years		+6 months	
National	MMR	12 months		6 years	
National	PCV	2 months	12 months	4 months	
National	Rotavirus	2 months	6 months	4 months	

This table shows the 2025 national immunization schedule for routine services in North Macedonia, reported through the WHO/UNICEF Joint Reporting Form on Immunization (JRF).

Each row corresponds to a vaccine or combination vaccine, indicating whether it is delivered at the national or subnational level. The schedule outlines the number of doses and the recommended ages for administration. Only childhood and adolescent vaccines relevant to WUENIC are included.

Vaccine introduction years

Vaccine	National introduction
HPV (Human papillomavirus) vaccine	2009
HepB birth dose	2004
Hepatitis B vaccine	2004
Hib (Haemophilus influenzae type B) vaccine	2008
IPV (Inactivated polio vaccine)	2015
IPV (Inactivated polio vaccine) 2nd dose	2015
Malaria vaccine	Not introduced
Measles-containing vaccine 2nd dose	1993
Meningococcal meningitis vaccines (any strain)	Not introduced
Mumps vaccine	1995
PCV (Pneumococcal conjugate vaccine)	2019
RSV (Respiratory syncytial virus) immunization strategy	Not introduced
Rotavirus vaccine	2019
Rubella vaccine	1993
Typhoid conjugate vaccine	Not introduced

This table displays the year each vaccine was introduced in North Macedonia. If a vaccine has been suspended, no introduction year is shown, but if it was suspended and later reintroduced, the year of reintroduction is provided. The introduction years can reflect nationwide rollout, partial (subnational) rollout, or introduction targeted to specific risk groups or high-risk areas, as indicated in the column headers.

Vaccine stockouts

Vaccines / supplies	2021
HPV	National (6m) and subnational
HepB	National (6m) and subnational

This table presents reported vaccine stockouts of childhood vaccines relevant to WUENIC at the national and subnational levels over the last 5 years (2021 to 2025). Where available, the duration of national-level stockouts is indicated in months. Subnational stockouts are noted without specifying duration. Only vaccines that had a stockout during the specified time period are displayed.

A stockout refers to a period when vaccine storage and distribution points (e.g., national or district stores) are fully depleted, including buffer stock, and are unable to supply vaccines to lower-level stores or facilities. It is important to note that facility-level stockouts can still occur even when upper-level stores have inventory. Stockouts, especially prolonged ones, can negatively impact immunization coverage.

In 2025, coverage increased for one antigens, remained unchanged for three, and declined for 10, indicating limited improvement in routine immunization performance; two achieved at least 90% coverage.

Vaccine coverage, North Macedonia, 2000-2025

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
BCG	97	97	91	95	94	99	92	95	94	98	96	94	95*	97	99	94	99*	97	93	93	93	93	93	93	93	93
HepBB							88	90	92	93	95	97	99	98	99	98	98	98	98	98	97	97*	97	97	97	97
DTP1	98	95	99	99	96	99	95	95	96	96	97	97	98*	99	98	98	97	97	98	96	93	89	92	92	93	89
DTP3	95	91	96	96	94	97	93	95	95	96	95	96	95*	98	95	91	95	91	93	91	84	81	84	86	89	79
Hib3									13	82	89	96	95*	97	94	89	94	91	93	91	84	81	84	86	91	79
HepB3						53	89	96	97	95	90	96	98*	97	97	92	94	91	92	91	84	79*	84	86	91	77
PCVC																					30	53	56	56	72	60
RotaC																					61	65	67	68	71	64
IPV1																98	97	97	98	96	93	89	92	92	93	89
IPVC																						81	84	86	89	79
MCV1	97	92	98	96	96	96	94	96	98	96	98	97	96	96	93	89	82	83	75	75	63	70	71	73	73	63
RCV1	97	92	98	96	96	96	94	96	98	96	98	97	96	96	93	89	82	83	75	75	63	70	71	73	73	63
MCV2	95	94	95	97	95	95	96	95	95	97	99	98	96	96	96	93	93	97	94	93	68	80	89	88	79	85
HPVc											31	45	29	32	43	29	45	41	43	37	31	21	50	42	40	40



Source: WHO/UNICEF Estimates of National Immunization Coverage, 2025 revision.
Note: Stock information available from 2003.
An asterisk (*) indicates where there was a vaccine stockout at the national or subnational level.

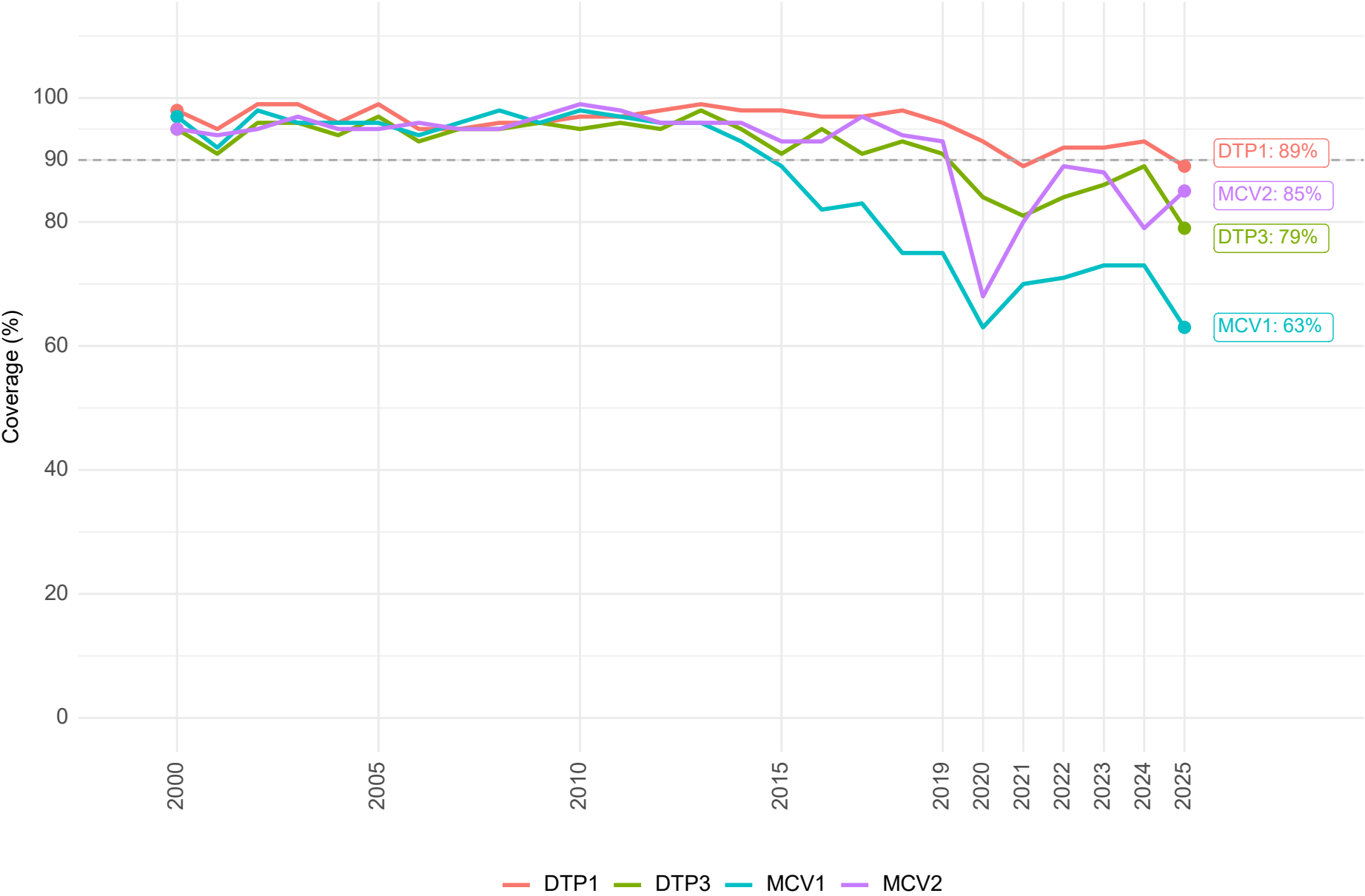
This heatmap shows trends in vaccine coverage since 2000, with green cells indicating coverage of 90% or more.

In 2025, 2 out of 14 (14%) vaccines in the schedule achieved coverage of 90% or more. Vaccine coverage ranged from 60% to 97%.

Since 2005, estimates have been made for 8 new vaccines. IPVC is the newest vaccine reported (2021), which achieved 79% coverage in 2025.

In 2025, North Macedonia did not report any stockouts of vaccines or supplies.

Coverage of key childhood vaccines (%), North Macedonia, 2000-2025



This chart shows coverage trends for the DTP and measles vaccines. These are key antigens for assessing national immunization programmes.

In 2025, DTP1 coverage (a proxy for access to immunization services) was 63%.

DTP3 coverage - a marker of how well countries are delivering immunization services to children - was below the 90% target set for 2030.

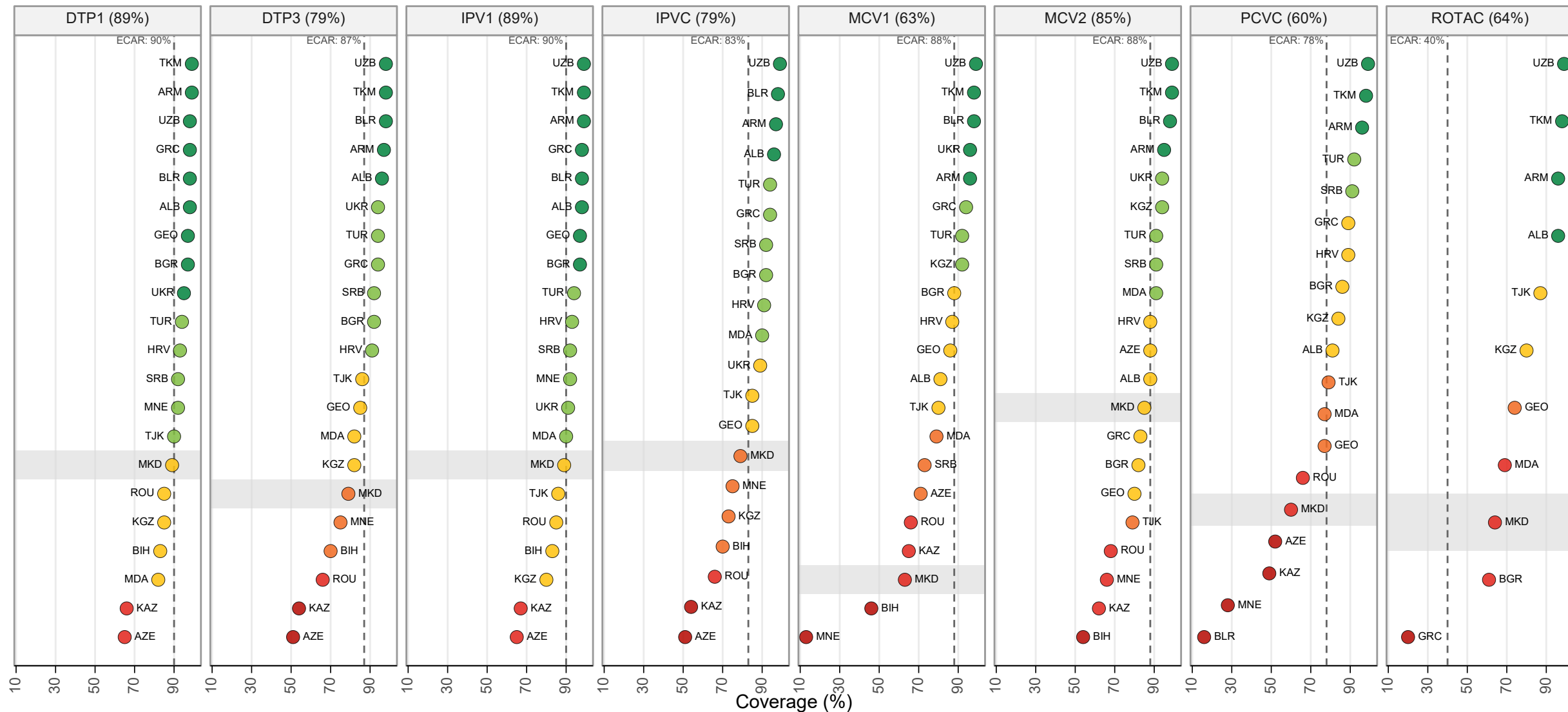
WHO recommends that countries achieve at least 95% coverage with both the first (MCV1) and second (MCV2) doses of measles-containing vaccine. MCV1 provides initial protection and MCV2 ensures long-term immunity and closes gaps in coverage.

In 2025, MCV1 coverage was below the 95% target and MCV2 coverage was below the 95% target.

Between 2024 and 2025, 1 vaccines increased coverage, 3 declined and 0 remained the same.

Source: WHO/UNICEF Estimates of National Immunization Coverage, 2025 revision

Vaccine coverage compared with other countries in the region, ECAR, 2025



Coverage (%) ● <60 ● 60-69 ● 70-79 ● 80-89 ● 90-94 ● >=95

Source: WHO/UNICEF Estimates of National Immunization Coverage, 2025 revision
Note: Country ISO codes displayed. Coverage in mkd shown in the headers. Regional average coverage shown by the dashed line.

