



# Community and Public Health Indicator Updates

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# Purpose of Today's Presentation

- ◆ Discuss the importance of measuring community health indicators
- ◆ Provide brief background on the IC/CHAB Community Health Assessment Model
- ◆ Share results of a national county health indicator project and state local public health indicators
- ◆ Update on CHAB's Key Health Indicator findings and process



# Three Health Indicator Sets

- ◆ National: County Health Rankings: Mobilizing Action Toward Community Health (MATCH)
- ◆ State: Washington State Local Public Health Indicators
- ◆ Local: Island County Key Health Indicators



# CHIs are Important for Compliance with Washington State Standards

## **DOMAIN 1: CONDUCT AND DISSEMINATE ASSESSMENTS FOCUSED ON POPULATION HEALTH STATUS AND PUBLIC HEALTH ISSUES FACING THE COMMUNITY**

- ◆ **Collect and Maintain Population Health Data**
- ◆ **Analyze Public Health Data**
- ◆ **Use Data for Public Health Action**

## **DOMAIN 3: INFORM AND EDUCATE ABOUT PUBLIC HEALTH ISSUES AND FUNCTIONS**

- ◆ **Provide Prevention and Wellness Policies, Programs, Processes, and Interventions**
- ◆ **Communicate Information on Public Health Issues and Functions**

## **DOMAIN 4: ENGAGE WITH THE COMMUNITY TO IDENTIFY AND ADDRESS HEALTH PROBLEMS**

- ◆ **Engage the Public Health System and the Community in Identifying and Addressing Health Problems**
- ◆ **Engage the Community to Promote Policies to Improve the Public's Health**



# CHI Indicators Will be Important for National Accreditation Compliance

- ◆ **Domain 1**
  - Collect and Maintain Population Health Data
  - Analyze Public Health Data
  - Use Data for Public Health Action
- ◆ **Domain 3**
  - Communicate Information on Public Health Issues and Functions
- ◆ **Domain 4**
  - Engage the Public Health System and the Community in Identifying and Addressing Health Problems
  - Engage the Community to Promote Policies to Improve the Public's Health
- ◆ **Domain 5**
  - Establish, Promote, and Maintain Public Health Policies
  - Develop and Implement a Strategic Plan
  - Conduct a Community Health Improvement Planning Process
- ◆ **Domain 7**
  - Assess Healthcare Capacity and Access to Healthcare Services
  - Implement Strategies to Improve Access to Healthcare Services
- ◆ **Domain 10**
  - Identify and Use Evidence-Based and Promising Practices
  - Promote Understanding and Use of Research



