

Maternal mortality in 1990-2015

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

UNITED STATES OF AMERICA

Year	Maternal mortality ratio (MMR) ^a	Maternal deaths	AIDS-related indirect maternal deaths	Live births ^b	Proportion of maternal deaths among deaths of female reproductive age (PM %)
	Per 100 000 live births (lb)	Numbers	Numbers	Thousands	
1990	12 [11-13]	470	9	3986	0.7
1995	12 [11-13]	470	25	3994	0.6
2000	12 [12-12]	480	16	4004	0.6
2005	13 [13-14]	560	14	4174	0.7
2010	14 [14-15]	580	7	4092	0.8
2015	14 [12-16]	550	5	4025	0.8

^a MMR and PM are calculated for women 15-49 years.

^b 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	-0.6 [-1.4 - 0.1]
1990-2000	-0.2 [-1.3 - 0.9]
2000-2015	-0.9 [-2.1 - 0.1]
2005-2015	-0.3 [-2.1 - 1.2]

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 ^c	292	272	250	329	320	343	320	316	301	328	276	293	323	–	–	–
Late maternal deaths ^d	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Female deaths ^e	63690	65954	67376	68906	69434	69764	71666	72141	75374	77635	79548	78922	76979	–	–	–
Adjustment factor ^f	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4	–	–	–
Maternal deaths not included ^g	–	–	–	–	–	–	–	–	–	–	–	–	–	281	391	395

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Maternal deaths ^c	–	–	–	–	–	–	–	–	–	–	860	893	998	–	–
Late maternal deaths ^d	–	–	–	–	–	–	–	–	–	–	161	189	250	–	–
Female deaths ^e	–	–	–	–	–	–	–	–	–	–	76246	74862	74429	–	–
Adjustment factor ^f	–	–	–	–	–	–	–	–	–	–	0.9	0.9	0.9	–	–
Maternal deaths not included ^g	396	356	482	517	599	553	531	631	650	643	–	–	–	–	–

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

^d ICD10 codes O96 and O97.

^e Female deaths data are from WHO VR database 2015.

^f 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.

^g Did not meet inclusion criteria or confidential inquiry used instead.

Interval between end of pregnancy and death was not known for an annual average of 15.8% (annual range 10-20%) of deaths during 1998-2010; numbers of late maternal deaths shown in tables are calculated assuming that this information is missing at random throughout the period.

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
CDC's Pregnancy Mortality Surveillance System	Maternal	1998-1999	404				10
CDC's Pregnancy Mortality Surveillance System	Maternal	1999-2000	469				12
CDC's Pregnancy Mortality Surveillance System	Maternal	2000-2001	505				13
CDC's Pregnancy Mortality Surveillance System	Maternal	2001-2002	518				13
CDC's Pregnancy Mortality Surveillance System	Maternal	2002-2003	469				12
CDC's Pregnancy Mortality Surveillance System	Maternal	2003-2004	585				14
CDC's Pregnancy Mortality Surveillance System	Maternal	2004-2005	529				13
CDC's Pregnancy Mortality Surveillance System	Maternal	2005-2006	551				13
CDC's Pregnancy Mortality Surveillance System	Maternal	2006-2007	570				14
CDC's Pregnancy Mortality Surveillance System	Maternal	2007-2008	548				13
CDC's Pregnancy Mortality Surveillance System	Maternal	2008-2009	583				14
CDC's Pregnancy Mortality Surveillance System	Maternal	2009-2010	633				15
CDC's Pregnancy Mortality Surveillance System	Maternal	2010-2011	572				14

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
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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	36612	60	99
1995	39618	58	99
2000	45185	56	99
2005	49395	57	99
2010	49774	56	99
2015	53196	55	99

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.

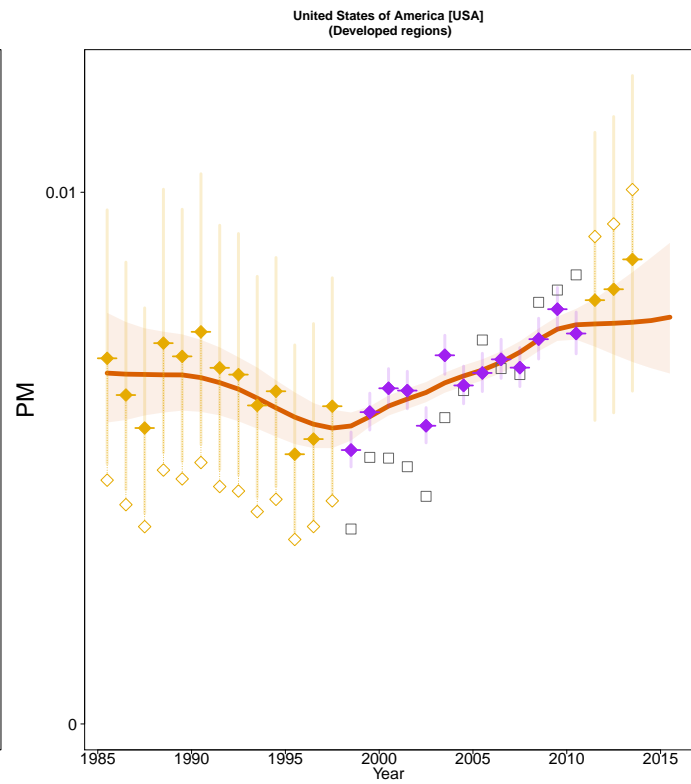
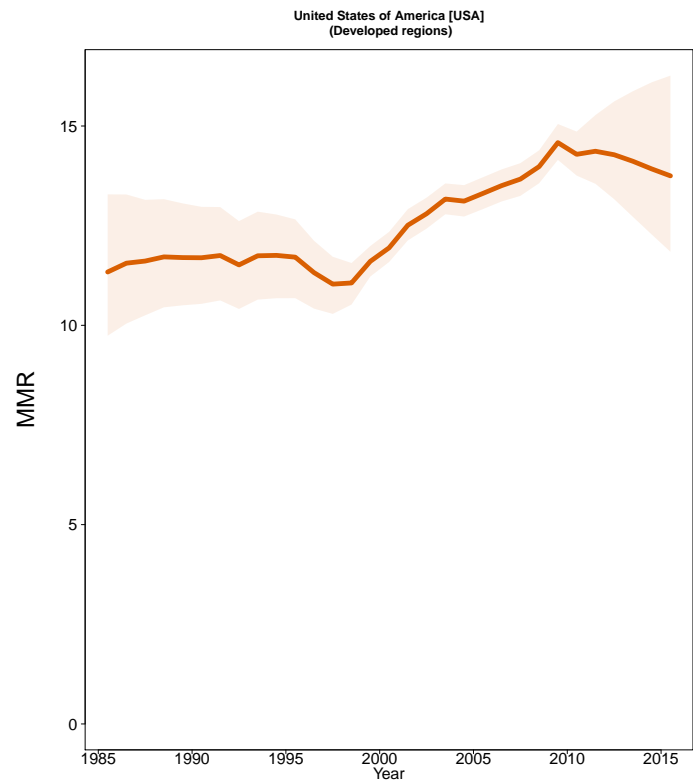
Source: World Bank Group, International Comparison Program database, 2014.

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)