DTP1

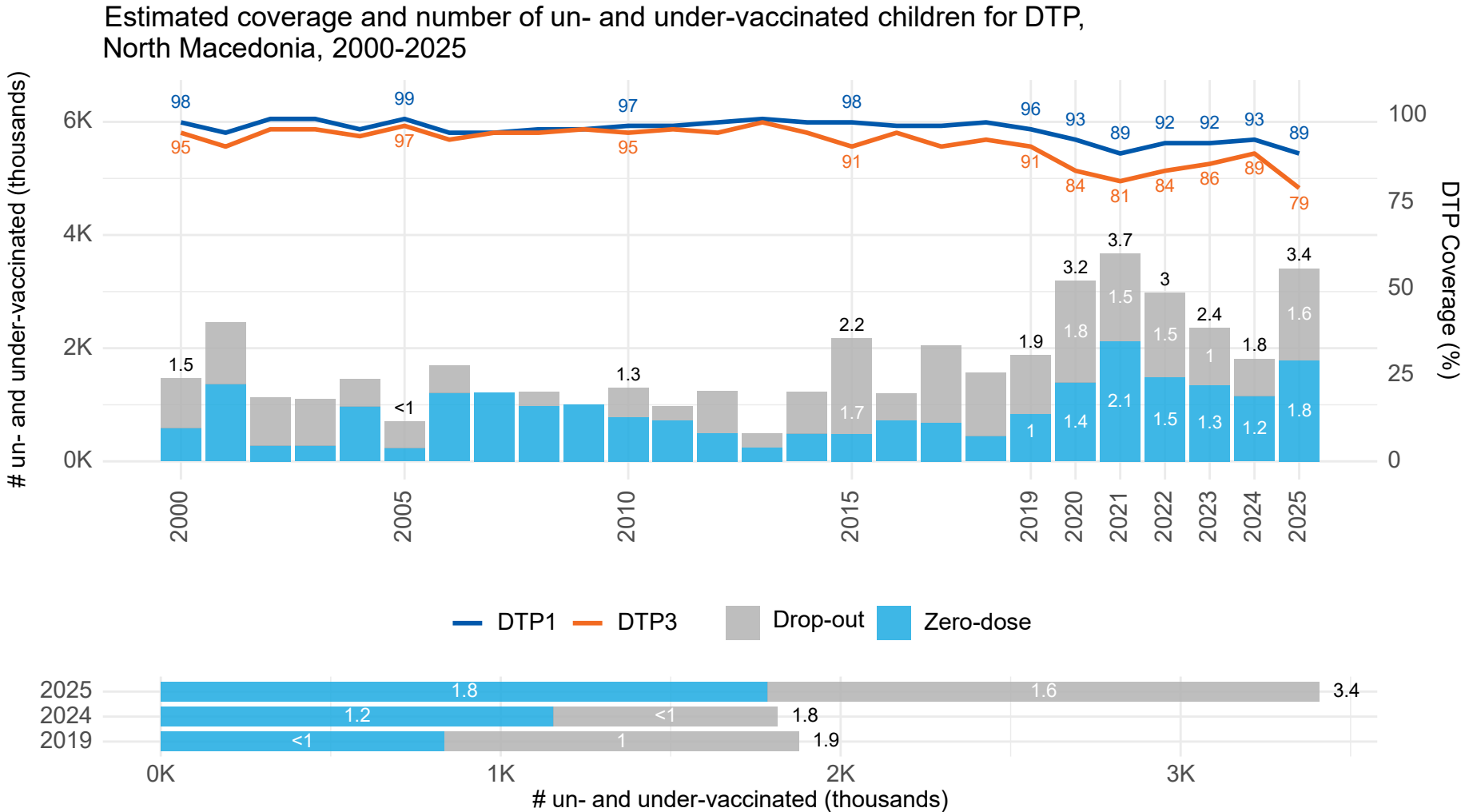
In 2025, DTP1 coverage was 89% and DTP3 was 79%, leaving 3,000 children un- or under-vaccinated, including 2,000 zero-dose and 2,000 with only partial protection.

The key goal of the Immunization Agenda 2030 is to make vaccination available to everyone, everywhere, by 2030.

This chart shows diphtheria, tetanus and pertussis-containing vaccine first (DTP1) and third dose (DTP3) coverage trends, the number of zero-dose children and DTP drop-out in North Macedonia.

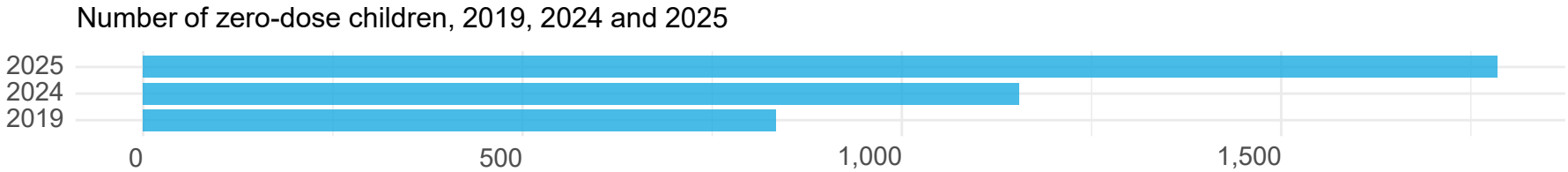
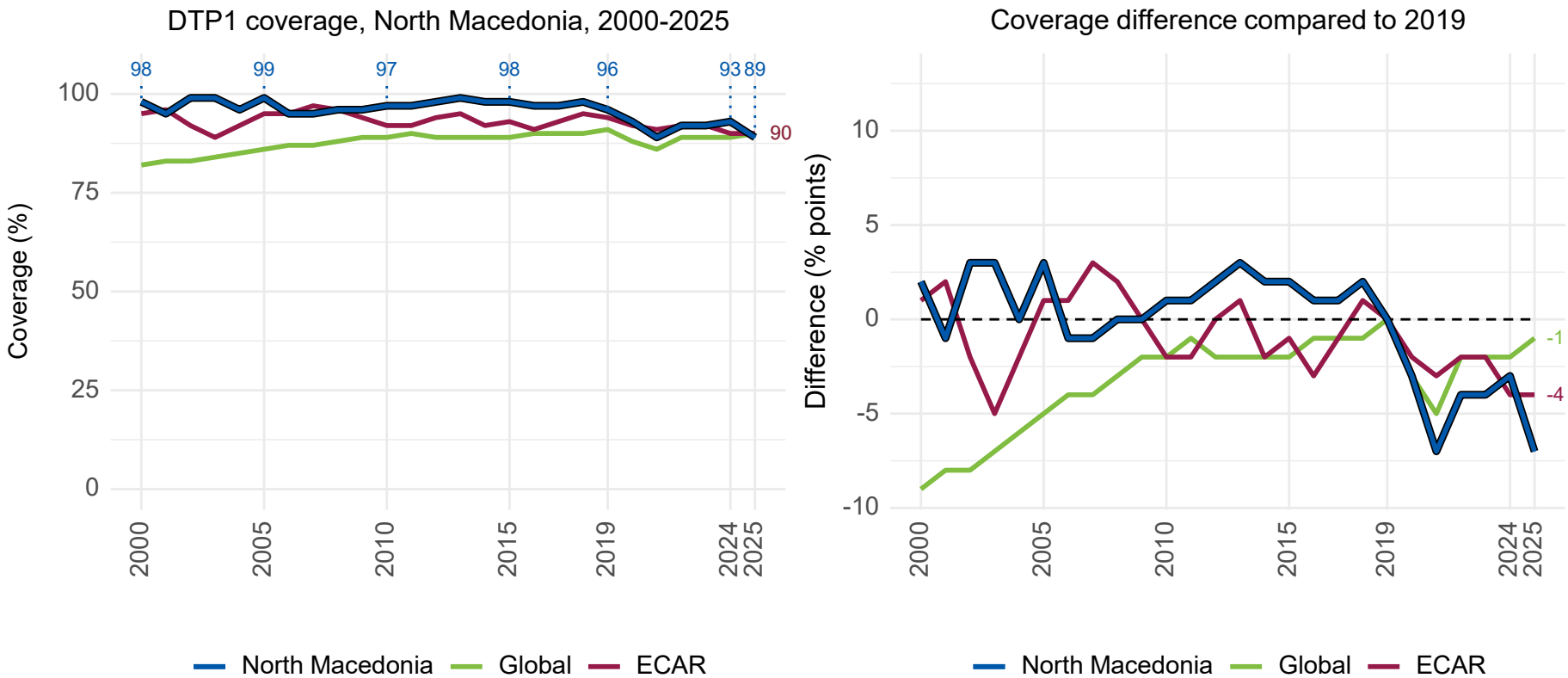
In 2025, DTP1 coverage in North Macedonia declined at 89%. The number of children missing out on any DTP vaccination (zero-dose children) increased from 1,000 in 2024 to 2,000 in 2025.

DTP3 coverage declined at 79% in 2025, leaving 3,000 children vulnerable to vaccine-preventable diseases.



Source: WHO/UNICEF Estimates of National Immunization Coverage, 2025 revision
Note: Lines show vaccine coverage and bars show number of children.
Zero-dose children are those who did not receive DTP1.

In 2025, North Macedonia DTP1 coverage was 89% - this is 7 percentage points lower than in 2019 and lower than both the global and regional averages.

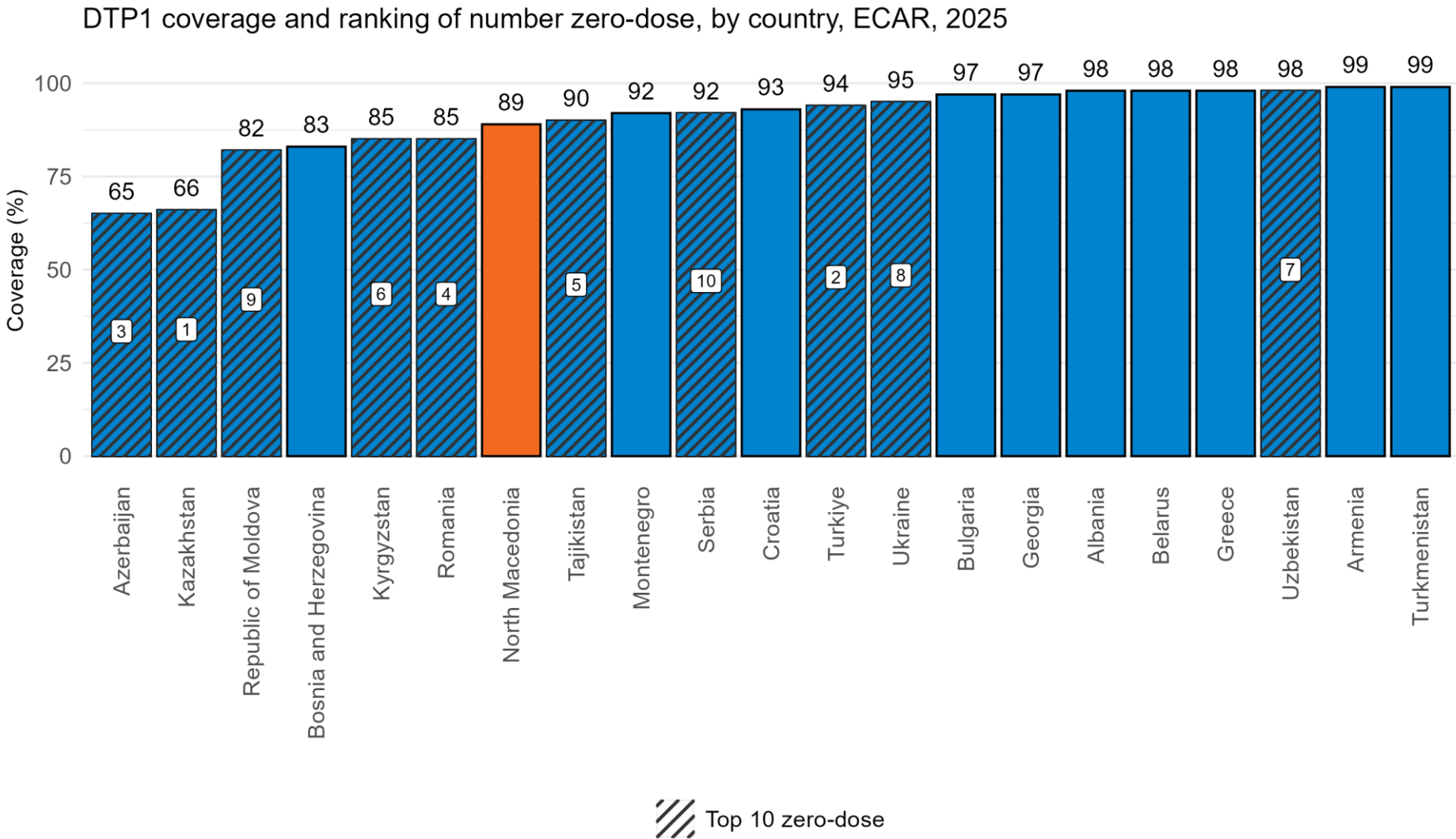


In 2025, DTP1 coverage in North Macedonia (89%) was 1 percentage point lower than the global average (90%) and 1 percentage point lower than the average across all ECAR countries (90%).

National DTP1 coverage was 7 percentage points lower than in 2019 (96%).

This equates to 2,000 zero-dose children in 2025 compared to <1,000 zero-dose children in 2019.

In 2025, North Macedonia was among the countries with the highest coverage and was not among the top 10 countries with the highest number of zero-dose children in the region.



