

Priority Area 14

Maternal and Infant Health

Health Status Objective: Infant mortality

PHS Agency Assignment: Health Resources and Services Administration

14.1 Reduce the infant mortality rate to no more than 7 per 1,000 live births.

<u>Infant Mortality</u> <u>(per 1,000 live births)</u>	Baseline Year	Baseline	1988	1989	1990	1991	1992	1993	1994	1995	1996	•ua•1997	2000 Target
Total population	1987	10.1	10.0	9.8	9.2	8.9	8.5	8.4	8.0	7.6	7.3	7.1	7
Special Population Targets													
14.1a Blacks	1987	18.8	18.5	18.6	18.0	17.6	16.8	16.5	15.8	15.1	14.7	13.7	11
14.1b American Indians/Alaska Natives	1984	13.4	12.7	13.4	13.1	11.3	---	---	---	9.0	10.0	---	8.5
14.1c Puerto Ricans	1984	12.9•ub•	11.6•uc•	11.7•ud•	9.9•ue•	9.7•uf•	---	---	---	8.9	8.6	---	8

- ua•Preliminary data.
- ub•Includes data for 23 States and D.C.
- uc•Includes data for 30 States and D.C.
- ud•Includes data for 47 States and D.C.
- ue•Includes data for 48 States and D.C.
- uf•Includes data for 49 States and D.C.

Note: Infant mortality is deaths of infants under 1 year.

Data Source: National Vital Statistics System, CDC, NCHS.

Health Status Objective: Infant mortality (cont'd)

PHS Agency Assignment: Health Resources and Services Administration

<u>Neonatal and Postneonatal Mortality (per 1,000 live births)</u>	<u>Baseline</u>												<u>2000 Target</u>
	<u>Year</u>	<u>Baseline</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>•ua•1997</u>	
14.1d Neonatal mortality	1987	6.5	6.3	6.2	5.7	5.6	5.4	5.3	5.1	4.9	4.8	4.7	4.5
14.1e Neonatal mortality among blacks	1987	12.3	12.1	11.9	11.6	11.2	10.8	10.7	10.2	9.8	9.6	9.0	7
14.1f Neonatal mortality among Puerto Ricans	1984	8.6•ub•	7.3•uc•	8.2•ud•	6.9•ue•	6.1•uf•	---	---	---	6.1	5.6	---	5.2
14.1g Postneonatal mortality	1987	3.6	3.6	3.6	3.4	3.4	3.1	3.1	2.9	2.7	2.5	2.4	2.5
14.1h Postneonatal mortality among blacks	1987	6.4	6.5	6.7	6.4	6.3	6.0	5.8	5.6	5.3	5.1	4.7	4
14.1i Postneonatal mortality among American Indians/Alaska Natives	1984	7.0	7.4	7.2	7.0	5.8	---	---	---	5.1	5.3	---	4
14.1j Postneonatal mortality among Puerto Ricans	1984	4.3•ub•	4.2•uc•	3.6•ud•	3.0•ue•	3.5•uf•	---	---	---	2.8	3.0	---	2.8

•ua•Preliminary data.
•ub•Includes data for 23 States and D.C.
•uc•Includes data for 30 States and D.C.
•ud•Includes data for 47 States and D.C.
•ue•Includes data for 48 States and D.C.
•uf•Includes data for 49 States and D.C.

Note: Neonatal mortality is deaths of infants under 28 days; postneonatal mortality is deaths of infants 28 days up to 1 year.

Data Source: National Vital Statistics System, CDC, NCHS.

Health Status Objective: Fetal deaths

PHS Agency Assignment: Health Resources and Services Administration

14.2 Reduce the fetal death rate (20 or more weeks of gestation) to no more than 5 per 1,000 live births plus fetal deaths.

<u>Fetal deaths</u> (per 1,000 live births plus fetal deaths)	Baseline		<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	2000
	<u>Year</u>	<u>Baseline</u>										<u>Target</u>
Total population	1987	7.6	7.5	7.5	7.5	7.3	7.4	7.1	7.0	7.0	6.9	5
Special Population Targets												
14.2a Blacks	1987	13.1	13.0	13.1	13.3	12.8	13.3	12.8	12.5	12.7	12.5	7.5

Data Source: National Vital Statistics System, CDC, NCHS.