## Why Communities Need Indicators

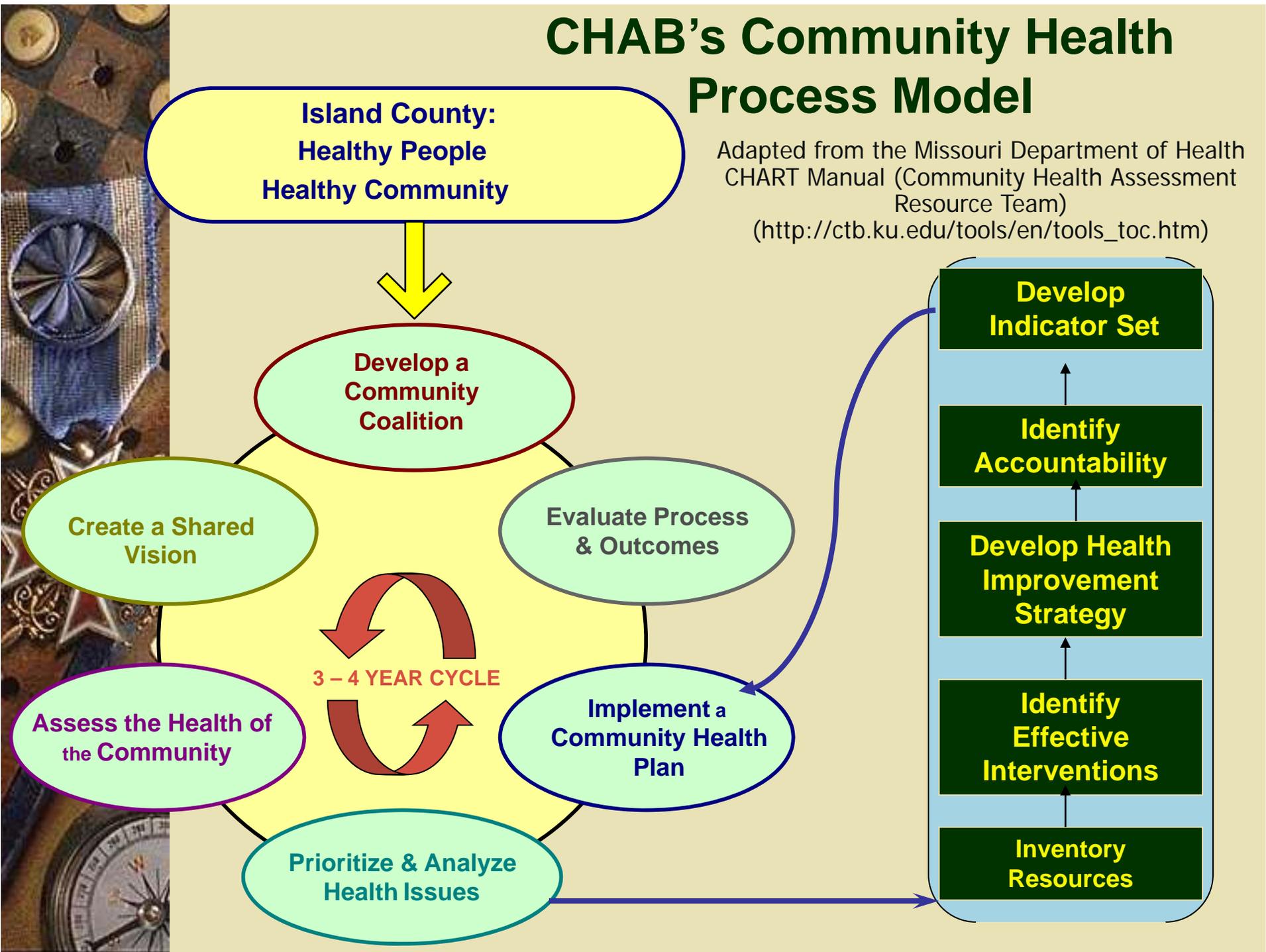
- Every community/region is different
- Communities are always changing
- Communities have unique sets of health problems
- Communities have unique assets and locally structured resources
- Communities must be able to reallocate resources according to changing needs and health priorities
- Local responsiveness is key to change

# Goal: Improving the Health of Island County Residents Using Health Indicator Data



# CHAB's Community Health Process Model

Adapted from the Missouri Department of Health  
CHART Manual (Community Health Assessment  
Resource Team)  
([http://ctb.ku.edu/tools/en/tools\\_toc.htm](http://ctb.ku.edu/tools/en/tools_toc.htm))



# CHAB Health Action Teams



- Name accountable partners
- Measurable outcomes (evaluation measures)
- Communicate issue (issue paper/ fact sheet)
- Policy implications
- Potential for project/program funding
- Opportunity for social marketing
- Explore effective, community-based, models for intervention
- Existing resources
- Potential partnerships