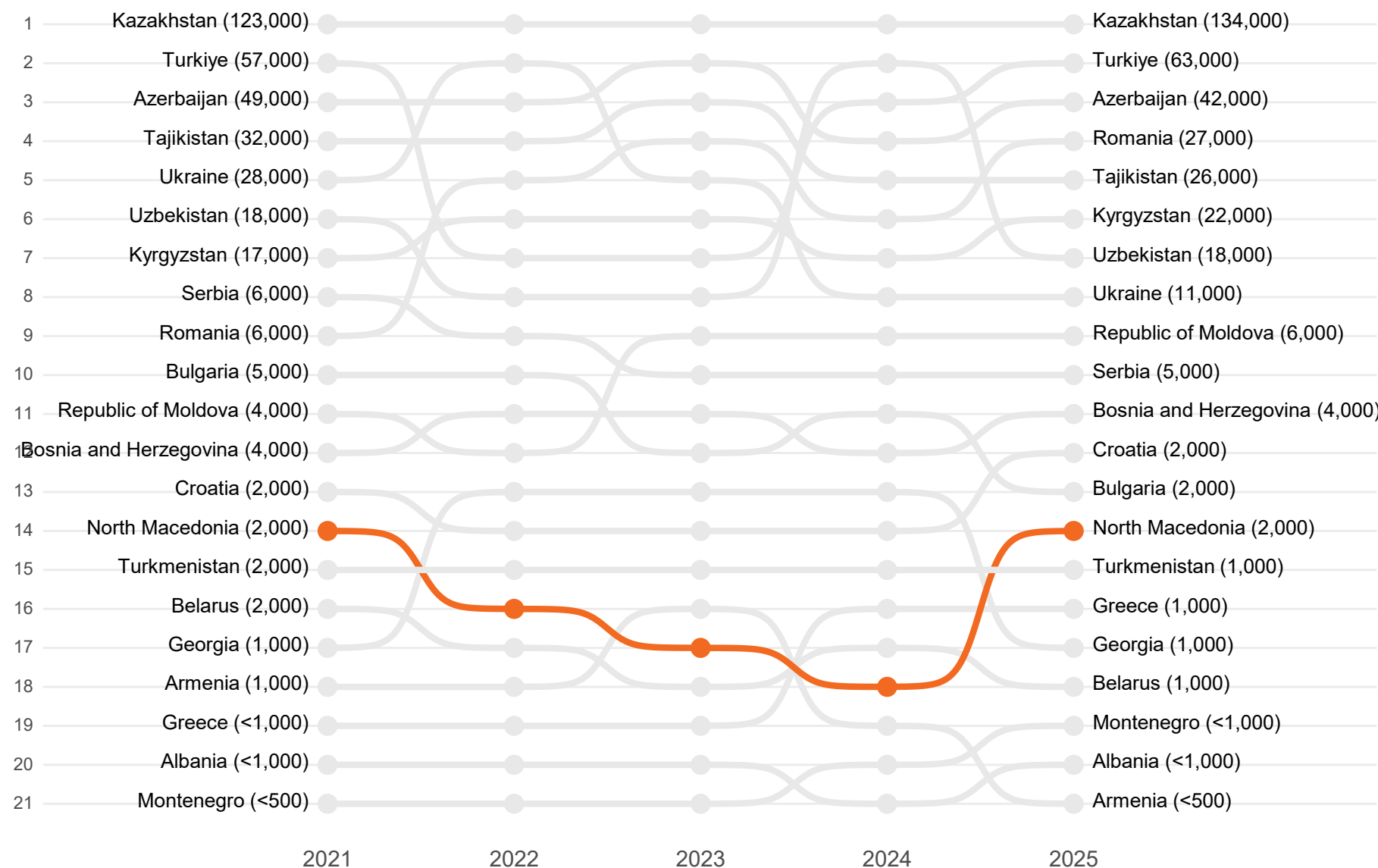
This chart shows DTP1 coverage in countries in ECAR from lowest to highest coverage, and the rank of the top 10 countries with the most zero-dose children, based on absolute numbers.

In 2025, North Macedonia ranked number 7 out of 21 countries for lowest DTP1 coverage (based on tied ranks).

North Macedonia was not in the top 10 countries with the most zero-dose children.

Note: Large cohort countries may have high numbers of zero-dose children despite high vaccine coverage. It is important to consider both coverage and absolute numbers of unvaccinated children to ensure vulnerable countries with small birth cohorts are not overlooked.

Countries ranked by number of zero-dose children, ECAR, 2021-2025



This chart compares the ranking of countries in the region based on the absolute number of zero-dose children, with rank 1 representing the country with the most zero-dose children.

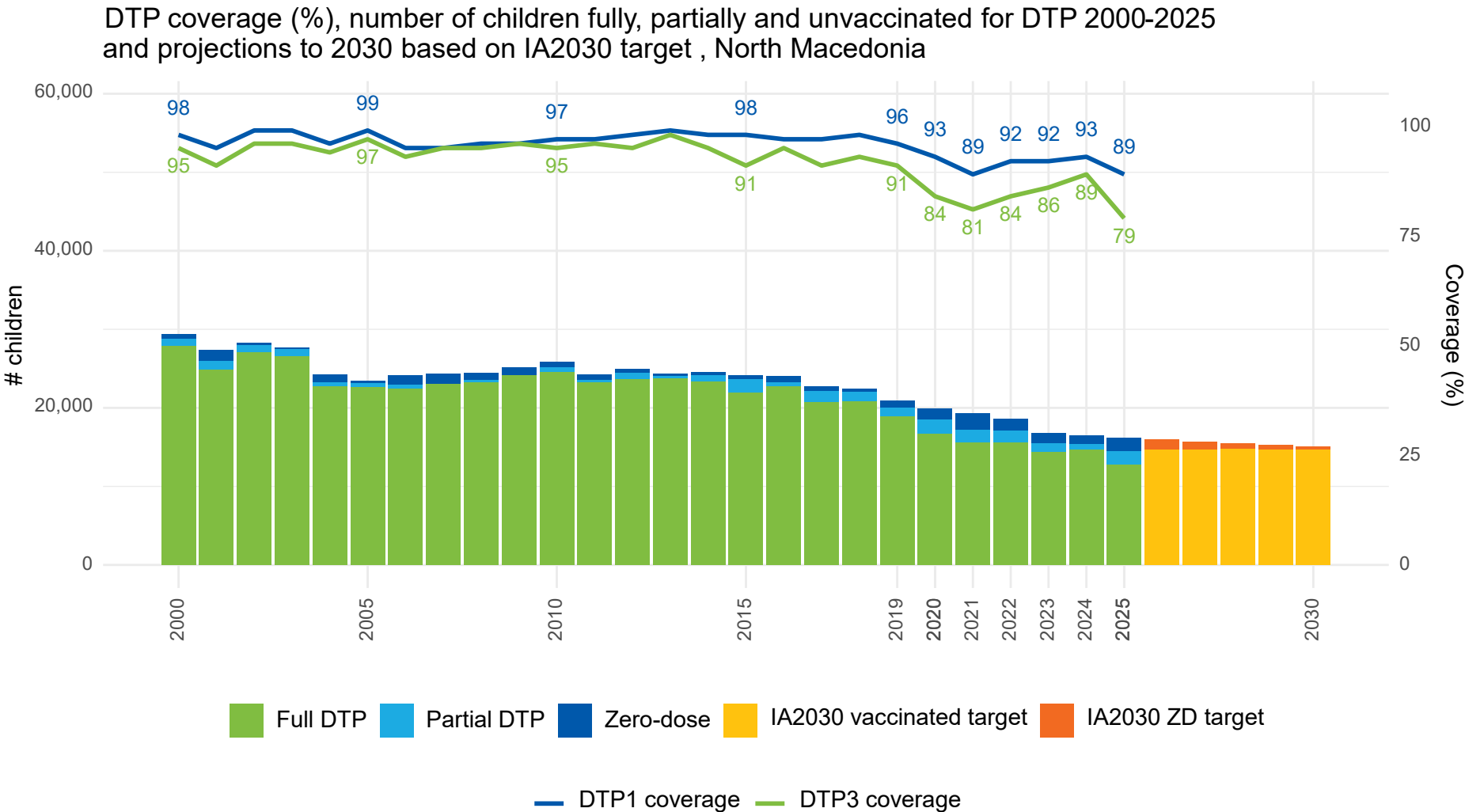
In 2021, North Macedonia ranked number 14 out of 21 countries with 2,000 zero-dose children.

In 2025, North Macedonia ranked number 14 out of 21 countries with 2,000 zero-dose children.

Note: Absolute numbers of zero-dose children is based on a combination of programme performance and surviving infant target population size. Countries may climb to a higher rank despite a decline in number of zero-dose children as the ranking also depends on performance of other countries in the region.

Source: WHO/UNICEF Estimates of National Immunization Coverage, 2025 revision
Note: Number in parentheses is the number of zero-dose children.

North Macedonia is on track to halve zero-dose children by 2030, but sustaining progress will require continued strengthening of immunization systems.



Sources: WHO/UNICEF Estimates of National Immunization Coverage, 2025 revision; United Nations, Department of Economic and Social Affairs, Population Division (2024). World Population Prospects 2024, Online Edition. Note: The Immunization Agenda 2030 (IA2030) calls on all countries to reduce the number of zero dose children in 2019 by half by 2030.

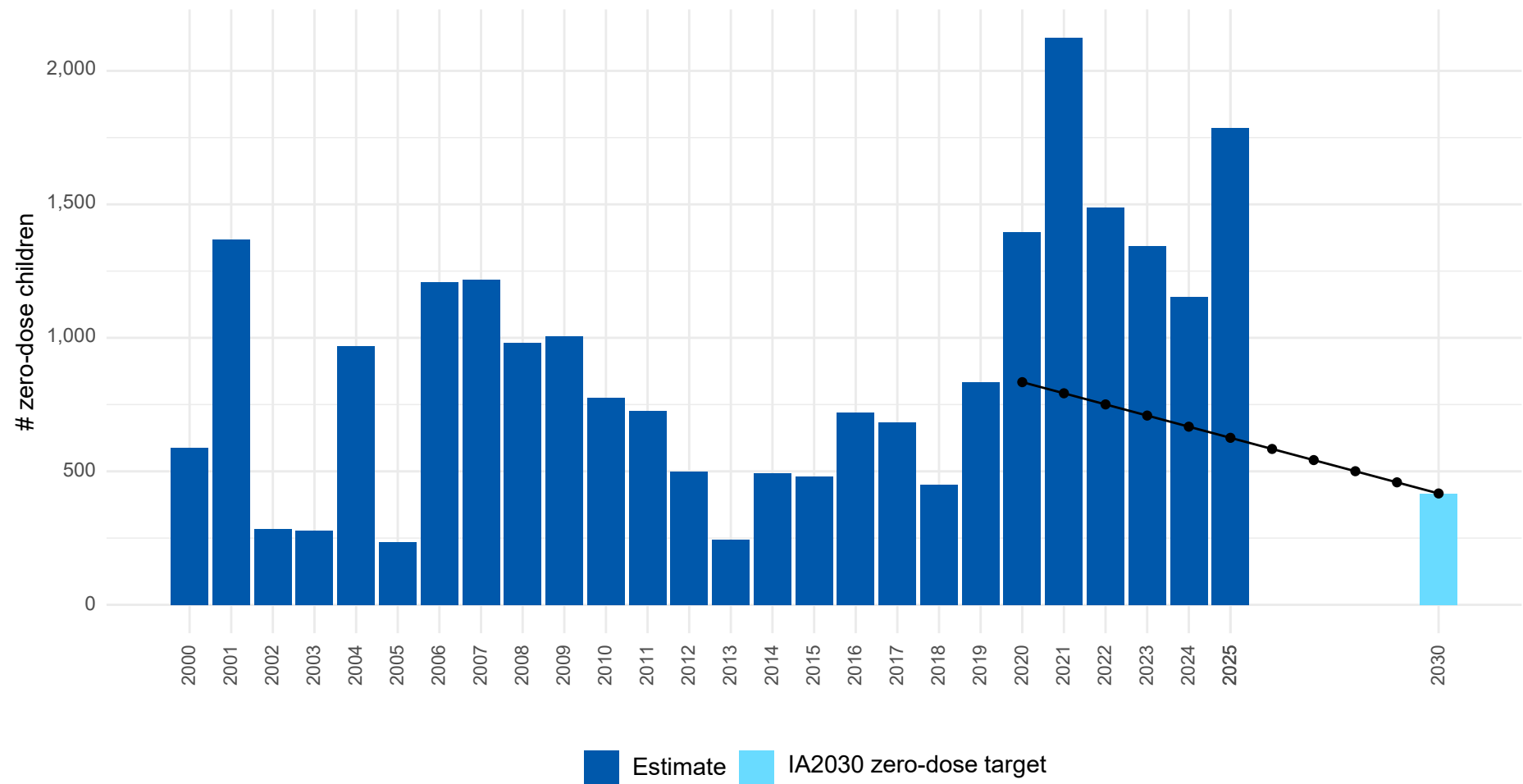
IA2030 calls on all countries to reduce the number of zero dose children in 2019 by half by 2030. This chart shows the annual number of children required to be vaccinated to reach the ZD target.

IA2030 calls on all countries to reduce the number of zero dose children in 2019 by half by 2030. This chart shows the annual number of children required to be vaccinated to reach the ZD target.

North Macedonia is projected to have a decline in the number of surviving infants by 2030. To achieve the IA2030 ZD target, current efforts would be sufficient, however, countries must strengthen beyond the targets.

In 2025, the number of zero-dose children was 185% above the annual IA2030 goal, putting the 2030 goal at serious risk without accelerated action.

