

Healthy Women, Healthy Babies: Reducing Low Birth Weight in Minnesota

Statewide Outcome:

Reduce low birth weight to no more than 5% of births (MN 2007 baseline 6.4%)

Definition: Low birth weight (LBW) is below 2500 grams or 5 lbs. 8 oz.

Effective Programs/Strategies to Reduce LBW:

Women, Infants, Children (WIC)

Home Visiting

Teen Pregnancy Prevention Initiatives

Family Planning

Primary, Preventive Health Care for Women of Childbearing Age

Risk Factors:

Use of alcohol, tobacco, drugs

Vaginal infections, sexually transmitted infections

Unintended pregnancy

Maternal age under 19 and over 35

Stress, lack of support

Race, ethnicity

Low pre-pregnancy weight, poor weight gain during pregnancy

Periodontal disease

Previous LBW or pre-term birth

Short intervals between pregnancies

Domestic violence

Poverty, residential segregation, geographic isolation

Environmental exposures: at work, at home, or in the community

Heavy physical work during pregnancy

Core Public Health Functions: Assessment, Policy Development, Assurance

Access to Care	Early Prenatal Care	Addressing Substance Use/Abuse, Mental Health/Stress	Nutrition	Social Conditions
Medical home	Prenatal care is part of an integrated, life course approach to women's health.	Tobacco: Smoking cessation intervention for pregnant women, 5 A's (Ask-Advise-Assess-Assist-Arrange).	Assess for appropriate pre-pregnancy weight for height	Assess childcare needs
Health insurance: continuous coverage		Alcohol: Education, screening, assessment, referral to treatment, provide ongoing support.	Assess adequacy of supply of nutritious food, capacity to store and prepare food.	Assess employment, working conditions, income adequacy
Primary health care	Prenatal care begins in first trimester and continues regularly throughout pregnancy.	Drugs: Education, screening, assessment, referral to treatment, reporting as required by statute, provide ongoing support.	Referral to WIC if eligible.	Assess housing for space, hazards, stability
Care for chronic conditions		Mental Health: Screen for prenatal and postpartum depression, assess, refer to treatment, provide ongoing support.	Assess for adequate weight gain during pregnancy.	Assess education level
Dental care	Assess health status and risk factors at regular intervals.	Stress: Screen for stress, assess for social support system; assess lifestyle, environment, provide ongoing support.	Provide key nutrition education:	Assess community safety, environmental hazards
Mental health services	Address social, behavioral, and medical risks.		<ul style="list-style-type: none"> • Prevention of iron deficiency • Folic acid education 	Assess for agricultural safety and exposures to hazardous chemicals
Family planning services	Coordinate care and resources as needed.	Screen for domestic violence, assess safety, provide information, refer for services; provide ongoing support.	Provide breastfeeding education, support.	Assess transportation needs
Preconception care				
Interconceptional care				

Overview of Low Birth Weight

Mortality and Morbidity: Low birth weight is a principal cause of infant death and a leading cause of childhood illness. Low birth weight (LBW) is defined as an infant who weighs less than 5 pounds 8 ounces (2500 grams) at birth. LBW occurs primarily when babies are born pre-term, before the 37th week of pregnancy. LBW also occurs when the fetus does not grow well during pregnancy, known as intrauterine growth restriction (IUGR). Often, LBW occurs because of a combination of the two.

Costs: LBW is very costly in terms of health care and services for families. Increased costs range from \$5000 to \$10,000 per birth. Annually, this translates to approximately \$30 million in additional health costs for Minnesota, not including additional education costs for very LBW children who may have significant disabilities.

Health Disparity: African Americans are twice as likely to have a LBW baby than whites. Pre-term and LBW births account for most of the disparity in infant mortality between the two populations.

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