Health Status Objective: Maternal mortality

PHS Agency Assignment: Health Resources and Services Administration

14.3 Reduce the maternal mortality rate to no more than 3.3 per 100,000 live births.

<u>Maternal Mortality</u> <u>(per 100,000 live births)</u>	Baseline Year	<u>Baseline</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>•ua•1997</u>	2000 Target
Total population	1987	6.6	8.4	7.9	8.2	7.9	7.8	7.5	8.3	7.1	7.6	7.5	3.3
Special Population Targets													
14.3a Blacks	1987	14.9	20.5	18.4	22.4	18.3	20.8	20.5	18.5	22.1	20.3	18.3	5
•ua•Preliminary data.													
ICD-9 codes: 630-676													

Data Source: National Vital Statistics System, CDC, NCHS.

Health Status Objective: Fetal alcohol syndrome

PHS Agency Assignment: Health Resources and Services Administration

14.4 Reduce the incidence of fetal alcohol syndrome to no more than 0.12 per 1,000 live births.

Fetal Alcohol Syndrome
(per 1,000 live births)

	Baseline Year	Baseline	1988	1989	1990	1991	1992	1993	2000 Target
Total population	1987	0.22	0.30	0.32	0.40	0.37	0.52	0.67	0.12
Special Population Targets									
14.4a American Indians/Alaska Natives	1987	4.0	4.6	2.0	5.2	---	---	---	2.0
14.4b Blacks	1987	0.8	1.1	1.4	1.4	1.9	2.3	5.4	0.4

Data Source: Birth Defects Monitoring Program, CDC, NCEH.

Risk Reduction Objective: Low birth weight

PHS Agency Assignment: Health Resources and Services Administration

14.5 Reduce low birth weight to an incidence of no more than 5 percent of live births and very low birthweight to no more than 1 percent of live births.

Birth Weight	Baseline												2000
	Year	Baseline	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Target
Low birth weight	1987	6.9%	6.9%	7.0%	7.0%	7.1%	7.1%	7.2%	7.3%	7.3%	7.4%	7.5%	5%
Very low birth weight	1987	1.2%	1.2%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.4%	1.4%	1.4%	1%
Special Population Targets													
<u>Low Birth Weight</u>													
14.5a Blacks	1987	13.0%	13.3%	13.5%	13.3%	13.6%	13.3%	13.3%	13.2%	13.1%	13.0%	13.0%	9%
<u>Very Low Birth Weight</u>													
14.5b Blacks	1987	2.8%	2.9%	3.0%	2.9%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	2%
<u>Low Birth Weight</u>													
14.5c Puerto Ricans	1990	9.0% ^{•ub}	...	...	...	9.4% ^{•uc}	9.2% ^{•uc}	9.2%	9.1%	9.4%	9.2%	9.4%	6%
<u>Very Low Birth Weight</u>													
14.5d Puerto Ricans	1990	1.6% ^{•ub}	...	...	...	1.7% ^{•uc}	1.7% ^{•uc}	1.7%	1.6%	1.8%	1.7%	1.9%	1%
^{•ub} 48 States and D.C. ^{•uc} 49 States and D.C.													
<i>Note: Low birth weight is weight at birth of less than 2,500 grams; very low birth weight is weight at birth of less than 1,500 grams.</i>													

Data Source: National Vital Statistics System, CDC, NCHS.

Risk Reduction Objective: Weight gain during pregnancy

PHS Agency Assignment: Health Resources and Services Administration

14.6 Increase to at least 85 percent the proportion of mothers who achieve the minimum recommended weight gain during their pregnancies.

<u>Weight gain during pregnancy</u>	Baseline			<u>2000 Target</u>
	<u>Year</u>	<u>Baseline^{•ua}</u>	<u>1988^{•ub}</u>	
Proportion of mothers achieving minimum recommended weight gain	1980	68% ^{•ub}	75%	85%

^{•ua}Baseline has been revised.
^{•ub}Data are for married women who had full-term live births and prenatal care.

Note: Recommended weight gain is pregnancy weight gain recommended in the 1990 National Academy of Science's report, Nutrition During Pregnancy.

Data Sources: Baseline: National Natality Survey, CDC, NCHS; Updates: 1988: National Maternal and Infant Health Survey, CDC, NCHS.