Estimated number of zero-dose children, 2000-2025 and target by 2030, North Macedonia



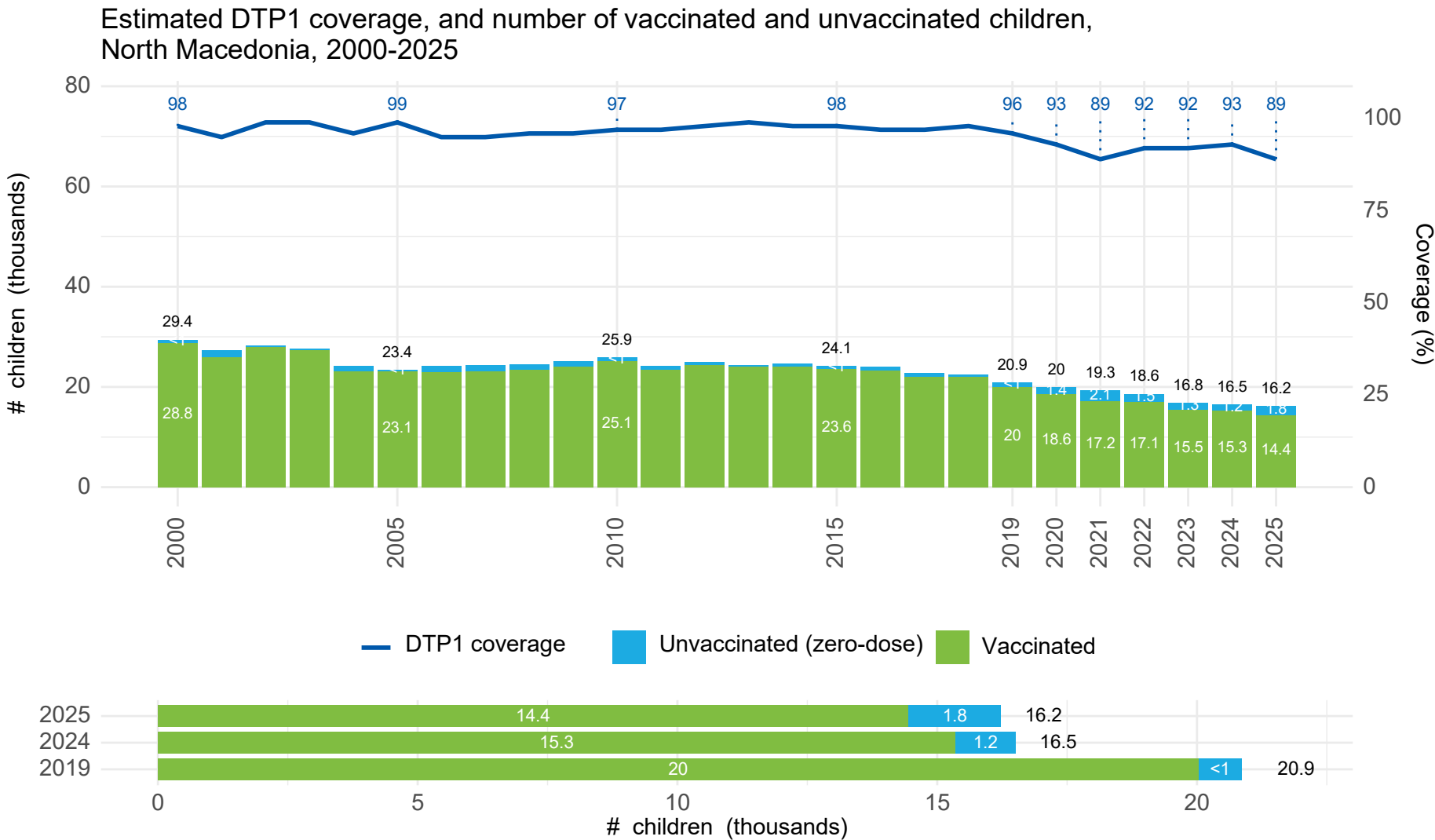
IA2030 aims to leave no one behind with immunization and calls on all countries to reduce the number of zero dose children by half by 2030.

- This chart shows:
- Estimated number of zero-dose children in 2000-2025 (dark blue bars)
 - Zero-dose target by 2030 (light blue bar)
 - Trajectory to reach the 2030 target based on a linear decline (points)

In 2025, the number of zero-dose children was approximately 185% higher than the annual number proposed to reach the target, based on a linear trajectory of decline.

Source: WHO/UNICEF Estimates of National Immunization Coverage, 2025 revision
Note: The Immunization Agenda 2030 (IA2030) calls on all countries to reduce the number of zero dose children in 2019 by half by 2030. Dark blue bars are the estimated number of zero-dose children in 2000-2025, light blue bar is the target number of zero-dose children by 2030. The line and points show the yearly progress and trajectory to meet the target by 2030, based on a linear decline.

For vaccine coverage to increase, the number of children vaccinated needs to either increase or decline at a slower rate than the decline in surviving infant target population.



Source: WHO/UNICEF Estimates of National Immunization Coverage, 2025 revision

DTP1 coverage in 2025 (89%) was lower than in 2019 (96%).

The number of children vaccinated with DTP1 decreased 28% compared to in 2019.

The number of surviving infants decreased approximately 22% compared to in 2019.

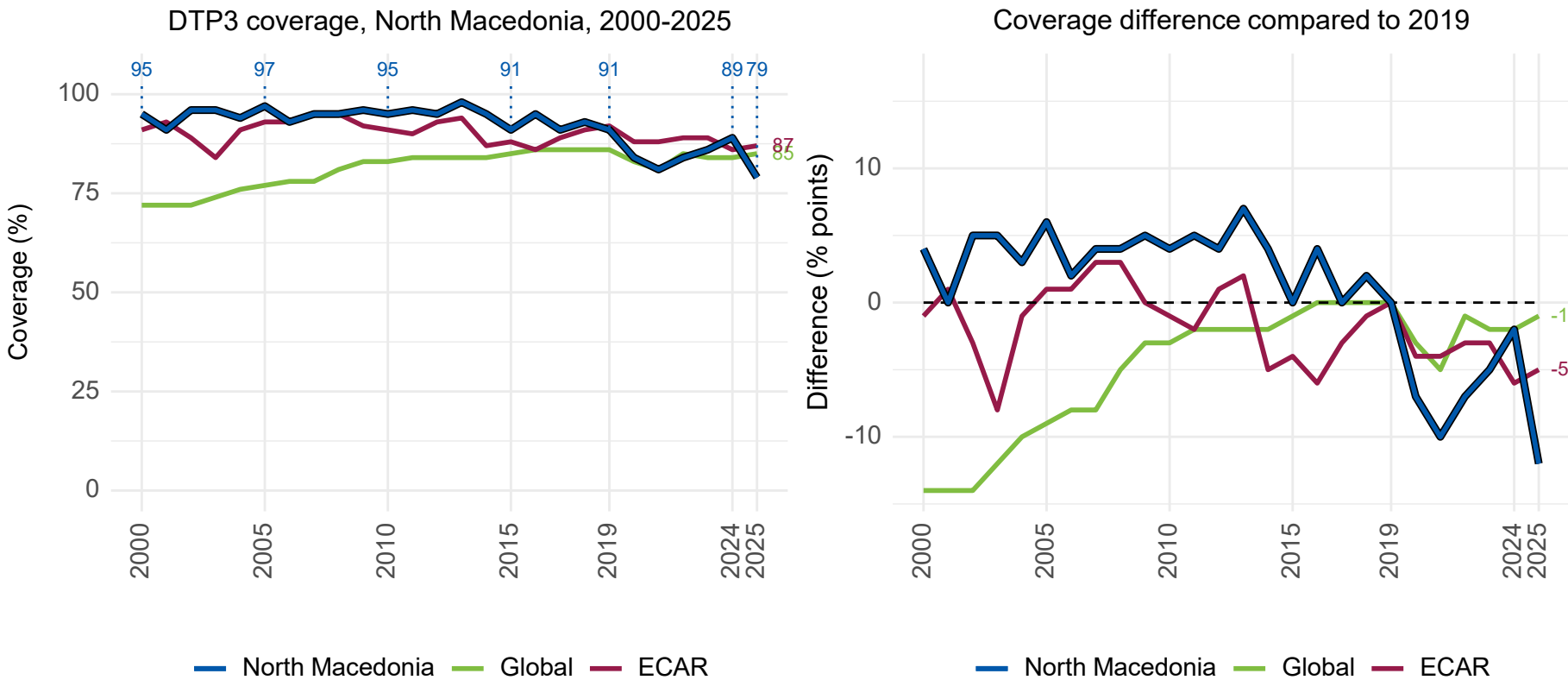
In 2025, fewer children were vaccinated than in 2019.

In 2025, there were fewer surviving infants (target population) than in 2019.

For vaccine coverage to increase, the number of children vaccinated needs to either increase or decline at a slower rate than the decline in surviving infant target population.

DTP3

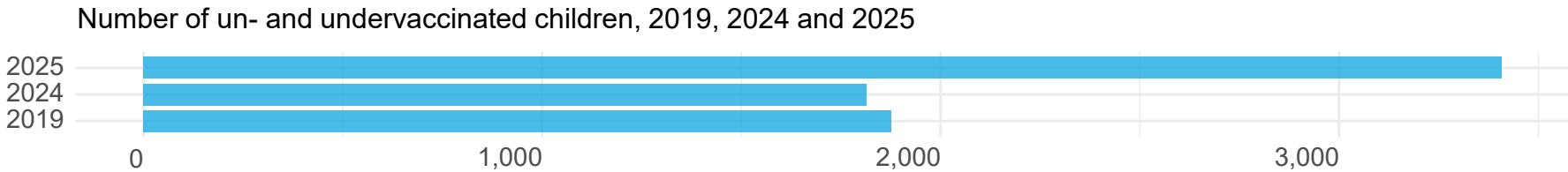
In 2025, North Macedonia DTP3 coverage was 79% - this is 12 percentage points lower than in 2019 and lower than both the global and regional averages.



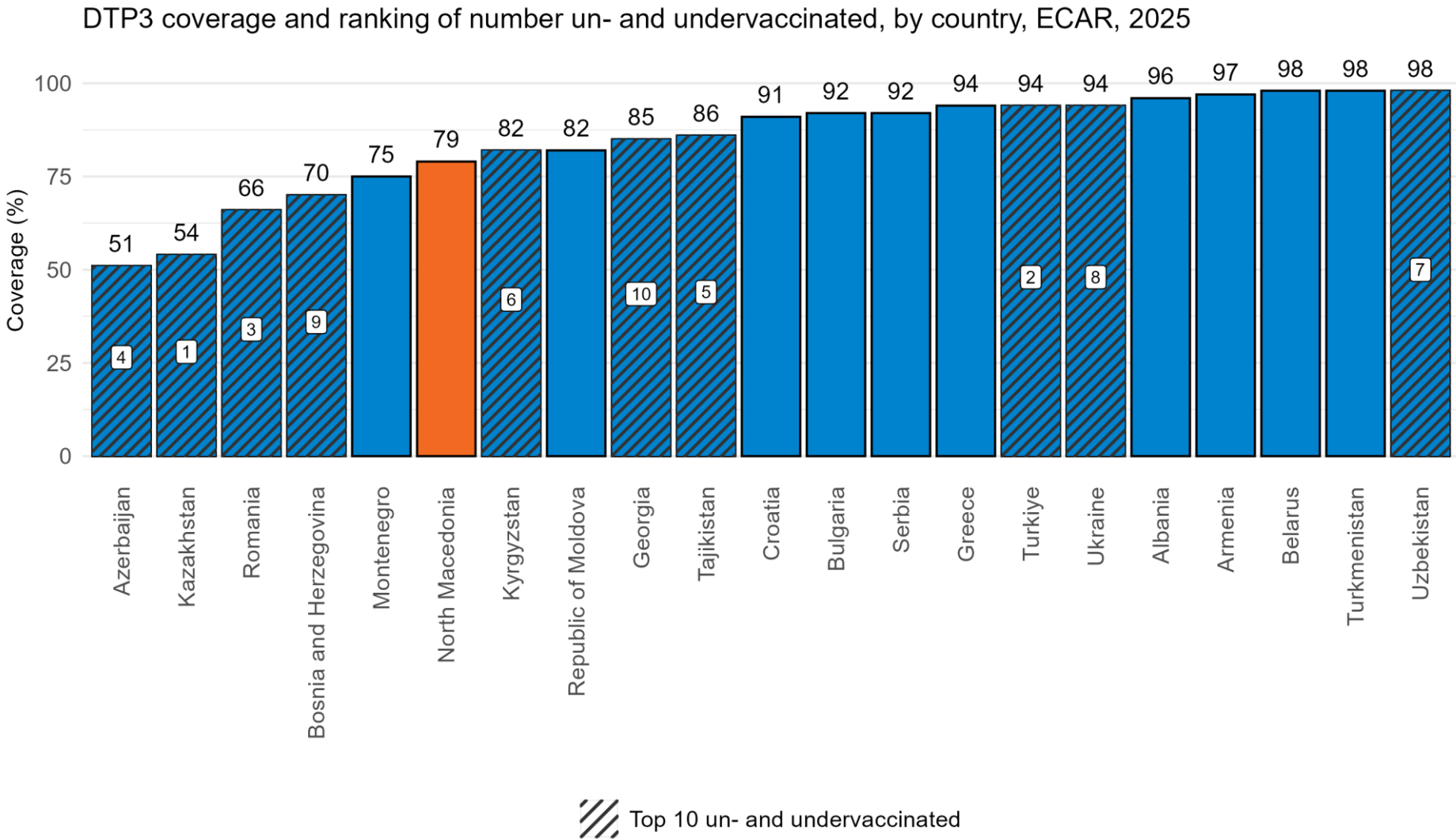
In 2025, DTP3 coverage in North Macedonia (79%) was 6 percentage points lower than the global average (85%) and 8 percentage points lower than the average across all ECAR countries (87%).

National DTP3 coverage was 12 percentage points lower than in 2019 (91%).

This equates to 3,000 un- and undervaccinated children in 2025 compared to 2,000 un- and undervaccinated children in 2019.



In 2025, North Macedonia was among the countries with the highest coverage and was not among the top 10 countries with the highest number of un- and undervaccinated children in the region.



