

# Maternal mortality in 1990-2015

WHO, UNICEF, UNFPA, World Bank Group, and United Nations Population Division  
Maternal Mortality Estimation Inter-Agency Group

## NETHERLANDS

Year	Maternal mortality ratio (MMR) <sup>a</sup>	Maternal deaths	AIDS-related indirect maternal deaths	Live births <sup>b</sup>	Proportion of maternal deaths among deaths of female reproductive age (PM %)
	Per 100 000 live births (lb)	Numbers	Numbers	Thousands	
1990	12 [10-13]	22	0	191	0.7
1995	13 [12-14]	25	0	195	0.8
2000	14 [13-15]	28	0	198	0.8
2005	11 [10-12]	21	0	192	0.7
2010	8 [6-9]	14	0	180	0.6
2015	7 [5-9]	12	0	177	0.6

<sup>a</sup> MMR and PM are calculated for women 15-49 years.

<sup>b</sup> Live birth data are from World Population Prospects: the 2015 Revision. New York, Population Division, Department of Economic and Social Affairs, United Nations Secretariat; 2015.

Annual Rate of Reduction	(%)
1990-2015	2 [1.1 - 3.3]
1990-2000	-2 [-3.8 - -0.5]
2000-2015	4.7 [2.9 - 7.2]
2005-2015	4.7 [2.5 - 7.9]

## Available data sources

Data from civil registration system:

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Maternal deaths <sup>c</sup>	8	15	14	18	10	15	12	14	–	–	–	–	–	–	–	–
Late maternal deaths <sup>d</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Female deaths <sup>e</sup>	2730	2918	2902	2894	3063	2984	3150	3201	–	–	–	–	–	–	–	–
Adjustment factor <sup>f</sup>	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	–	–	–	–	–	–	–	–
Maternal deaths not included <sup>g</sup>	–	–	–	–	–	–	–	–	16	12	14	23	15	23	19	17
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Maternal deaths <sup>c</sup>	–	–	–	–	–	–	–	–	–	–	3	6	5	–	–	
Late maternal deaths <sup>d</sup>	–	–	–	–	–	–	–	–	–	–	0	0	0	–	–	
Female deaths <sup>e</sup>	–	–	–	–	–	–	–	–	–	–	2519	2383	2240	–	–	
Adjustment factor <sup>f</sup>	–	–	–	–	–	–	–	–	–	–	2.5	2.5	2.5	–	–	
Maternal deaths not included <sup>g</sup>	14	19	7	10	16	15	9	8	9	4	–	–	–	–	–	

<sup>c</sup> ICD10 codes O00-O99 Pregnancy, childbirth and the puerperium and A34 Obstetrical tetanus; ICD9 codes 630-676 Complications of pregnancy, childbirth and the puerperium.

<sup>d</sup> ICD10 codes O96 and O97.

<sup>e</sup> Female deaths data are from WHO VR database 2015.

<sup>f</sup> For details on the adjustment factor please refer to: WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. Trends in maternal mortality: 1990 to 2015. Geneva: World Health Organization; 2015.

<sup>g</sup> Did not meet inclusion criteria or confidential inquiry used instead.

## Available data sources (continued)

Data from studies **included** in analysis:

Source	Definition	Study period	Maternal deaths	Female deaths, 15-49	PM(%)	MMR per 100 000 lb	Adjusted MMR per 100 000 lb
Confidential enquiry, 2013	Maternal	1993-1994	27				14
Rise in maternal mortality in the Netherlands	Maternal	1993-2005	309				13
Confidential enquiry, 2013	Maternal	1994-1995	10				5
Confidential enquiry, 2013	Maternal	1995-1996	21				11
Confidential enquiry, 2013	Maternal	1996-1997	32				16
Confidential enquiry, 2013	Maternal	1997-1998	18				9
Confidential enquiry, 2013	Maternal	1998-1999	31				16
Confidential enquiry, 2013	Maternal	1999-2000	32				16
Confidential enquiry, 2013	Maternal	2000-2001	33				17
Confidential enquiry, 2013	Maternal	2001-2002	24				12
Confidential enquiry, 2013	Maternal	2002-2003	33				17
Confidential enquiry, 2013	Maternal	2003-2004	19				10
Confidential enquiry, 2013	Maternal	2004-2005	17				9
Confidential enquiry, 2013	Maternal	2005-2006	25				13
Confidential enquiry, 2013	Maternal	2006-2007	24				13
Confidential enquiry, 2013	Maternal	2007-2008	15				8
Confidential enquiry, 2013	Maternal	2008-2009	16				9
Confidential enquiry, 2013	Maternal	2009-2010	10				6
Confidential enquiry, 2013	Maternal	2010-2011	10				6

Data from studies **not included** in analysis:

Source	Definition	Study period	Maternal deaths	Female deaths, 15-49	PM(%)	MMR per 100 000 lb	Adjusted MMR per 100 000 lb
Confidential enquiry into maternal deaths in The Netherlands 1983-1992	Maternal	1983-1993	180				

## Covariates used in the model

Year	GDP per capita, PPP (constant 2011 Int \$)	General Fertility Rate per 1000 women 15-49	Skilled attendance at birth (% of births)
1990	30219	48	100
1995	33296	48	100
2000	38581	50	100
2005	41268	49	100
2010	43084	47	100
2015	42803	48	100

GDP per capita measured in purchasing power parity (PPP) equivalent dollars, reported as constant 2011 international dollars, based on estimates published by World Bank Group.