Risk Reduction Objective: Severe complications of pregnancy

PHS Agency Assignment: Health Resources and Services Administration

14.7 Reduce severe complications of pregnancy to no more than 15 per 100 deliveries.

<u>Severe complications of pregnancy (per 100 deliveries)</u>	<u>Baseline Year</u>	<u>Baseline</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>2000 Target</u>
Total population	1987	22	21	19	18	18	17	15	15	14	14	15
Special Population Target												
14.7a Blacks	1991	28	...	...	...	...	26	24	25	24	23	16
ICD-9 codes: 630-676, exclude 635												
<i>Note: Severe complications of pregnancy are measured using hospitalizations (not involving delivery) due to pregnancy-related complications.</i>												

Data Source: National Hospital Discharge Survey, CDC, NCHS.

Risk Reduction Objective: Cesarean delivery

PHS Agency Assignment: Health Resources and Services Administration

14.8 Reduce the cesarean delivery rate to no more than 15 per 100 deliveries.

<u>Cesarean Delivery (per 100 deliveries)</u>	Baseline												2000
	Year	Baseline	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Target
Total population	1987	24.4	24.7	23.8 (22.8) ^{•ub•}	23.5 (22.7) ^{•ub•}	23.5 (22.6) ^{•ub•}	23.6 (22.3) ^{•ub•}	22.8 (21.8) ^{•ub•}	22.0 (21.2) ^{•ub•}	20.8 (20.8) ^{•ub•}	21.8 (20.7) ^{•ub•}	---	15 (20.8) ^{•ub•}
Type-Specific Targets													
14.8a Primary (first time) cesarean delivery	1987	17.4	17.5	17.1 (16.1) ^{•ub•}	16.8 (16.0) ^{•ub•}	17.1 (15.9) ^{•ub•}	16.8 (15.6) ^{•ub•}	16.3 (15.3) ^{•ub•}	15.8 (14.9) ^{•ub•}	15.5 (14.7) ^{•ub•}	15.7 (14.6) ^{•ub•}	---	12 (14.6) ^{•ub•}
14.8b Repeat cesarean deliveries ^{•uc•}	1987	91.2	87.4	81.5 (81.1) ^{•ub•}	79.6 (80.1) ^{•ub•}	75.8 (78.7) ^{•ub•}	74.9 (77.4) ^{•ub•}	74.6 (75.7) ^{•ub•}	70.3 (73.7) ^{•ub•}	64.5 (72.5) ^{•ub•}	66.4 (71.7) ^{•ub•}	---	65 (72.6) ^{•ub•}
^{•ub•} Data from the certificate of live birth per 100 births. ^{•uc•} Among women who had a previous cesarean delivery.													
ICD-9 codes: 148, procedure codes 74, excluding 74.3 and 74.91; 14.8a same, without 654.2; 14.8b with 654.2.													

Data Sources: National Hospital Discharge Survey, CDC, NCHS. National Vital Statistics System, CDC, NCHS.

Risk Reduction Objective: Breastfeeding

PHS Agency Assignment: Health Resources and Services Administration

14.9 (2.11) Increase to at least 75 percent the proportion of mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

	Baseline											
	Year	Baseline	1989	1990	1991	1992	1993	1994	1995	1996	1997	Target
<u>Mothers breastfeeding their babies^{•ua}</u>												
During early postpartum period ^{•ub}	1988	54%	52%	52%	53%	54%	56%	57%	60%	59%	62%	75%
At age 6 months	1988	20% ^{•uc}	18%	18%	18%	19%	19%	20%	22%	22%	26%	50%
Special Population Targets												
<u>During early postpartum period^{•ub}</u>												
14.9a Low-income mothers ^{•ud}	1988	34% ^{•uc}	32%	35%	33%	35%	38%	40%	42%	42%		75%
14.9b Black mothers	1988	25%	23%	23%	26%	28%	31%	33%	37%	37%	41%	75%
14.9c Hispanic mothers	1988	51%	48%	48%	52%	52%	56%	58%	61%	61%	64%	75%
14.9d American Indian/Alaska Native mothers	1988	47%	43%	47%	46%	53%	51%	44%	52%	54%	56%	75%
<u>At age 6 months</u>												
14.9a Low-income mothers ^{•ud}	1988	9%	8%	8%	8%	9%	10%	10%	11%	12%		50%
14.9b Black mothers	1988	7% ^{•uc}	6%	6%	7%	8%	9%	10%	11%	11%	15%	50%
14.9c Hispanic mothers	1988	14% ^{•uc}	14%	13%	15%	16%	16%	18%	20%	20%	25%	50%
14.9d American Indian/Alaska Native mothers	1988	28%	27%	27%	22%	24%	28%	24%	24%	24%	25%	50%

- ua•Includes exclusive use of human milk or the use of human milk with a supplemental bottle of formulas or cow's milk.
- ub•Breastfed in hospital.
- uc•Baseline has been revised.
- ud•Less than \$10,000 income.