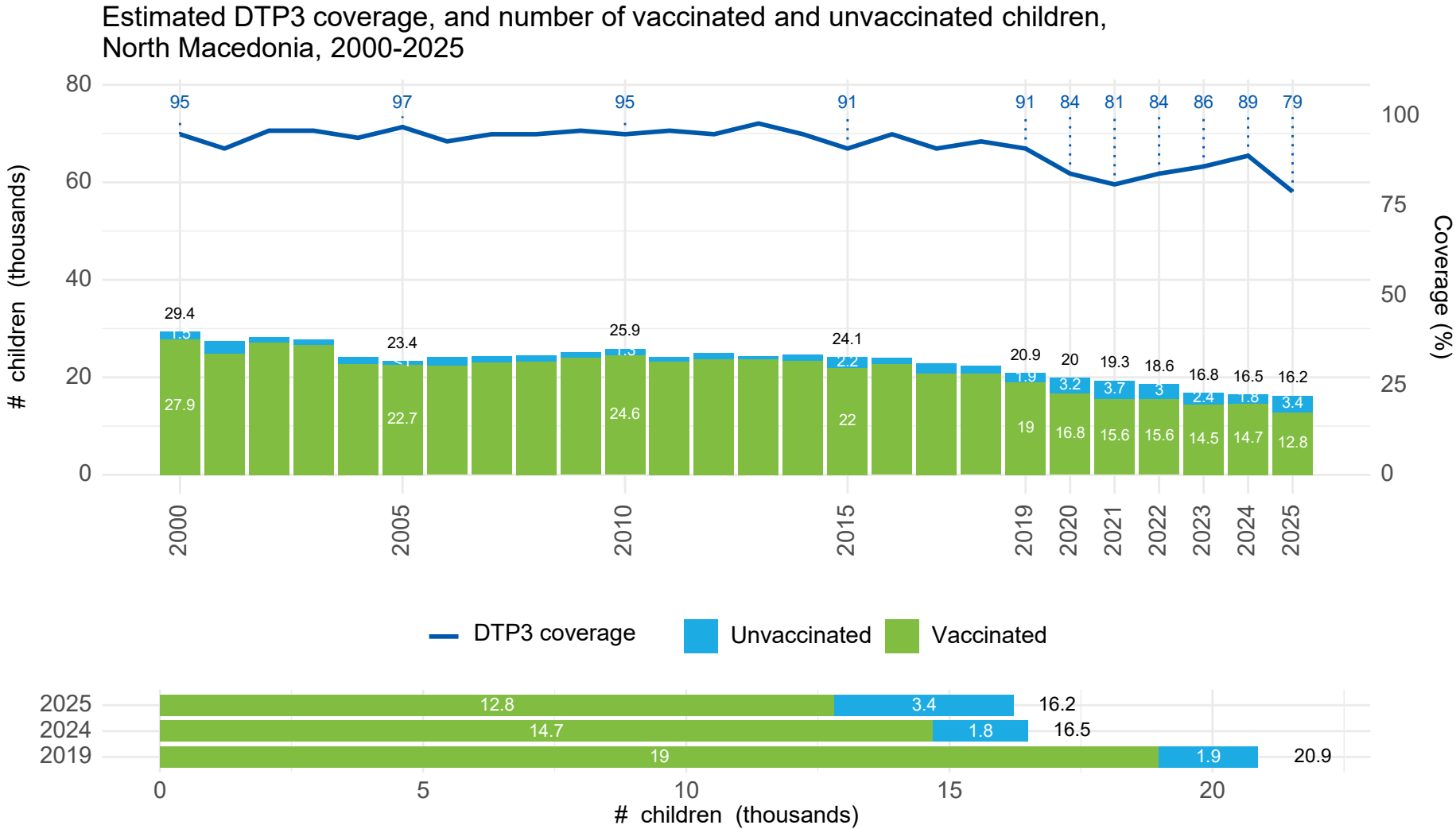
This chart shows DTP3 coverage in countries in ECAR from lowest to highest coverage, and the rank of the top 10 countries with the most un- and undervaccinated children, based on absolute numbers.

In 2025, North Macedonia ranked number 6 out of 21 countries for lowest DTP3 coverage (based on tied ranks).

North Macedonia was not in the top 10 countries with the most un- and undervaccinated children.

Note: Large cohort countries may have high numbers of un- and undervaccinated children despite high vaccine coverage. It is important to consider both coverage and absolute numbers of unvaccinated children to ensure vulnerable countries with small birth cohorts are not overlooked.

For vaccine coverage to increase, the number of children vaccinated needs to either increase or decline at a slower rate than the decline in surviving infant target population.



Source: WHO/UNICEF Estimates of National Immunization Coverage, 2025 revision
Note: Unvaccinated includes zero-dose and undervaccinated children

DTP3 coverage in 2025 (79%) was lower than in 2019 (91%).

The number of children vaccinated with DTP3 decreased 32% compared to in 2019.

The number of surviving infants decreased approximately 22% compared to in 2019.

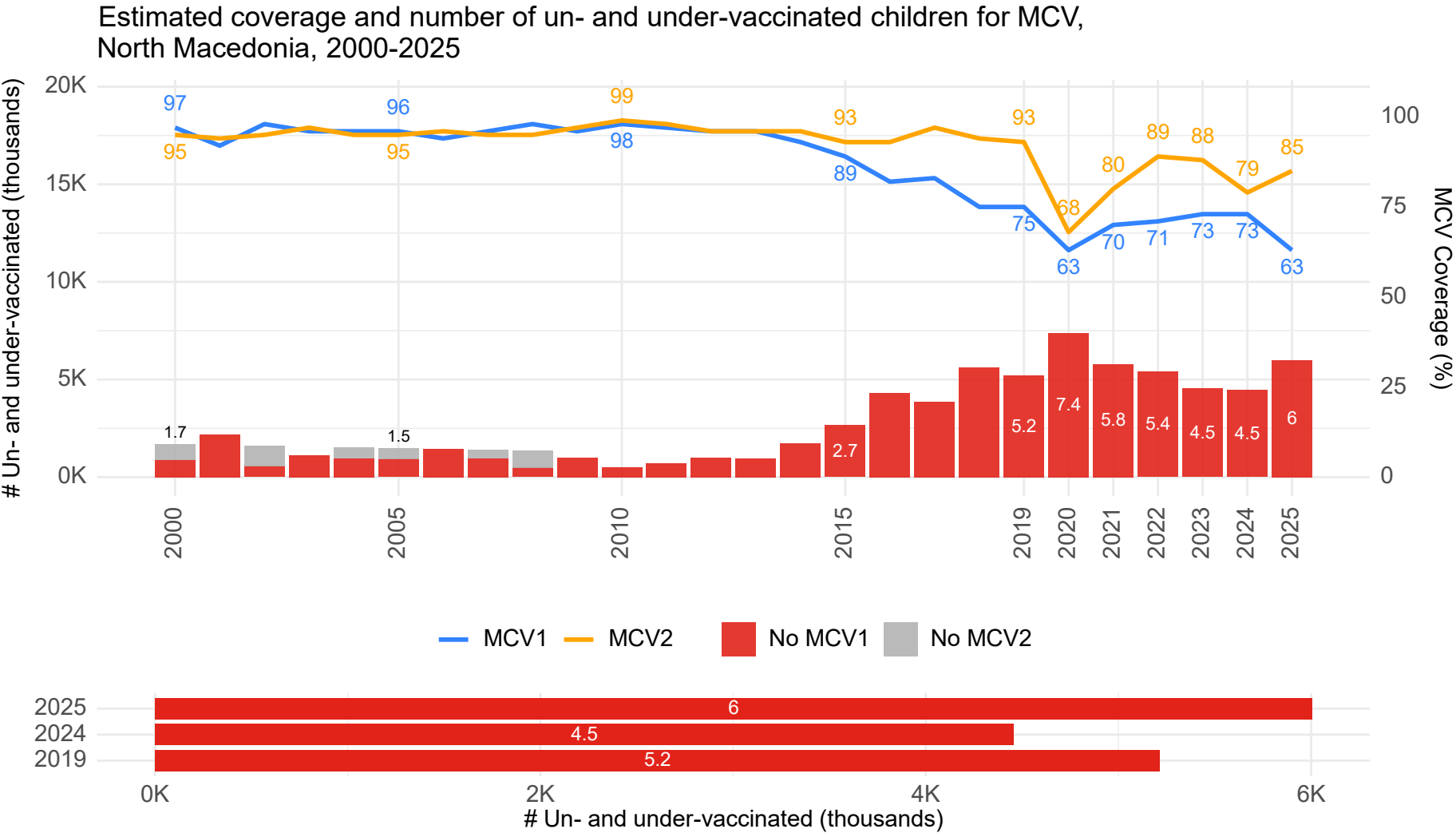
In 2025, fewer children were vaccinated than in 2019.

In 2025, there were fewer surviving infants (target population) than in 2019.

For vaccine coverage to increase, the number of children vaccinated needs to either increase or decline at a slower rate than the decline in surviving infant target population.

MCV1

MCV1 coverage declined at from 73% in 2024 to 63% in 2025 - below the 95% level needed to prevent outbreaks and, leaving 6,000 children without any protection against measles. MCV2 coverage increased to from 79% in 2024 to 85% in 2025 - below the IA2030 target of 90%.



Source: WHO/UNICEF Estimates of National Immunization Coverage, 2025 revision
Note: Lines show vaccine coverage and bars show number of children.

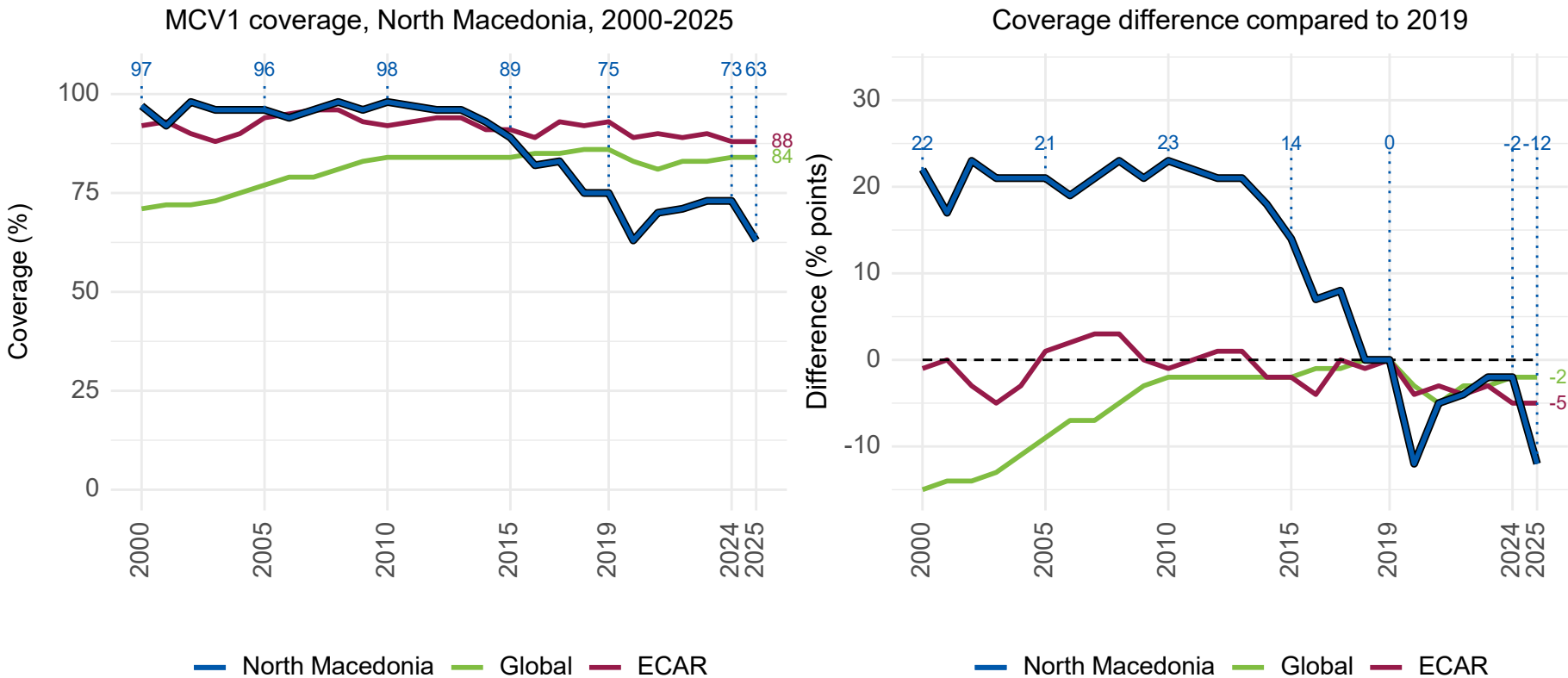
Measles, because of its high transmissibility, acts as a 'canary in the coalmine', quickly exposing any immunity gaps in the population. The coverage of measles containing vaccine (MCV) is thus often used as a tracer for protection.

The percentage of children receiving MCV1 – typically at 9 or 12 months depending on the national vaccination schedule – declined at 63%. This is lower than in 2019, where coverage was 75%.

6,000 children missed their routine first dose of measles vaccine.

MCV2 is typically administered to children between 18 months and five years old. MCV2 coverage increased to 85% in 2025.

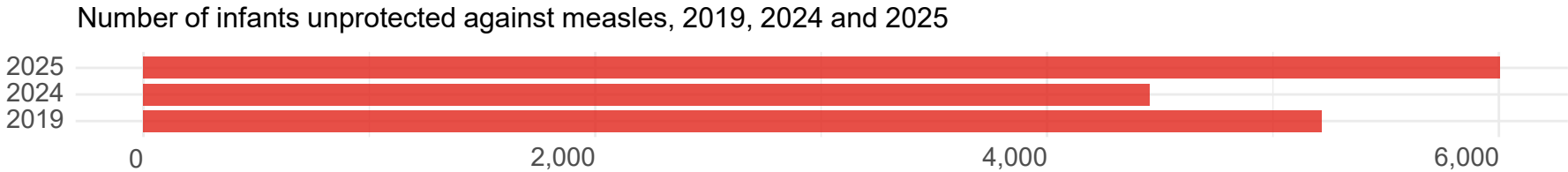
In 2025, North Macedonia MCV1 coverage was 63% - this is 12 percentage points lower than in 2019 and more than 10 percentage points lower than both the global and regional averages.