# Priority Issues 2002

## Early Support for Infants/Parents

- Parent Support
- Parent Education
- Child Care Choice

## Preventive Health Screening

- Adult Immunization
- Colonoscopy
- Pap Test
- STD Rates
- Pediatric Dentistry

## Mental Health Services & Resources

- Child/Teen
- Uninsured
- Prevention
- Resources
- Depression

## Physical Activity/ Chronic Disease

- Overweight
- Hypertension
- Diabetes
- CVD
- Depression



# 2005 How IC Rated by Topic

<b>+3</b>	<b>Oral Health</b>
<b>+2</b>	<b>General Health</b>
<b>+1.5</b>	<b>Quality of Life</b>
<b>+1.0</b>	<b><u>Environmental Health</u></b>
<b>.5</b>	<b>Chronic Disease/Physical Activity</b>
<b>.375</b>	<b>Substance Abuse</b>
<b>.33</b>	<b>Crime and Violence</b>
<b>0</b>	<b><u>Sociodemographic</u></b>
<b>-.5 or -1</b>	<b>Mental Health</b>
<b>-.33</b>	<b>Health Access</b>
<b>-.875</b>	<b>Communicable Disease</b>
<b>-.9</b>	<b>Maternal Child Health</b>
<b>-1.25</b>	<b>Unintentional Injuries</b>



# CHAB's Top Priorities in 2008...

## Communicable Disease

**HAT Formed  
& ICPH**

- Childhood immunizations
- Adults > 65 immunizations (flu/pneumonia)
- STD rates
- Rates for food/waterborne diseases

## Maternal-Child Health

**Refer issues to  
ICHD & CC**

- Reading to Child
- Prenatal Care Access in First Trimester
- Pregnant women not smoking
- Firearms in the home (loaded and unlocked)

## Physical Activity/Chronic Disease

**Refer to ACHIEVE  
& ICPH**

- Overweight and obese adults
- Overweight Children and Youth
- Screen Time
- Youth-Moderate Physical Activity
- Falls



# Falls

- **HP2010: Reduce the falls age adjusted mortality rate to 3.0 per 100,000.**
- **How are we meeting our goal?**
  - Not meeting**
- **IC: 13.7 per 100,000; significant increase from 6.42 per 100,000 in 1996**
- **State: 9.1 per 100,000**
- **Nation: 6.5 per 100,000**



# County Health Rankings: Mobilizing Action Toward Community Health (MATCH)

- ◆ **New national data set, Snapshot 2010**
- ◆ **Funded by Robert Wood Johnson,  
conducted by University of Wisconsin  
Population Health Institute**



# Purpose: County Health Rankings

- ◆ Increase awareness of the many factors—clinical care access and quality, health-promoting behaviors, social and economic factors, and the physical environment—that contribute to the health of communities
- ◆ Foster engagement among public and private decision makers to improve community health
- ◆ Develop incentives to encourage coordination across sectors for community health improvement



