




## Benefits of Consistent Messaging for Pediatric Obesity In North Dakota


Dr. Joan Connell, MD, FAAP  
Mikaela Schlosser, RD, CLC

### Objectives


- Understand the current rates of obesity in young children in North Dakota.
- Describe an overview of the Colorado Department of Public Health & Environment's consistent messaging project: *9 Ways to Grow Healthy Colorado Kids*.
- List two reasons consistent messaging could strengthen efforts around Maternal and Child Health in North Dakota.



### Introduction



- History
- Where are we today: Exploration Phase
- Target population: Prenatal to age 5
- Purpose: Use of consistent messaging
- Long Term Vision



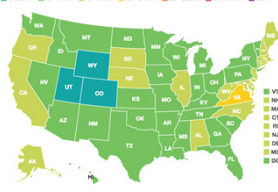

### North Dakota: 24<sup>th</sup> Highest WIC Toddler obesity rate (14.4%)

**Obesity Rate: WIC Participants Ages 2-4, 2014**

Select years with the slider to see historical data. Hover over states for more information. Click a state to lock the selection. Click again to unlock.

**Percent of WIC participants ages 2-4 with obesity**

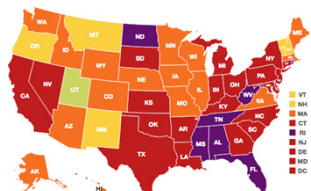

- 0 - 10.0%
- 10.1 - 15.0%
- 15.1 - 19.9%
- 20.0 - 24.9%
- 25 - 29.9%
- 30 - 34.9%
- 35%+

### North Dakota 2<sup>nd</sup> highest 10-17 year old obesity rate in the country (37.1%)

**Combined overweight and obese rates, children ages 10 to 17**

- 0 - 9.9%
- 10 - 14.9%
- 15 - 19.9%
- 20 - 24.9%
- 25 - 29.9%
- 30 - 34.9%
- 35%+

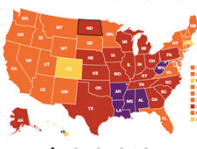



### North Dakota: 15<sup>th</sup>/51 States for Obese Adults-31.9% in 2016

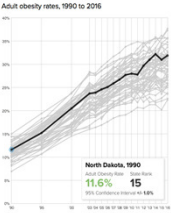
**Adult Obesity Rate by State, 2016**

Percent of obese adults (Body Mass Index of 30+)


- 0 - 14.9%
- 15 - 19.9%
- 20 - 24.9%
- 25 - 29.9%
- 30 - 34.9%
- 35%+



**Adult obesity rates, 1990 to 2016**



North Dakota, 1990  
Adult Obesity Rate: 11.6%



### Pediatric Obesity: Why is it Happening in North Dakota?

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### North Dakota Breastfeeding: Initiation and Duration

Progress Toward Healthy People 2020 Objectives:

Objective	HP 2020 Target	ND 2016 Actual
EVER	81.5	82.3
EXCLUSIVE AT 3 MONTHS	46.2	50
EXCLUSIVE AT 6 MONTHS	25.5	25
NEWBORNS WHO RECEIVE FORMULA SUPPLEMENTATION WITHIN THE FIRST 2 DAYS OF LIFE	14.2	14

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### Dietary Guidelines for Americans: Current Intakes

Food Group	Intake Below Recommendation or Above Limit (%)	Intake At/Above Recommendation or Below Limit (%)
Vegetables	~85	~15
Fruit	~75	~25
Total Grains	~65	~35
Dairy	~55	~45
Protein Foods	~45	~55
Oils	~35	~65
Added Sugars	~85	~15
Saturated Fats	~75	~25
Sodium	~95	~5

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### Obesity: Why is it Happening in North Dakota?