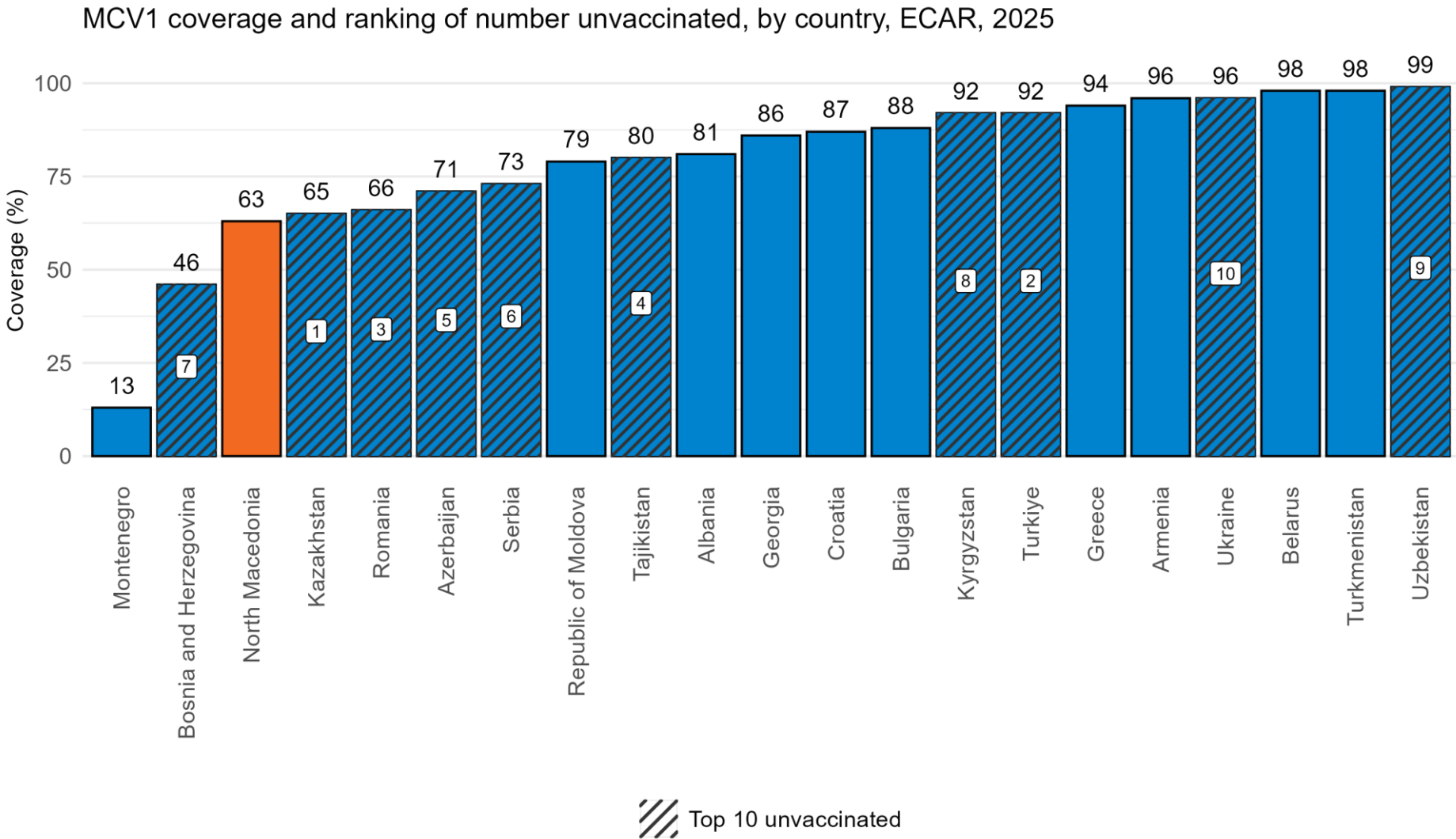
In 2025, MCV1 coverage in North Macedonia (63%) was 21 percentage points lower than the global average (84%) and 25 percentage points lower than the average across all ECAR countries (88%).

National MCV1 coverage was 12 percentage points lower than in 2019 (75%).

This equates to 6,000 unvaccinated children in 2025 compared to 5,000 unvaccinated children in 2019.



In 2025, North Macedonia was among the countries with the lowest coverage, but was not among the top 10 countries with the highest number of unvaccinated children in the region.



This chart shows MCV1 coverage in countries in ECAR from lowest to highest coverage, and the rank of the top 10 countries with the most unvaccinated children, based on absolute numbers.

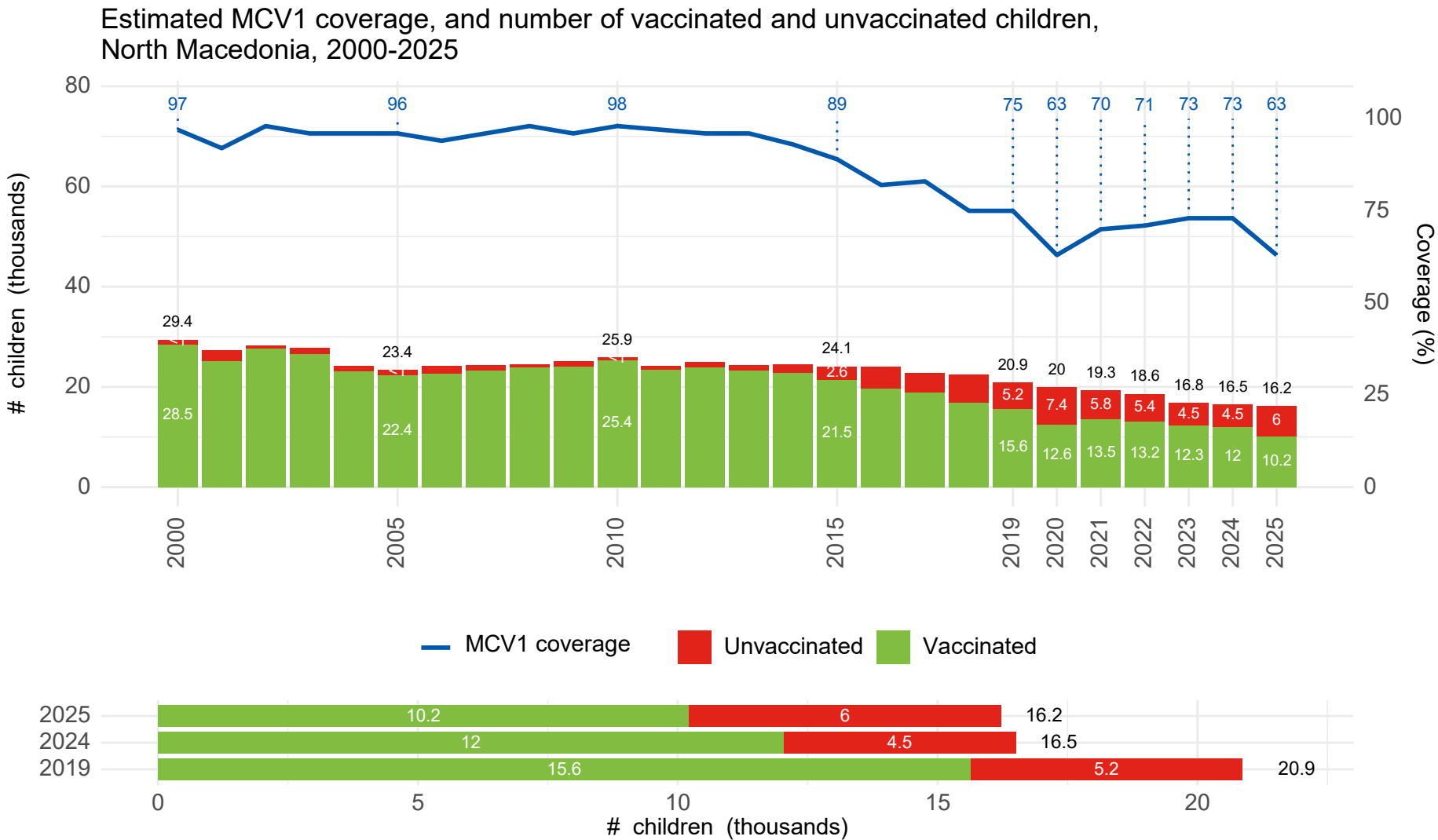
In 2025, North Macedonia ranked number 3 out of 21 countries for lowest MCV1 coverage (based on tied ranks).

North Macedonia was not in the top 10 countries with the most unvaccinated children.

Note: Large cohort countries may have high numbers of unvaccinated children despite high vaccine coverage. It is important to consider both coverage and absolute numbers of unvaccinated children to ensure vulnerable countries with small birth cohorts are not overlooked.

Source: WHO/UNICEF Estimates of National Immunization Coverage, 2025 revision
Note: Bars are ranked by ascending coverage. Numbers in bubbles display top 10 rank based on absolute number of unvaccinated children.

For vaccine coverage to increase, the number of children vaccinated needs to either increase or decline at a slower rate than the decline in surviving infant target population.



Source: WHO/UNICEF Estimates of National Immunization Coverage, 2025 revision

MCV1 coverage in 2025 (63%) was lower than in 2019 (75%).

The number of children vaccinated with MCV1 decreased 35% compared to in 2019.

The number of surviving infants decreased approximately 22% compared to in 2019.

In 2025, fewer children were vaccinated than in 2019.

In 2025, there were fewer surviving infants (target population) than in 2019.

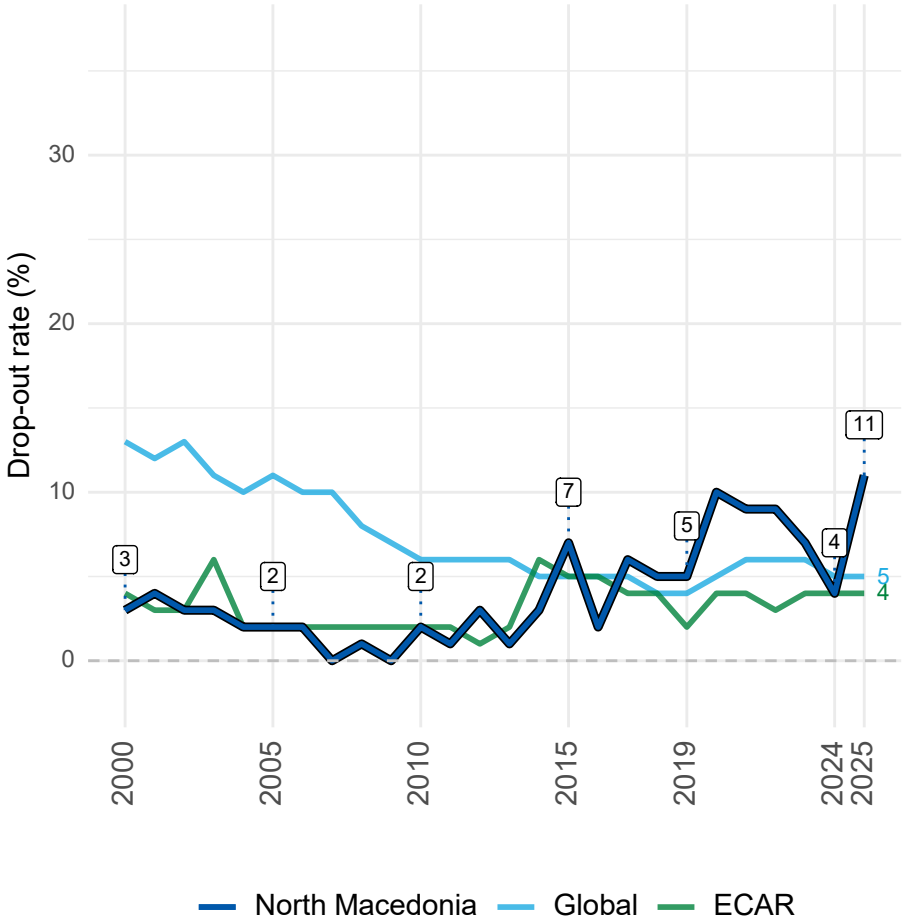
For vaccine coverage to increase, the number of children vaccinated needs to either increase or decline at a slower rate than the decline in surviving infant target population.

Childhood immunization: Additional charts

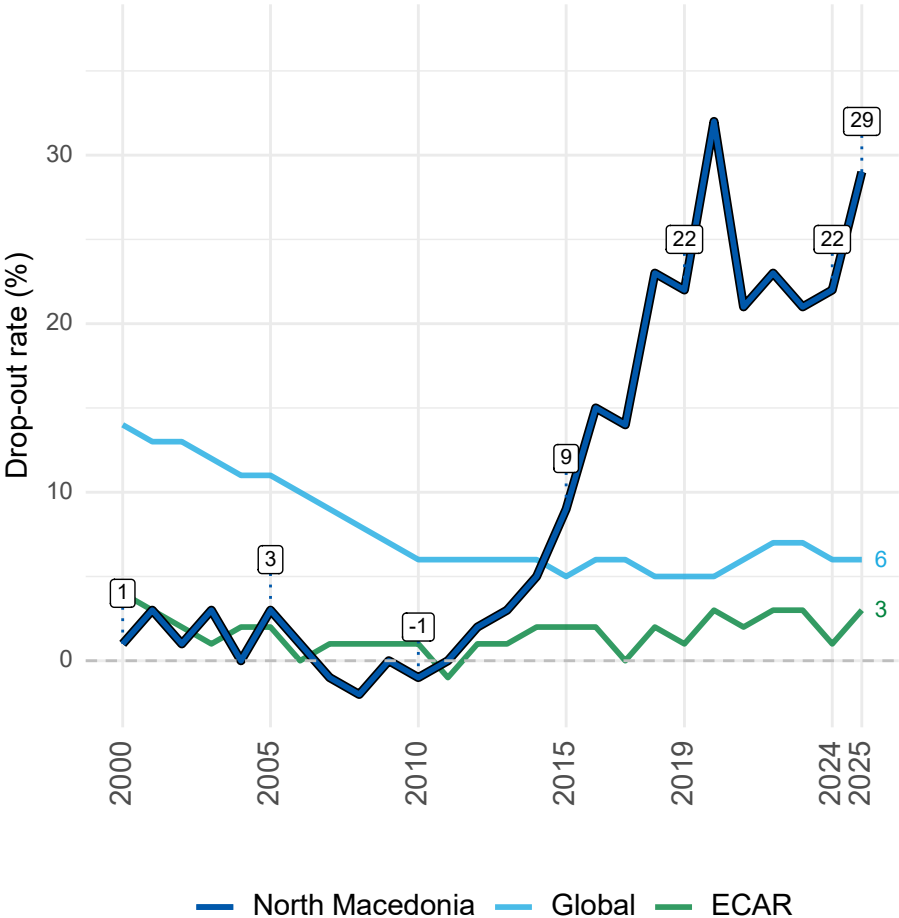
In 2025, DTP1 and DTP3/MCV1 drop-out was high in North Macedonia, indicating poor retention of children in immunization programmes, and the need for stronger follow-up of those initially reached.