Data Sources: Ross Laboratories Mother Survey; For 14.9d, Pediatric Nutrition Surveillance System, CDC, NCCDPHP.

Risk Reduction Objective: Alcohol, tobacco, and drug use during pregnancy

PHS Agency Assignment: Health Resources and Services Administration

14.10 Increase abstinence from tobacco use by pregnant women to at least 90 percent and increase abstinence from alcohol, cocaine, and marijuana by pregnant women by at least 20 percent.

<u>Abstinence from alcohol, tobacco, and drug use during pregnancy</u>	Baseline Year	Baseline	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	2000 Target
Abstinence from tobacco	1985	75%	78%	80% ^{•ua•}	79% (82%) ^{•ua•}	80% (82%) ^{•ua•}	83% ^{•ua•}	80% (84%) ^{•ua•}	---	---	---	---	90%
Abstinence from alcohol	1988	79%	...	---	---	---	---	81%	---	---	---	---	95%
Abstinence from cocaine	1988	99%	...	---	---	---	---	99%	---	---	---	---	100%
Abstinence from marijuana	1988	98%	...	---	---	---	---	97%	---	---	---	---	100%

^{•ua•}Data from the certificate of live birth.

Data Sources: 1985 Baseline - National Health Interview Survey, CDC, NCHS; 1988 Baselines - National Maternal and Infant Health Survey, CDC, NCHS. Updates - National Maternal and Infant Health Survey, CDC, NCHS (1988); National Vital Statistics System, CDC, NCHS (smoking: 1989-96); National Health Interview Survey, CDC, NCHS (smoking: 1990-91); National Pregnancy & Health Survey, NIH, NIDA (1993).

Services and Protection Objective: Prenatal Care

PHS Agency Assignment: Health Resources and Services Administration

14.11 Increase to at least 90 percent the proportion of all pregnant women who receive prenatal care in the first trimester of pregnancy.

<u>Proportion of Pregnant Women Receiving Early Prenatal Care (percent of live births)</u>	Baseline		<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>2000 Target</u>
	<u>Year</u>	<u>Baseline</u>											
Percent of live births	1987	76.0%	75.9%	75.5%	75.8%	76.2%	77.7%	78.9%	80.2%	81.3%	81.9%	82.5%	90%
Special Population Targets													
14.11a Black women	1987	60.8%	60.7%	60.0%	60.6%	61.9%	63.9%	66.0%	68.3%	70.4%	71.4%	72.3%	90%
14.11b American Indian/Alaska Native	1987	57.6%	58.1%	57.9%	57.9%	59.9%	62.1%	63.4%	65.2%	66.7%	67.7%	68.1%	90%
14.11c Hispanic women (Selected States)	1987	61.0% ^{•ub}	61.3% ^{•uc}	59.5% ^{•ud}	60.2% ^{•ue}	61.0% ^{•uf}	64.2% ^{•uf}	66.6%	68.9%	70.8%	72.2%	73.7%	90%

•ub•Includes data for 23 States and D.C.
 •uc•Includes data for 30 States and D.C.
 •ud•Includes data for 47 States and D.C.
 •ue•Includes data for 48 States and D.C.
 •f•Includes data for 49 States and D.C.

Data Source: National Vital Statistics System, CDC, NCHS.

Service and Protection Objective: Age-appropriate preconception counseling by clinicians

PHS Agency Assignment: Health Resources and Services Administration

14.12 (5.10) Increase to at least 60 percent the proportion of primary care providers who provide age-appropriate preconception care and counseling.