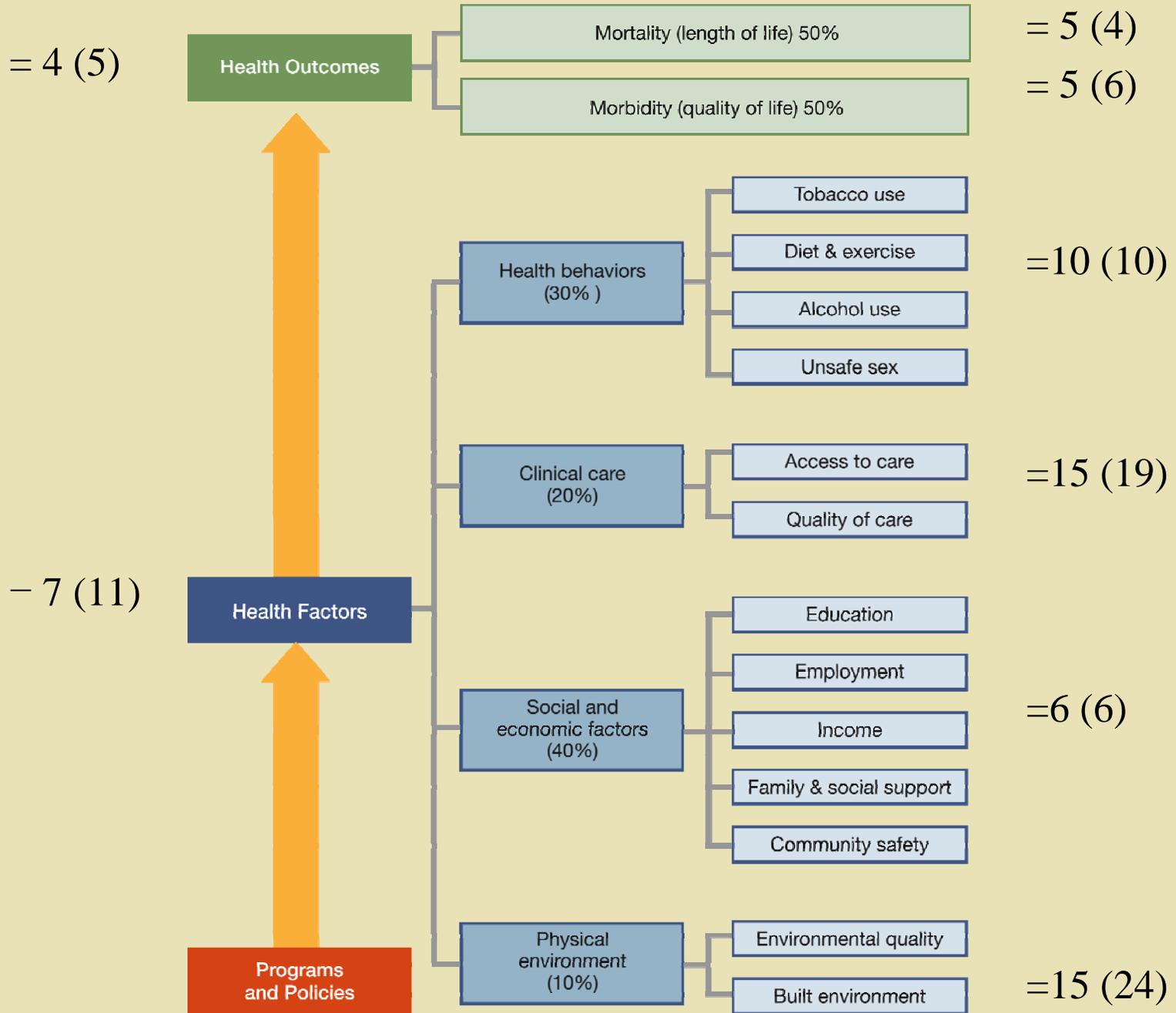
# Measuring Health

- ◆ Two health outcomes are measured

- how long people live (mortality)
- how healthy people feel while alive (morbidity)

- ◆ Four types of health factors are measured

- health behaviors
- clinical care
- social and economic
- physical environment factors.





# Health Factors (10)

## ◆ Health Behaviors (10)

- Tobacco Use
- Diet & Exercise
- Alcohol Use
- Sexual Behavior
- Driving

## ◆ Clinical Care (15)

- Access to care
- Quality of care

## ◆ Social and Economic Factors (6)

- Education
- Employment
- Income
- Family & Social Support
- Community Safety

## ◆ Physical Environment (15)

- Air & Water Quality
- Build Environment (access to healthy foods, liquor store density)



# Individual Health Factors

- ◆ Adult preventive services:
  - Paps (78%--last time)
  - Mammography (76%, down from 80%)
  - Sigmoidoscopy (50%)
  - Vaccines for 65+: Pneumonia (67%) and influenza (68%)
- ◆ Communicable Disease—better for all except for Pertussis outbreak in '08 (68 cases, expected 15)



# Individual Risk Factors

- ◆ No exercise (13.5%)
- ◆ Few fruits and vegetables (69.4%)
- ◆ Obesity (22.9%)
- ◆ High blood pressure (21.6%)
- ◆ Smoker (21%)
- ◆ Diabetes (5.2%)

**PUBLIC HEALTH IMPROVEMENT PARTNERSHIP**

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**Washington State  
Local Public Health Indicators**



## WA State Local Public Health Indicators

- ◆ Local measures providing a snapshot of health status, health behavior, and public health system performance
- ◆ These data can be used to help evaluate our work and decide where to invest limited resources to improve our community's health
- ◆ Data is comparable across all counties and Washington State with some comparability to the Nation



