National Trends in the Pregnancy-Related Mortality Ratio, Ethiopia, 2000–2024/25

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DHS	Official PRMR	Reconstructed PRMR (95% CI)	Validation difference (recon. - official)	Observed pregnancy-related deaths (n)	Change from previous survey (deaths/100,000)	% change from previous survey	Decline since 2000 (deaths/100,000)	% decline since 2000	Index 2000=100
2000	871	868.9 (721.5–1016.2)	-2.1	254	—	—	0	0.0%	100.0
2005	673	672.5 (547.6–797.4)	-0.5	165	-198	-22.7%	198	22.7%	77.3
2011	676	674.9 (537.6–812.2)	-1.1	237	+3	+0.4%	195	22.4%	77.6
2016	412	411.8 (277.6–546.0)	-0.2	131	-264	-39.1%	459	52.7%	47.3
2024/25	169	168.5 (112.4–224.6)	-0.5	99	-243	-59.0%	702	80.6%	19.4

Essential interpretation for Ministry of Health readers. Pregnancy-related death is the rarest event analyzed in this ten-chapter program. The mortality ratio is therefore estimated from relatively few observed deaths—254 in 2000, 165 in 2005, 237 in 2011, 131 in 2016, and only 99 in 2024/25. The point estimates show a very large long-run decline, but the confidence intervals are indispensable: they communicate the sampling uncertainty created by rare events. Do not interpret small differences between adjacent surveys from point estimates alone.

How to read every column and row

Column	Meaning / calculation	Example and interpretation
DHS	Survey round. Each row is an independent national DHS cross-section; it is not the same women followed over time.	Rows 2000 through 2024/25 describe successive national survey periods.
Official PRMR	Published pregnancy-related mortality ratio: pregnancy-related deaths per 100,000 live births for the DHS reference period.	2024/25 official PRMR = 169 deaths per 100,000 live births.
Reconstructed PRMR (95% CI)	PRMR independently reconstructed from the DHS microdata using the survey design. The 95% CI is the interval estimate around that reconstructed ratio.	2024/25 = 168.5 (112.4–224.6). The point estimate is about 169, but uncertainty is substantial.
Validation difference	Reconstructed PRMR - official PRMR. Values near zero show that the analytic reconstruction reproduces the published DHS result.	2024/25: 168.499 - 169 = -0.501, displayed as -0.5. This is a replication check, not a mortality trend measure.
Observed pregnancy-related deaths (n)	Unweighted number of pregnancy-related deaths contributing to the survey estimate. This is the actual rare-event count in the analytic data, not the PRMR and not a national death count.	Only 99 such events were observed in 2024/25. This small numerator is why uncertainty must be emphasized.

Column	Meaning / calculation	Example and interpretation
Change from previous survey	Current official PRMR - previous official PRMR, in deaths per 100,000 live births. Negative values denote decline; positive values denote increase.	2024/25: 169 - 412 = -243 deaths per 100,000 relative to 2016.
% change from previous survey	[(Current official PRMR - previous official PRMR) / previous official PRMR] x 100.	2024/25: (169 - 412) / 412 x 100 = -59.0%. This is relative change, not percentage-point change.
Decline since 2000	Official PRMR in 2000 - official PRMR in the survey year. Positive values quantify the absolute reduction from the 2000 baseline.	2024/25: 871 - 169 = 702 fewer pregnancy-related deaths per 100,000 live births.
% decline since 2000	[(PRMR2000 - PRMRyear) / PRMR2000] x 100.	2024/25: (871 - 169) / 871 x 100 = 80.6% decline from the 2000 baseline.
Index 2000=100	(Official PRMR year / Official PRMR2000) x 100. This expresses each survey's mortality ratio relative to the 2000 level.	2024/25: 169 / 871 x 100 = 19.4. Thus, the 2024/25 PRMR is about one-fifth of the 2000 level.

Row-by-row interpretation

2000 — baseline	Official PRMR 871; reconstructed 868.9 (95% CI 721.5–1016.2); 254 observed pregnancy-related deaths. This is the baseline against which the long-run decline and index are calculated.
2005 — first major decline	PRMR 673, 198 lower than 2000 (-22.7%). The reconstructed estimate, 672.5, essentially reproduces the official value.
2011 — apparent plateau	PRMR 676, only 3 higher than 2005 (+0.4%). Given the wide uncertainty inherent in rare-event mortality estimation, this tiny point-estimate difference should not be described as evidence of a true increase.
2016 — renewed decline	PRMR 412, a reduction of 264 (-39.1%) from 2011 and 459 (52.7%) below the 2000 baseline.
2024/25 — lowest observed level	PRMR 169; reconstructed 168.5 (95% CI 112.4–224.6); 99 observed pregnancy-related deaths. This is 243 (-59.0%) below 2016 and 702 (80.6%) below 2000. The index of 19.4 means the ratio is about 19% of its 2000 level.

Methodological cautions. PRMR is a ratio per 100,000 live births; it is not a percentage and should not be read as the probability that an individual woman will die. The observed-death column contains sample events, not an estimate of the total number of pregnancy-related deaths occurring nationally. Pregnancy-related mortality is broader than cause-certified maternal mortality because classification is based on the temporal relationship to pregnancy rather than adjudication of obstetric cause. Trend interpretation should prioritize the magnitude and direction of long-run change together with confidence intervals; statistical significance of pairwise survey differences is not established merely because point estimates differ. Regional estimation is especially hazardous for such a rare outcome because subdividing the national sample sharply reduces the event count.

Source. Authors' reconstruction and validation using Ethiopia Demographic and Health Surveys, 2000, 2005, 2011, 2016, and 2024/25; official PRMR values as recorded in the supplied validated trend table.