

# Physical Activity – Nutrition – Healthy Weight Program (Obesity P & C) Maine CDC

## Topic: Policy and Environmental Change at the State level



*Maine Center for Disease  
Control and Prevention*

*An Office of the  
Department of Health and Human Services*

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# Focus on Policy, Systems and Environmental Change Strategies:

- Policies include laws, regulations, and rules (both formal and informal)
- Environmental interventions include changes to the economic, social, or physical environments
  - Preaching “exercise more and eat less” has not worked. Personal responsibility? Much more complex.

# Evolution of the PAN-HW Program

- Capacity Building phase years 1 – 4
  - Start July 2003
  - PAN Plan 2005-2010
- Implementation Status year 5
- CDC reduced funded states in 2008 (Yr 6)
  - 2008/2009 reduced staff
  - 2010 rebuilding year - ARRA

# **CDC/DNPAO & PAN-HW Goals**

*Division of Nutrition, Physical Activity and Obesity  
Physical Activity - Nutrition – Healthy Weight Program*

- Increase health-related physical activity through population-based approaches.
- Improve those aspects of dietary quality most related to population burden of chronic disease and unhealthy child development.
- Decrease prevalence of obesity through prevention of excess weight gain and maintenance of healthy weight loss.

# CDC/PAN Plan - Target Areas

- Decrease consumption of sugar sweetened beverages
- Reduce consumption of high energy dense foods
- Increased physical activity
- Reduced television time (youth)
- Increased breastfeeding
- Increased consumption of fruits and vegetables

For what target area has Maine recently had a significant policy success specific to worksites?

# Objectives/Strategies

- PAN Plan 2005-2010 addresses youth and adults
- Settings
  - School
  - Community
  - Healthcare
  - Worksite