Zero-dose children are those who did not receive DTP1.

DTP1 and DTP3



DTP1 and MCV1



Source: WHO/UNICEF Estimates of National Immunization Coverage, 2025 revision
Drop-out classification: <5% = low, 5-10% = medium, >10% = high

Drop-out rates show the percentage of children who received DTP1, but not DTP3/MCV1. Low drop-out rates indicate high retention of children in immunization programmes.

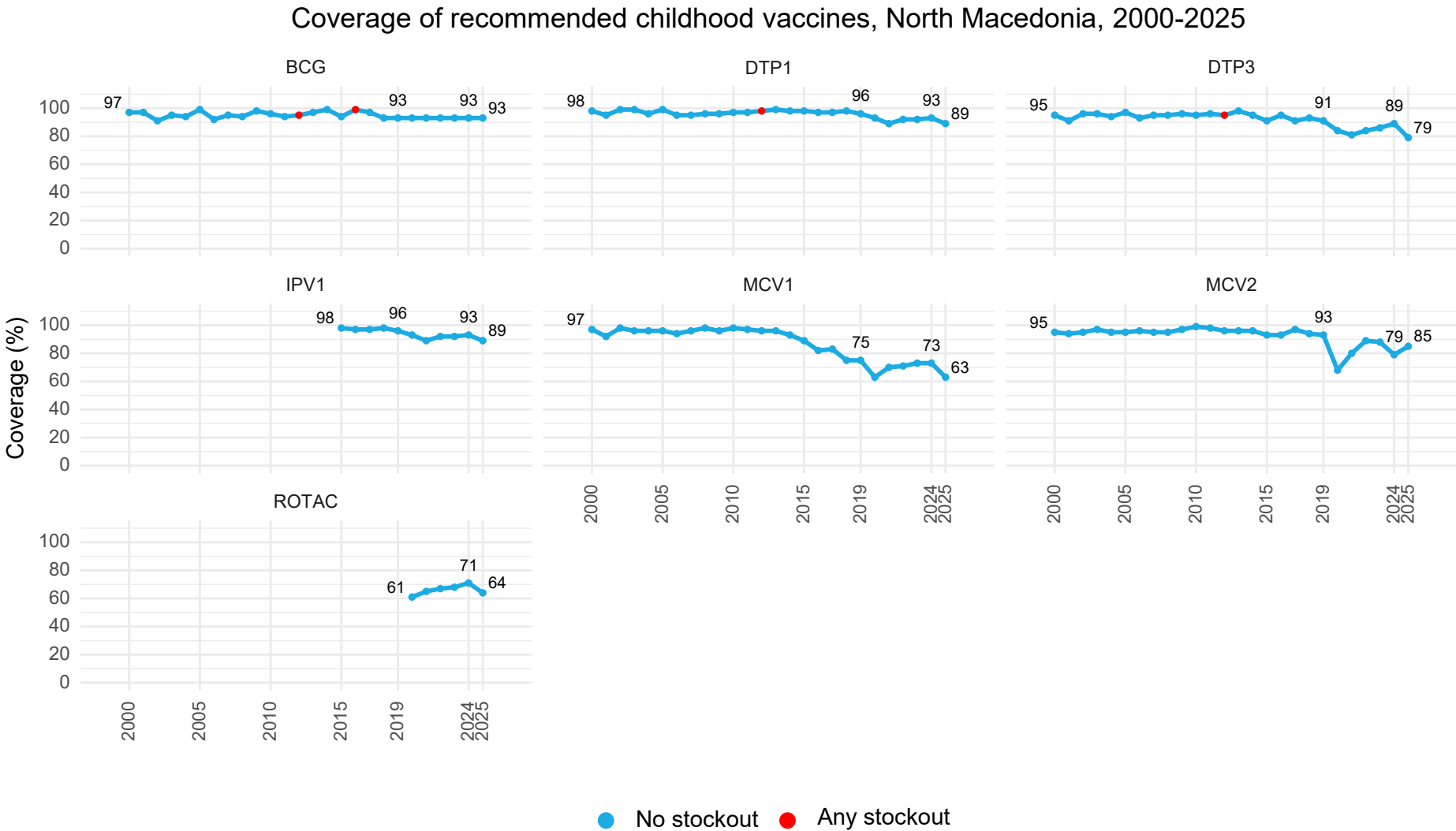
This chart shows trends in drop-out rates between DTP1 and DTP3, and DTP1 and MCV1.

In 2025, 11% of children who received DTP1 did not receive DTP3 (left), and 29% of children who received DTP1 did not receive MCV1 (right).

The high DTP drop-out rate implies poor ability to provide a complete series of vaccines early in life. The high DTP-MCV drop-out rate implies poor retention in immunization programmes and ability to provide a full course of vaccines in infancy (up to one year).

In 2025, North Macedonia DTP drop-out was higher than the global rate, while DTP-MCV drop-out was higher than the global rate.

In 2025, North Macedonia had its lowest coverage in MCV1 (63%), while most other routine vaccines clustered around 64-93%; 5 antigens decreased since 2019, and 5 antigens decreased since 2024.



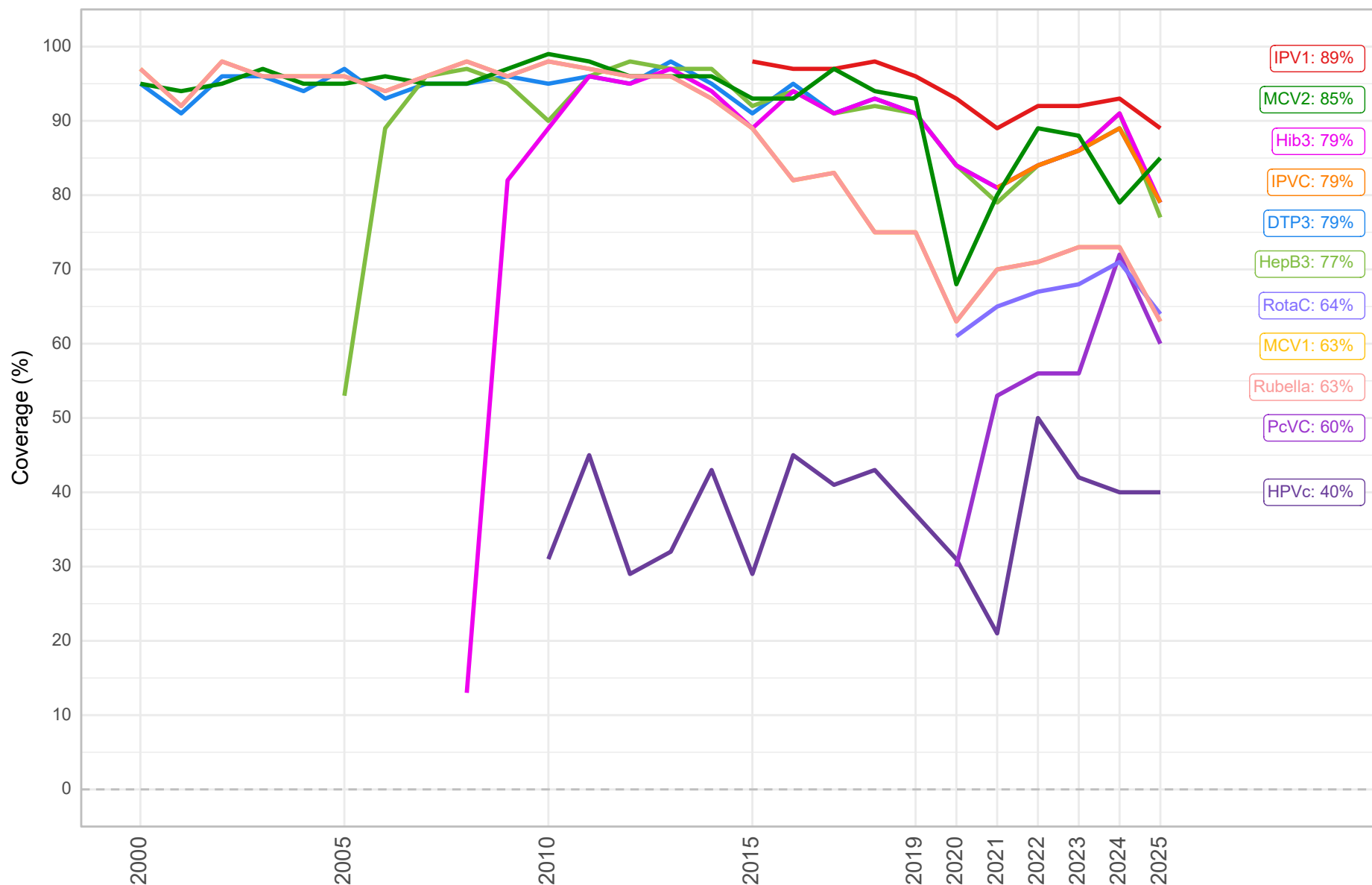
This chart shows trends in coverage of selected core routine vaccines recommended in childhood.

In 2025, MCV1 had the lowest coverage (63%), followed by ROTAC (64%).

Compared to 2019, coverage of one vaccine remained constant (BCG) and 5 vaccines decreased (DTP1, DTP3, IPV1, MCV1 and MCV2).

Compared to 2024, coverage of one vaccine remained constant (BCG), 5 vaccines decreased (DTP1, DTP3, IPV1, MCV1 and ROTAC), and one vaccine increased (MCV2).

Vaccine coverage (%), North Macedonia, 2000-2025



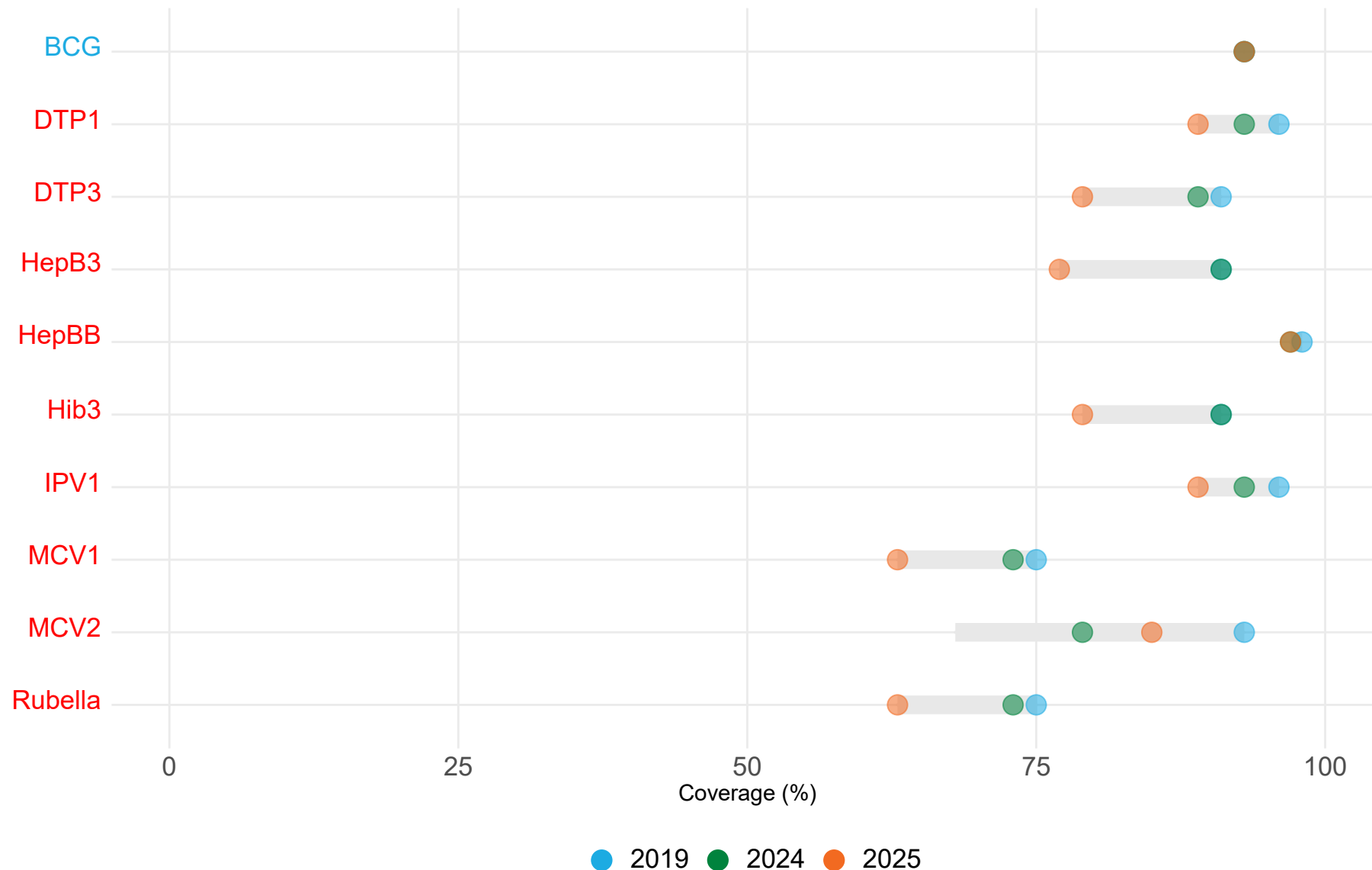
This chart shows trends in coverage of 10 vaccines (complete series).

In 2025, HPVc had the lowest coverage of all vaccines (40%), followed by MCV1 and Rubella (63%).

Coverage of 7 vaccines decreased (DTP3, HEPB3, HIB3, IPV1, MCV1, MCV2 and RUBELLA) and 1 vaccine increased (HPVC) compared to respective coverage in 2019.

Coverage of 8 vaccines decreased (DTP3, HEPB3, HIB3, IPV1, IPVC, MCV1, ROTAC and RUBELLA), 1 vaccine was the same (HPVC), and 1 vaccine increased (MCV2) compared to respective coverage in 2024.