Access to Parks and/or Recreation Facilities

Source: Development of a Nationally Representative Built Environment Measure of Access to Exercise Opportunities, Preventing Chronic Disease, Vol 12(2)1

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### Prevalence of obesity and overweight\* among children aged 2 to <5 years, by race and ethnicity

Race/Ethnicity	Obese (%)	Overweight (%)
White	~10	~15
Black	~10	~15
Hispanic	~15	~15
American Indian	~20	~25
Asian	~0	~0
Multiple	~15	~15
Total-State	~15	~15
Total-Nation	~15	~15

\* Obese:  $\geq 95^{\text{th}}$  percentile BMI-for-age; overweight:  $\geq 85^{\text{th}}$ – $95^{\text{th}}$  percentile BMI-for-age. CDC Growth Charts, 2000. 15% of children are expected to fall above the 85th percentile (5% above the 95th percentile and 10% between the 85th and 95th percentiles).

2011 ND PedNSS Table 8C

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### Obesity in North Dakota: Why Does it Matter??

**Diabetes:**

- 8.6% North Dakotan Adults (42/51 states)
- 58,887 cases in 2010- estimating 79,617 cases in 2030

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## Obesity in North Dakota: Why Does it Matter??

**Hypertension:**  
 30.4% North Dakotans (30/51 states)  
 - 145,630 cases in 2010, estimating 170,467 in 2030

**Heart Disease:**  
 - 46,993 cases in 2010, estimating 190,739 cases 2030

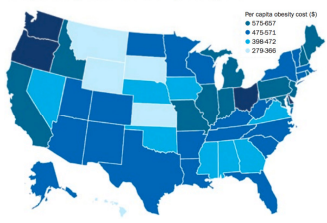
**Arthritis:**  
 - 141,984 cases in 2010, estimating 110,099 cases in 2030

**Obesity-Related Cancer:**  
 - 11,572 cases in 2010, estimating 26,762 cases in 2030




## Obesity in North Dakota: Why does it Matter??

**Per Capita Obesity-Related Healthcare Expenditures, 2013**




Source: Wang YC, Hamelin J, Long MK, Ward ZJ, Gortmaker SL, and Andriyeva T. 2015. Severe obesity in adults cost state Medicaid programs nearly \$8 billion in 2013. Health Affairs, 2015;34(12):1592-1593.



## Why Focus Prenatal to Age 5?

- 90 percent of brain development occurs
- Physical activity and healthy eating habits formed early in life track into adulthood
- 5 times more likely to be overweight/obese as an adult



## The Pediatric Obesity Mini CoIn™

**What Are We Trying to Do?**  
 Support parents and providers that support healthy weight behaviors in early care and education (ECE) settings by November 2017

**Why?**  
 To increase the proportion of children ages 5 to 9 years who fall within a healthy weight range

**What?**  
 Arkansas, California, Indiana, Iowa, Kentucky, Louisiana, Missouri, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, and Tennessee

**State Highlights**

The North Dakota team developed Nutrition and Physical Activity Competency Guides for Early Learning Settings.

- 3-hour Pre-Workshop to Address Play for Early Childhood™ offers practical steps to encourage children ages 3-5 to get physical activity in various physical activities. The guides available at <http://www.nidirect.org/early-childhood>
- 3-hour Pre-Workshop to Address Feeding for Early Childhood™ offers practical steps to promote healthy foods and eating experiences. The guide is available at <http://www.nidirect.org/early-childhood>

The 100+ hours required to complete the training target "center to meet" ECEs to participate in this training. Workshops, identifying with their specific needs at the state level for these trainings.

**Collaborating Organizations**





## 9 Ways to Grow Healthy Colorado Kids

**Identified problem:**

- Families receive messages from a variety of sources

**Goals/Purpose:**

- Unite health advocates to all Speak with One Voice
- Messages complement messaging currently used (Let's Go 5.2.1.0.)
- Ensure pregnant women and families with infants and children hear consistent messages in multiple settings
- Aligned with Colorado Department of Health and Environment Strategies
- Maternal and Child Health- Life Course Approach\*\*



## 9 Ways to Grow Healthy Colorado Kids

Together we can make a bigger impact- Speaking with One Voice

Risk Factors	Protective Factor
High pre-pregnancy BMI	Breastfeeding
Too little/Too much gestational weight gain	
Unresponsive Feeding Practices	
Consumption of Sugar-Sweetened beverages	
Poor diet and lack of exercise	
Short sleep duration	
Too much screen time	