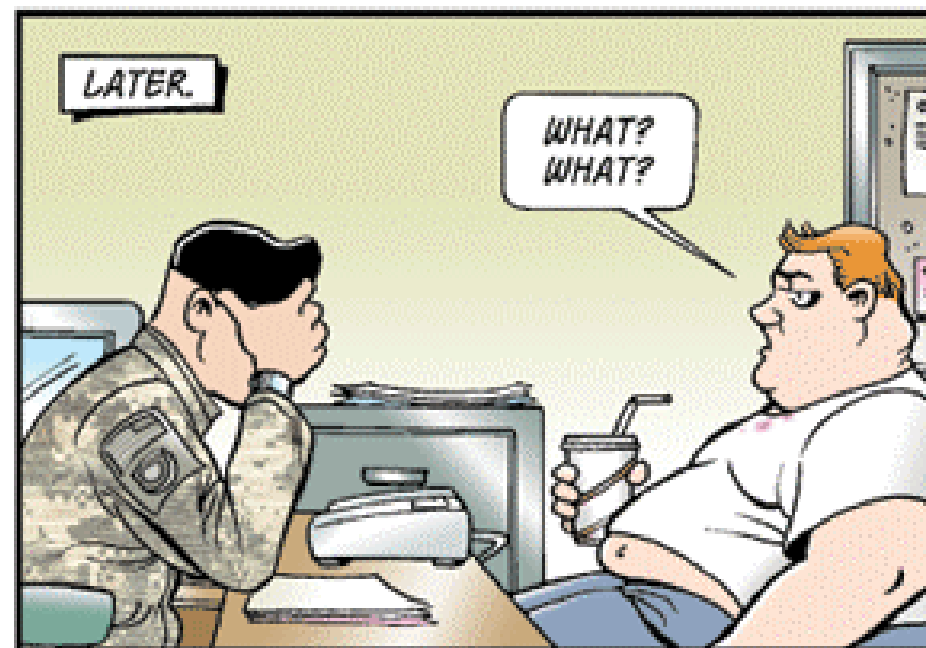




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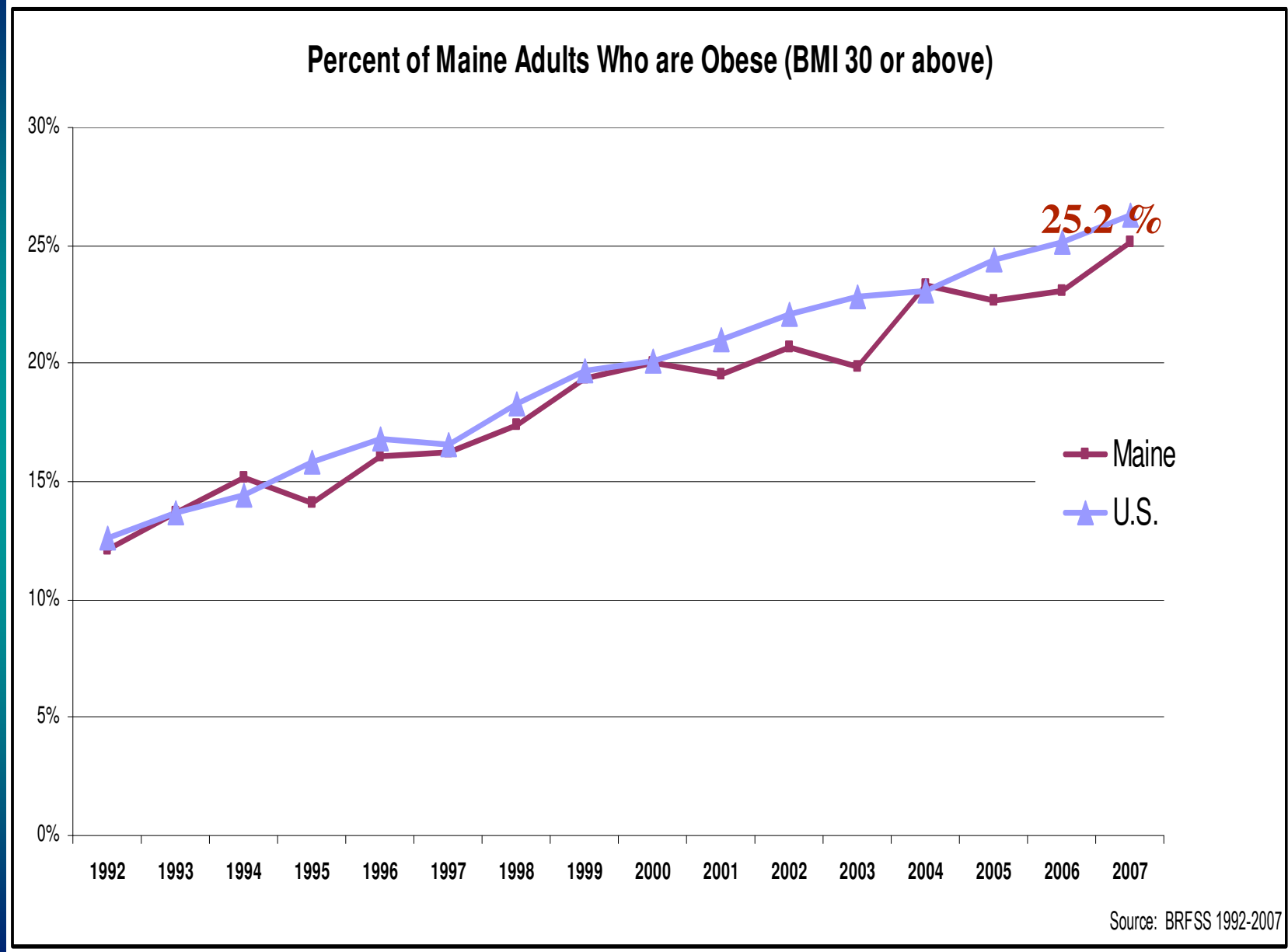


