

West Virginia Pediatric Nutrition Surveillance System (PedNSS)

This fact sheet describes the prevalence of specific health indicators of nutrition risk in low-income infants and children in West Virginia during the year 2000. The information presented here was gathered by the West Virginia WIC Program during the course of weighing, measuring, and sampling hemoglobin for approximately 53,000 children. Due to the advent of a new growth reference by the CDC in 2000, rates expressed in this report should not be compared to previously published reports.

The WIC Program provides nutrition counseling and education, and referral services to a range of community resources for medical care, early childhood programs, or family support programs. Supplemental foods are provided to pregnant women, postpartum women, infants, and children up to five years old. In West Virginia, 75 percent of WIC participants report family income under 100% of the federal poverty level.

Health disparities for low-income people are a nationwide public health concern. The national Healthy People 2010 Initiative has called for improvement in low birth weight rates, reducing the prevalence of short stature, and increasing breastfeeding rates. Achieving the target Objectives in the next ten years will require concerted effort on the part of all health providers.

Participant Overview - the Year in PedNSS in West Virginia

53,000
low income
infants and children
are served

38%
are less than one
year old

5,200
infants were
Breastfed

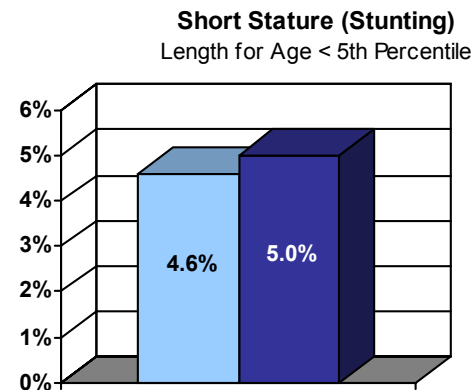
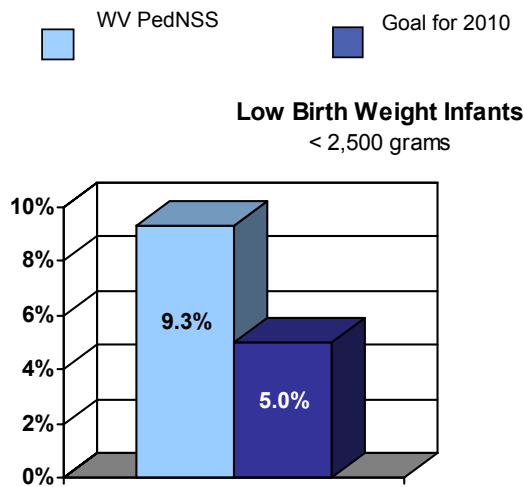
WV PedNSS in 2000 and Healthy People 2010 Objectives¹

¹ Full text of Healthy People 2010 at www.health.gov/healthy_people/

² 1999 WV Vital Statistics Report, WV Bureau for Public Health

³ Institute of Medicine, WIC Nutrition Risk Criteria: A Scientific Assessment, National Academy Press, Washington DC, 1996. p.98-102

⁴ Ibid, Institute of Medicine, 1996, p. 106-107



- WV Vital Statistics 1999 reported (for all infants born in WV) the prevalence of low birth weight at 8.0%²
- In PedNSS, Black infants had a much higher LBW rate than White infants - 15.2% of Black infants and 8.9% of White infants were born low birth weight.
- Premature LBW infants have a higher mortality rate. Full-term LBW infants have slower physical growth, possibly slower mental development, and are more likely to have congenital abnormalities.³
- Nationally, the prevalence of stunting for PedNSS children is 5.9%.
- In West Virginia PedNSS, the prevalence of stunting is very stable, fluctuating only 1% over the last ten years
- Stunting early in life may lead to reduced physical capacity and endurance in adulthood⁴

WV PedNSS in 2000 and National Data Comparisons

⁵ National Health and Nutrition Examination Survey, CDC, 1988-1994

⁶ I. Pravanta, "Nutrition" in L. Wilcox, J. Marks, eds. From Data to Action: CDC's Public Health Surveillance for Women Infants and Children, Centers for Disease Control and Prevention, US Public Health Services, Atlanta, GA, 1995, p.325

⁷ CDC, Division of Nutrition. Enhanced PedNSS User Manual, US DHHS, PHS, 1994, p.1-9

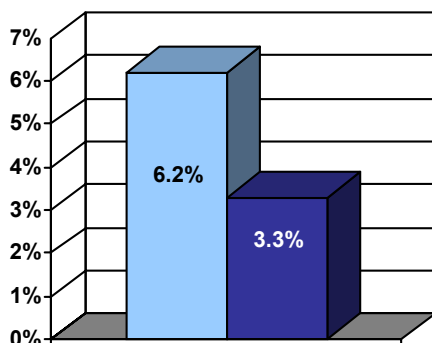
⁸ ibid; CDC, Division of Nutrition.p.1-9

⁹ based on USDA Urban-Rural Codes for county of WIC Participation

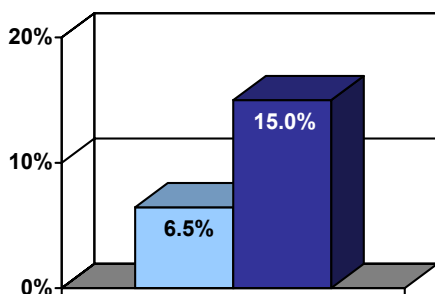
¹⁰ US Census Bureau, 2000, SF2 file

■ WV PedNSS ■ US NHANES III ⁵

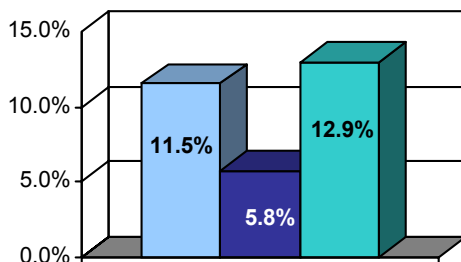
Underweight Infants and Children
Weight-for Length or BMI < 5th Percentile



Anemic Children - One and Two Year Olds



Overweight Children 2 and Older
BMI >95th Percentile



■ WV PedNSS ■ NHANES III ■ US PedNSS

- Healthy People 2010 established no Objective for underweight. The percentage of children expected to be underweight is 5%.
- National PedNSS rates in 2000 for underweight are slightly better than WV PedNSS at 5.7%.
- Thinness is associated by the CDC with recent severe disease associated with disaster conditions such as famine.⁶ The prevalence for underweight in WV has been stable for many years.
- Overall, WV PedNSS children have had low anemia rates for the last 10 years.
- Ten percent of WV PedNSS Black children (one and two years) are anemic, compared with six percent of White children of the same age.
- Iron deficiency Anemia has been associated with impaired mental ability and psychomotor development in infants and children.⁷
- Low-income children in WV are overweight at about the same rate as low-income children nationwide; but compared to all children in the US, the prevalence in WV is double.
- The CDC estimates 1/3 to 1/2 of overweight children will become overweight adults. Obesity is associated with heart disease, hypertension and diabetes.⁸

Demographic Factors in PedNSS

Ethnicity in PedNSS

White	92.6%
African-American	6.1%
All Others	1.3%

Age

Under 1 Year	38.1%
One through Two	35.6%
Three to Five Years	26.3%

Rural Residence

	PedNSS ⁹	All Children ¹⁰
Rural	17.0%	14.0%
Small Town	45.3%	42.7%
Urban	37.7%	43.3%