Vaccine coverage (%), North Macedonia, 2019-2025



Source: WHO/UNICEF Estimates of National Immunization Coverage, 2025 revision
 Note: The grey bar spans vaccine coverage across all years 2019-2025 and the dots represent coverage in specific years.
 Coverage is shown for vaccines with data all years 2019-2025.
 Vaccine names are coloured based on if coverage is lower (red), the same as (blue) or higher (green) than in 2019

This chart shows the range of coverage across all years 2019 to 2025 (grey bars), and coverage in specific years (dots), by vaccine. The chart can be used for assessing recovery to pre-pandemic levels.

DTP1 coverage declined between 2019 (96%) and 2024 (93%). DTP1 coverage declined in 2025 (89%) compared to 2024, and was lower than in 2019. In 2019-2025, DTP1 coverage was at it's lowest level in 2021 and 2025 (89%).

In 2024, 7 vaccines had lower coverage than in 2019.

In 2025, 9 vaccines had lower coverage than in 2019.

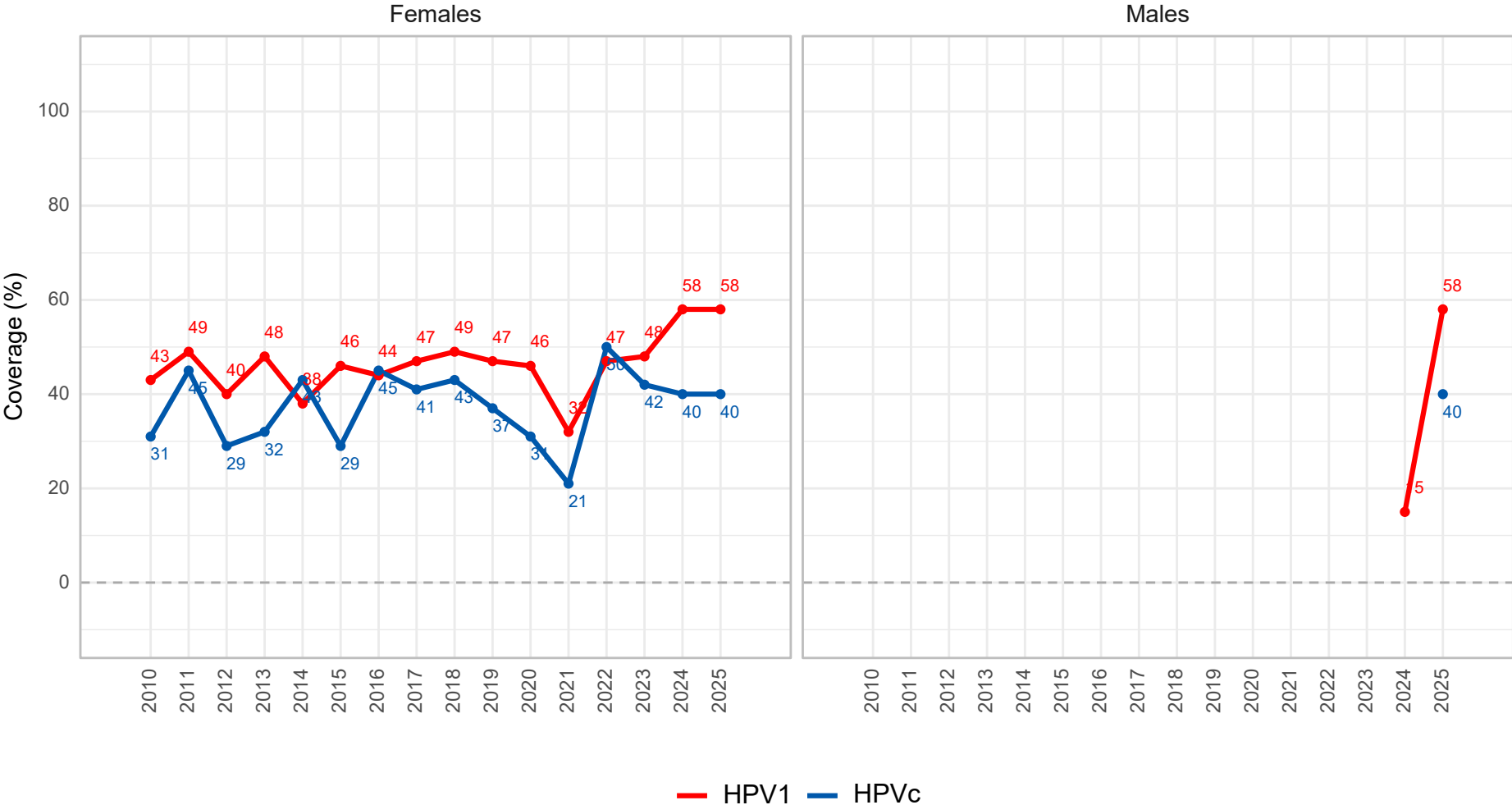
In 2025, 7 vaccines had lower coverage than in 2024.

HPV vaccination

Methods: • [Bruni et al. 2021, HPV vaccination introduction worldwide and WHO and UNICEF estimates of national HPV immunization coverage 2010–2019 \(supplementary materials\).](#)

In 2025, HPV last dose coverage among girls remained at 40% and coverage among boys stood at 40%.

Human papillomavirus (HPV) vaccine coverage (%), North Macedonia, 2010-2025



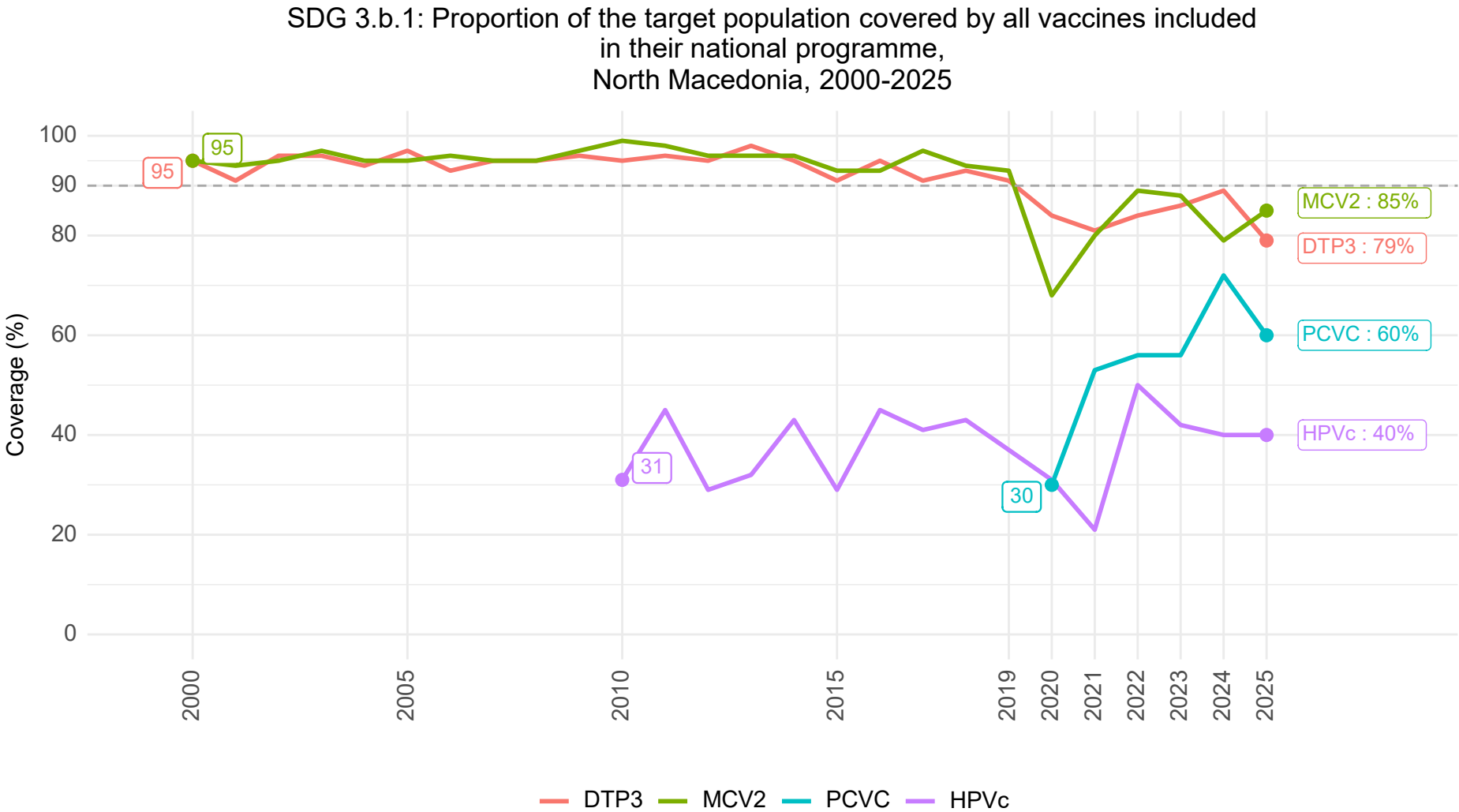
The first year of HPV programme coverage estimates in North Macedonia was 2010.

In 2025, first dose (HPV1) programme coverage among girls was 58%. In 2025, last dose (HPVc) programme coverage among girls was 40%.

Source: WHO/UNICEF Estimates of National Immunization Coverage, 2025 revision.
For some countries, if HPV vaccine is in the schedule, but the country did not report data in a given year, HPV programme coverage estimates are not produced.

SDG 3.b.1

In 2025, no SDG vaccines in met the 90% SDG coverage target.



Source: WHO/UNICEF Estimates of National Immunization Coverage, 2025 revision
Note: The four vaccination coverage indicators contribute to SDG indicator 3.b.1 are: DTP3, MCV2, PCVC and HPVc
The Immunization Agenda 2030 (IA2030) global target is 90% coverage of all four antigens by 2030.

Four vaccination coverage indicators contribute to Sustainable Development Goal 3, indicator b.1: DTP3, PCV3, MCV2 and HPV.

The IA2030 global target is 90% coverage of all four antigens by 2030.

North Macedonia has all 4 of the SDG vaccines.

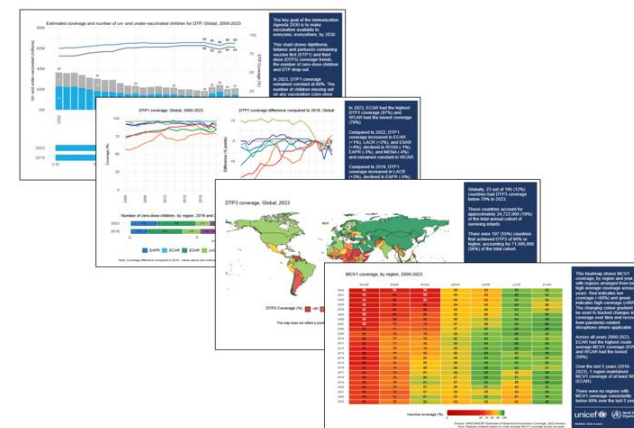
In 2025, North Macedonia had achieved at least 90% coverage of none out of the 4 vaccines.

Additional resources

[illegible]

	A	B	C	D	E	F	G	H	I	J	
1	unicef	regio	iso3c	country	vaccine	year	target_grp	coverage	vaccinated	unvaccinated	target
2	ROSA	AFG		Afghanistan	bog	1982	births	10	57,000	514,000	571,000
3	ROSA	AFG		Afghanistan	bog	1983	births	10	56,000	503,000	559,000
4	ROSA	AFG		Afghanistan	bog	1984	births	11	62,000	501,000	563,000
5	ROSA	AFG		Afghanistan	bog	1985	births	17	100,000	490,000	591,000
6	ROSA	AFG		Afghanistan	bog	1986	births	18	107,000	489,000	596,000
7	ROSA	AFG		Afghanistan	bog	1987	births	27	161,000	434,000	595,000
8	ROSA	AFG		Afghanistan	bog	1988	births	40	238,000	358,000	596,000
9	ROSA	AFG		Afghanistan	bog	1989	births	38	233,000	380,000	614,000
10	ROSA	AFG		Afghanistan	bog	1990	births	30	191,000	446,000	637,000
11	ROSA	AFG		Afghanistan	bog	1991	births	21	134,000	505,000	640,000
12	ROSA	AFG		Afghanistan	bog	1992	births	19	127,000	541,000	668,000
13	ROSA	AFG		Afghanistan	bog	1993	births	17			760,000
14	ROSA	AFG		Afghanistan	bog	1994	births	15			852,000
15	ROSA	AFG		Afghanistan	bog	1995	births				899,000
16	ROSA	AFG		Afghanistan	bog	1996	births				932,000
17	ROSA	AFG		Afghanistan	bog	1997	births				962,000
18	ROSA	AFG		Afghanistan	bog	1998	births				986,000
19	ROSA	AFG		Afghanistan	bog	1999	births	36			1,013,000
20	ROSA	AFG		Afghanistan	bog	2000	births	30			1,037,000
21	ROSA	AFG		Afghanistan	bog	2001	births	43	432,000	574,000	1,007,000
22	ROSA	AFG		Afghanistan	bog	2002	births	46	467,000	548,000	1,015,000

UNICEF, WHO, World Bank, Gavi and
African Union regions



Additional immunization data resources can be found at:

<https://data.unicef.org/resources/immunization/>

*UNICEF, WHO, World Bank, Gavi and
African Union regions*

[illegible][illegible]

Interactive
WUENIC
country profiles
can be found at:

<https://worldhealthorg.shinyapps.io/wuenic-trends/>

Short feedback questionnaire

(5 minutes)

We are seeking your feedback on the global groupings (GAVI, African Union, World Bank Income, WHO and UNICEF) and country-level PowerPoint slides developed for the release of global immunization estimates. Your input will help us understand their usefulness and identify areas for improvement.

Please take a few moments to complete this short survey and have your voice heard:

<https://forms.office.com/e/Qv1HXxxNZQ>