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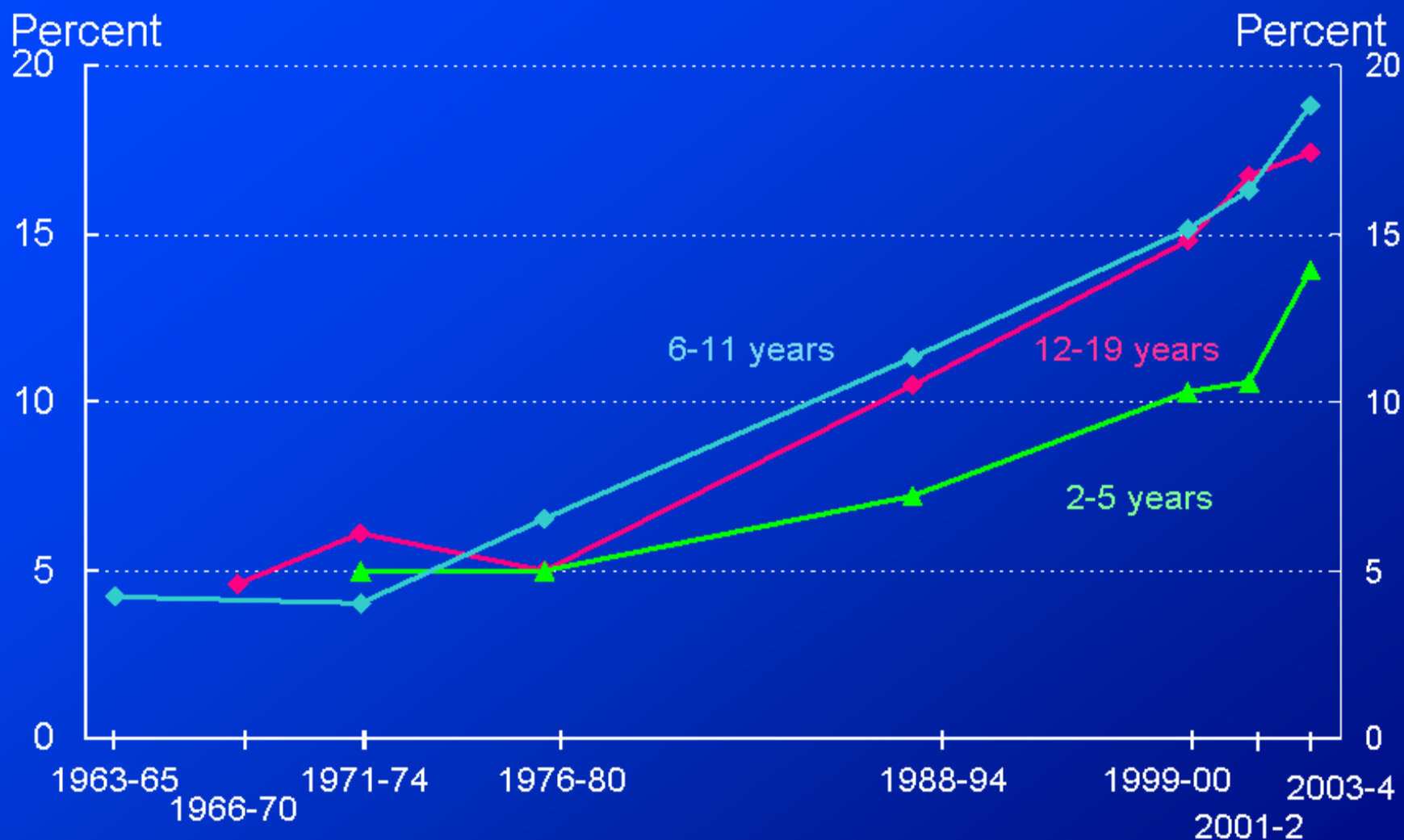




# Prevalence of Obesity (> BMI 30) Maine - US



# Trends in Child and Adolescent Obesity - US



Note: Overweight is defined as BMI  $\geq$  gender- and weight-specific 95th percentile from the 2000 CDC Growth Charts.

Source: National Health Examination Surveys II (ages 6-11) and III (ages 12-17), National Health and Nutrition Examination Surveys I, II, III and 1999-2004, NCHS, CDC.

# Recent Data/Studies on Childhood Obesity

- Implications
  - Contemporary children are heavier than ever
  - More children becoming heavier, earlier

*More children than ever before facing increased risks of heart attack/deaths and other serious chronic disease in adulthood*

# Childhood Obesity – The Shape of Things to Come, David Ludwig, MD.

- tip of the iceberg re: consequences of obesity epidemic
- **Phase IV of obesity epidemic**
  - Acceleration through transgenerational mechanisms
- **Economic costs could become catastrophic**
  - Diminished worker productivity
  - Bankruptcy of Medicare
  - Shrinking health care coverage
  - Neglect of social structure

# Cost of Overweight/Obesity

- Medical Expenses Maine
  - \$357 million per year
  - Or, nearly 1 million/day

(Finklestein et al, 2004)

- Other Costs?



# Chenoweth Associates, 2006

## Productivity Loss Costs by Risk Factor

	<b>Physical Inactivity</b>	<b>Overweight</b>	<b>Obesity</b>
Absenteeism	129,819,475	51,386,876	165,519,831
Presenteeism	2,072,784,287	591,327,710	1,901,855,312
S.T. Disability	126,573,988	79,947,160	257,475,292
On-the-job injury	1,159,289	466,391	1,101,325
Sub-total	2,330,337,039	723,128,137	2,325,951,760
Risk Factor Prevalence	x 0.469	x 0.439	x 0.294
<b>Total Costs</b>	<b>\$1,092,928,071</b>	<b>\$317,453,252</b>	<b>\$683,829,817</b>