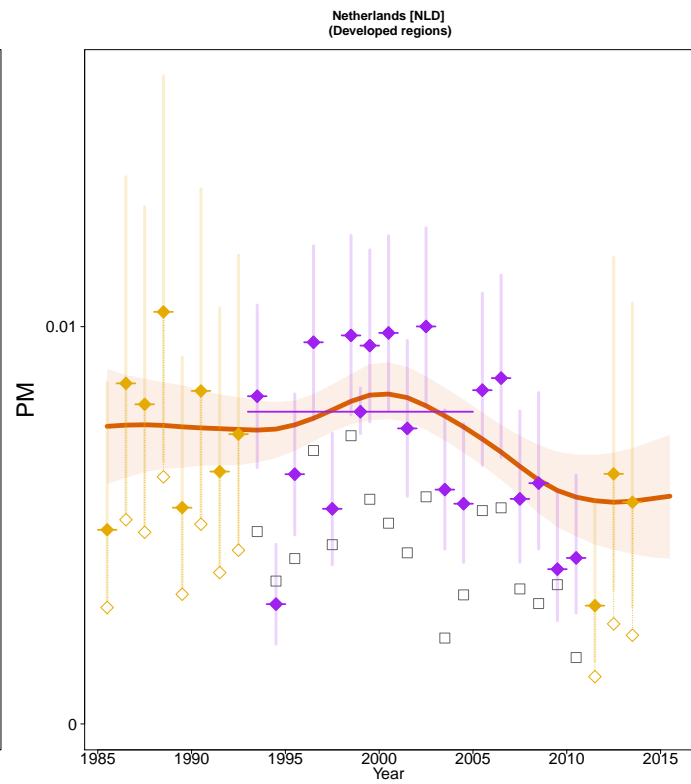
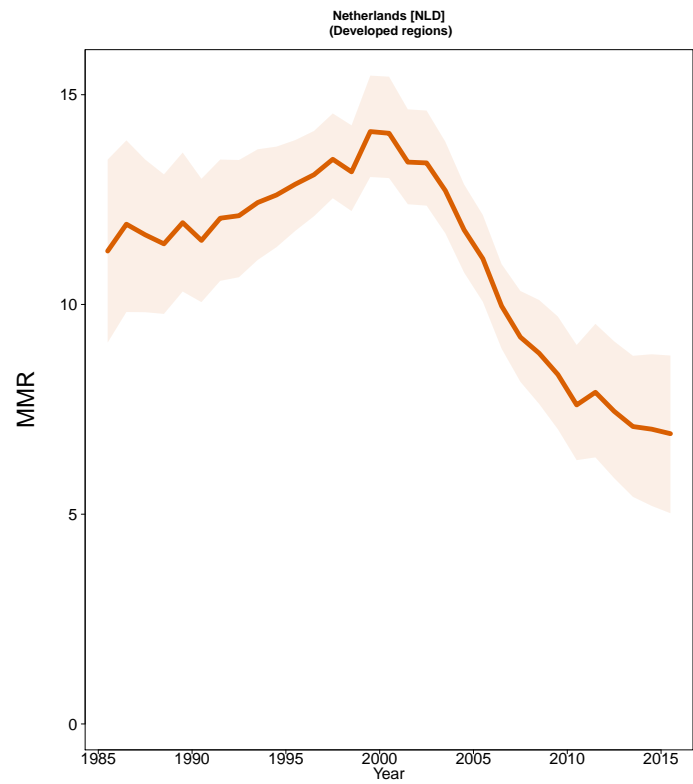
*Source:* World Bank Group, International Comparison Program database, 2014.

General fertility rate

*Source:* World Population Prospects: the 2015 Revision. New York, Population Division, Department of Economic and Social Affairs, United Nations Secretariat; 2015.

Percentage of births attended by skilled health personnel (doctors, nurses or midwives).

*Source:* UNICEF global databases 2015, based on MICS, DHS and other nationally representative sources. (<http://data.unicef.org/>).



- Estimates –
- MMEIG 2015
- MMR Database 2015 –
- ◇ Observed Data
- ◆ Adjusted Data
- Data type –
- ◆ VR
- ◆ Spec. studies
- Excluded VR data  
(overlap with specialized study)