<u>Age-appropriate preconception counseling</u>	<u>Baseline Year</u>	<u>Baseline</u>	<u>1997-98</u>	<u>2000 Target</u>
Primary care providers		---	---	60%
<u>Percent of clinicians routinely providing service to 81-100% of patients</u>				
<u>Inquiry about family planning (females, childbearing ages)</u>				
Pediatricians	1992	18%	---	60%
Nurse Practitioners	1992	53%	42%	60%
Obstetrician/Gynecologists	1992	48%	---	60%
Internists	1992	24%	---	60%
Family Physicians	1992	28%	---	60%
<u>Counseling about family planning</u>				
Pediatricians	1992	36%	---	60%
Nurse Practitioners	1992	53%	40%	60%
Obstetrician/Gynecologists	1992	65%	---	60%
Internists	1992	26%	---	60%
Family Physicians	1992	36%	---	60%

Note: Primary Care Providers include pediatricians, physicians, nurse, practitioners, obstetricians, gynecologists and physician assistants. Response rates to the Primary Care Provider Surveys were: Family Physicians 50%, Nurse Practitioners 70%, Obstetrician/Gynecologists 71% and Pediatricians 80%. Data on assessment/inquiry represent the proportion of providers who queried 81-100% of their patients. Data on counseling/treatment /referral represent the proportion of providers who delivered these services to 81-100% of their clients who need the particular intervention.

Data Source: Baseline: Primary Care Providers Survey, OPHS, ODPHP. Update: Prevention in Primary Care Study, ACPM

Services and Protection Objective: Counseling on detection of fetal abnormalities

PHS Agency Assignment: Health Resources and Services Administration

14.13 Increase to at least 90 percent the proportion of women enrolled in prenatal care who are offered screening and counseling on prenatal detection of fetal abnormalities.

<u>Prenatal detection of fetal abnormalities</u>	<u>Baseline Year</u>	<u>Baseline</u>	<u>1992</u>	<u>2000 Target</u>
Proportion of pregnant women screened for alpha-fetoprotein	1988	29%	51%	90%

Data Sources: College of American Pathologists, Foundation for Blood Research.

Services and Protection Objective: Risk-appropriate care

PHS Agency Assignment: Health Resources and Services Administration

14.14 Increase to at least 90 percent the proportion of pregnant women and infants who receive risk-appropriate care.

Risk-appropriate care

Baseline

2000
Target

Proportion of pregnant women and infants

90%

Data Source:

Services and Protection Objective: New born screening and followup

PHS Agency Assignment: Health Resources and Services Administration

14.15 Increase to at least 95 percent the proportion of newborns screened by State-sponsored Systems for genetic disorders and other disabling conditions and to 90 percent the proportion of newborns testing positive for disease who receive appropriate treatment.

<u>Newborn screening and treatment</u>	<u>Baseline Year</u>	<u>Baseline</u>	<u>1990</u>	<u>2000 Target</u>
Screened by State-sponsored Systems for genetic disorders and other conditions		---	---	95%
Testing positive for disease and receiving appropriate treatment		---	---	90%
Sickle cell anemia screening	1987	33% ^{•ua•}	89% ^{•ub•}	95%
Black infants	1987	57% ^{•ua•}	77% ^{•uc•}	95%
Newborns diagnosed positive for sickle cell anemia receiving treatment		---	95%	90%
Galactosemia with 38 States reporting screening	1987	70%	97%	95%
Newborns diagnosed positive for galactosemia receiving treatment		---	100%	90%

^{•ua•}Based on 20 States reporting screening.
^{•ub•}Based on 43 States reporting screening.
^{•uc•}Based on 9 States because other States do not report race of child.

Data Source: Council of Regional Networks for Genetic Services

Services and Protection Objective: Primary care for babies

PHS Agency Assignment: Health Resources and Services Administration

14.16 Increase to at least 90 percent the proportion of babies aged 18 months and younger who receive recommended primary care services services at the appropriate intervals.

<u>Primary care services at appropriate intervals</u>	<u>Baseline Year</u>	<u>Baseline</u>	<u>2000 Target</u>
Babies aged 18 months and younger		---	90%

Data Source:

Health Status Objective: Spina bifida and neural tube defects

PHS Agency Assignment: Health Resources and Services Administration

14.17 Reduce the incidence of spinal bifida and other neural tube defects to 3 per 10,000 live births.

<u>Spina bifida and other neural tube defects (per 10,000 live births)</u>	<u>Baseline Year</u>	<u>Baseline</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>2000 Target</u>
Total population	1990	6	7	6	7	3

Data Source: Birth Defects Monitoring Program, CDC, NCEH.