**Overall Productivity Loss Costs \$2,094,211,140**

	Physical Inactivity		Overweight		Obesity	
	Direct	Indirect	Direct	Indirect	Direct	Indirect
<b>Medical Care</b>						
1. Treatments	\$18,244,352	\$41,414,679	\$ 8,076,700	\$18,334,109	\$11,747,927	\$26,667,794
2. Rx Drugs	39,242,531	89,080,545	20,864,983	47,363,511	41,863,148	95,029,346
<b>Subtotal</b>	<b>57,486,883</b>	<b>130,495,224</b>	<b>28,941,683</b>	<b>65,697,620</b>	<b>53,611,075</b>	<b>121,697,140</b>
<b>Workers' Compensation</b>						
1. Medical	\$ 1,491,282	\$ 5,965,128	\$ 436,216	\$ 1,744,864	\$ 701,125	\$ 2,804,500
2. Wages	351,548	0	109,858	0	263,661	0
<b>Subtotal</b>	<b>1,842,830</b>	<b>5,965,128</b>	<b>546,074</b>	<b>1,744,864</b>	<b>964,786</b>	<b>2,804,500</b>
<b>Lost Productivity*</b>						
	\$1,092,928,071	0	\$ 317,453,252	0	\$ 683,829,817	0
<b>Sub-totals</b>	<b>\$1,152,257,784</b>	<b>\$136,460,352</b>	<b>\$346,941,009</b>	<b>\$67,442,484</b>	<b>\$738,405,678</b>	<b>\$124,501,640</b>

\* Indirect costs are not applicable in this category, since lost productivity measures, as characterized in the Chenoweth analysis, are considered to be immediate (direct) costs to employers.

Risk Factor	Total Cost
Physical Inactivity	\$1,288,718,136
Overweight	414,383,493
Obesity	862,907,318
<b>Grand Total</b>	<b>\$2,566,008,947</b>

# Solutions to the Obesity Epidemic

- Must be comprehensive
- Multi-faceted
- Use evidenced-based practices
- Address all populations and ages
- Consistent long term commitment



# Youth

- Childcare: policy and environmental change for pre-school age.
  - State level policy change
  - HMP reaching this audience at local level
- BMI data collection. Voluntary for now – will try to supplement with school health report card for parents – **parents are in denial!**
  - Arkansas model

# Youth

- School - Transform food environment
  - Chapter 51 – soda out of schools (except for teachers!)
  - 2007: no advertising junk food on school grounds
  - IOM nutrition standards – get fast food out of school
  - Farm to school to educate and feed healthy foods – stakeholder group efforts

# Youth

- Schools - Increase PA and PE.
- Informal policy change re: PA in class (Take Time)
- **PE4ME** major initiative: adopt national PA and PE recommendations:
  - 30 mins/day,
  - 150mins/wk K-8
  - \$9.5-18.3 million for **expanded PE**
    - Need 220 to 448 new PE teachers

# Youth

- PE4ME other recommendations
  - \$5 million for **obesity and chronic disease fund (established)**.
    - Media campaigns
    - Additional interventions
    - Help Line for weight loss
    - Statewide coverage re: Cooperative Extension Nutrition Associates (14)

# Youth

- PE4ME other recommendations
  - \$3 million for **school health coordinators (one for each school district)**
    - Champions of wellness teams
    - Introduce PAN initiatives
    - Empower youth
- **School Wellness Policies**

# Youth

- Health Care
  - MYOC/AAP recommendations for Docs
  - 5-2-1-0 approach to healthy behaviors rather than diet or body image approach.
  - MaineHealth and other healthcare orgs adopting clinical guidelines

# Adults

- Menu labeling at chain restaurants. Major impact!
- Low SES population. Environmental Change Project at DHHS and WIC offices. Emotional messaging.
- Active Communities and built environment
  - Zoning changes
  - Transportation changes
  - Bike/ped projects

# Healthy Maine Partnerships

- Maine is unique – tobacco settlement dollars spent on public health
- 8 public health regions, 28 Healthy Maine Partnerships/ School Health Coordinators
- implementing PAN-HW Plan at local level
- Last 10 years - \$6.5 million/year on PAN and tobacco programmatic work at local level.
- This continues in next 5 year grant period.



# Adults

- Healthy Maine partnerships – community, worksite, health care
  - New objectives in new RFP
- Worksite
  - HMP Worksite Assessment tool for small business
  - Maine-Harvard Prevention Research Center focus on medium to larger worksites

# MAPPS (handout)

## Communities Putting Prevention to Work

- Media – Access – Point of purchase/promotion – Price – Social Support & Services
- Bulleted items are individual interventions, most of which are policy and environmental change in schools, communities (including worksites and businesses, health care etc.)