# Criteria for selecting indicators

- Measures important outcomes **of public health's work**
- Important to the entire population
- Uses standard measures from existing data systems
- Are actionable - **local public health** can implement activities to improve
- Can be reported in **at least 80%** of local health jurisdictions with comparisons to the state
- Measurable over time to determine trends
- Understandable



# Local Public Health Indicators

## 32 Indicators

### Communicable Disease

Reported Chlamydia infections  
Treated Chlamydia infections  
Influenza vaccine (65 years or older)  
Reported child immunizations *(new)*

### Prevention and Health Promotion

Years of healthy life expected at age 20  
Adult cigarette smoking  
Adult physical activity  
Adults overweight/obese  
Adult fruit/vegetable consumption  
Adult binge drinking  
Adults with diabetes  
Adult poor mental health

### Environmental Health

Solid waste facilities in compliance *(under development)*  
Food service safety *(new)*  
On-site sewage systems *(new)*

### Maternal and Child Health

First trimester prenatal care  
Maternal cigarette smoking  
Teen birth rate  
Low birth weight  
Teen physical activity  
Teen cigarette smoking  
Teens overweight  
Teen alcohol use  
Childhood unintentional injury hospitalizations

### Access to Care

Adults with unmet medical need  
Adults with personal healthcare provider  
Adult dental care  
Adult preventive cancer screening - Breast  
Adult preventive cancer screening - Cervical  
Adult preventive cancer screening - Colorectal  
Adults with health insurance  
Children with health insurance *(new)*



## How can LPHI Data be Used?

- Work in conjunction with the standards to measure system performance as opposed to individual LHJ performance
- Show outcomes of program interventions
- Guide investments of limited resources

# In Island County

## Communicable Disease

**Better than the state**

**Reported Chlamydia infections  
Influenza vaccination (65 yrs.+)**

The same as the state

**Worse than the state**

**Treated Chlamydia infections \*\*  
Reported child immunizations \*\***



# In Island County

## Prevention and Health Promotion

**Better than the state**

Years of healthy life expected at age 20  
Adult physical activity  
Adult fruit/vegetable consumption  
Adult binge drinking  
Adults with diabetes  
Adults overweight/obese

The same as the state

Adult cigarette smoking

**Worse than the state**

Adult mental health



# In Island County

## Environmental Health

**Better than the state**

The same as the state

**Worse than the state**



# In Island County

## Maternal and Child Health

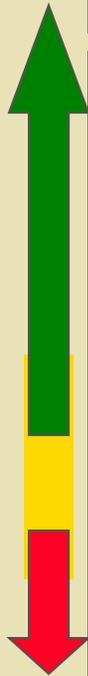
**Better than the state**

First trimester prenatal care  
Teen birth rate \*\*  
Low birth weight  
Teen overweight  
Teen alcohol use  
Childhood unintentional injury hospitalizations

The same as the state

**Worse than the state**

Maternal cigarette smoking  
Teen physical activity  
Teen cigarette smoking



# In Island County

## Access to Care

**Better than the state**

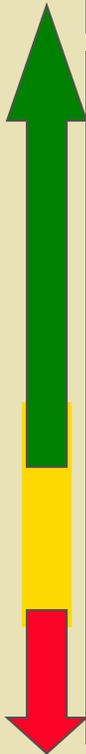
Adults with unmet medical need \*\*  
Adult preventive cancer screening-  
Breast \*\*  
Adult preventive cancer screening-  
Cervical \*\*  
Adult preventive cancer screening-  
Colorectal \*\*  
Adults with health insurance

**The same as the state**

Adults with personal healthcare  
provider

**Worse than the state**

Adult dental care  
Children with health insurance





## Similar or Better to State – But IC Trends Are Worse

- ◆ Adult fruit/veggie consumption
- ◆ Adult binge drinking
- ◆ First trimester care
- ◆ Teen alcohol use
- ◆ Reported Chlamydia infections
- ◆ Adults with health insurance

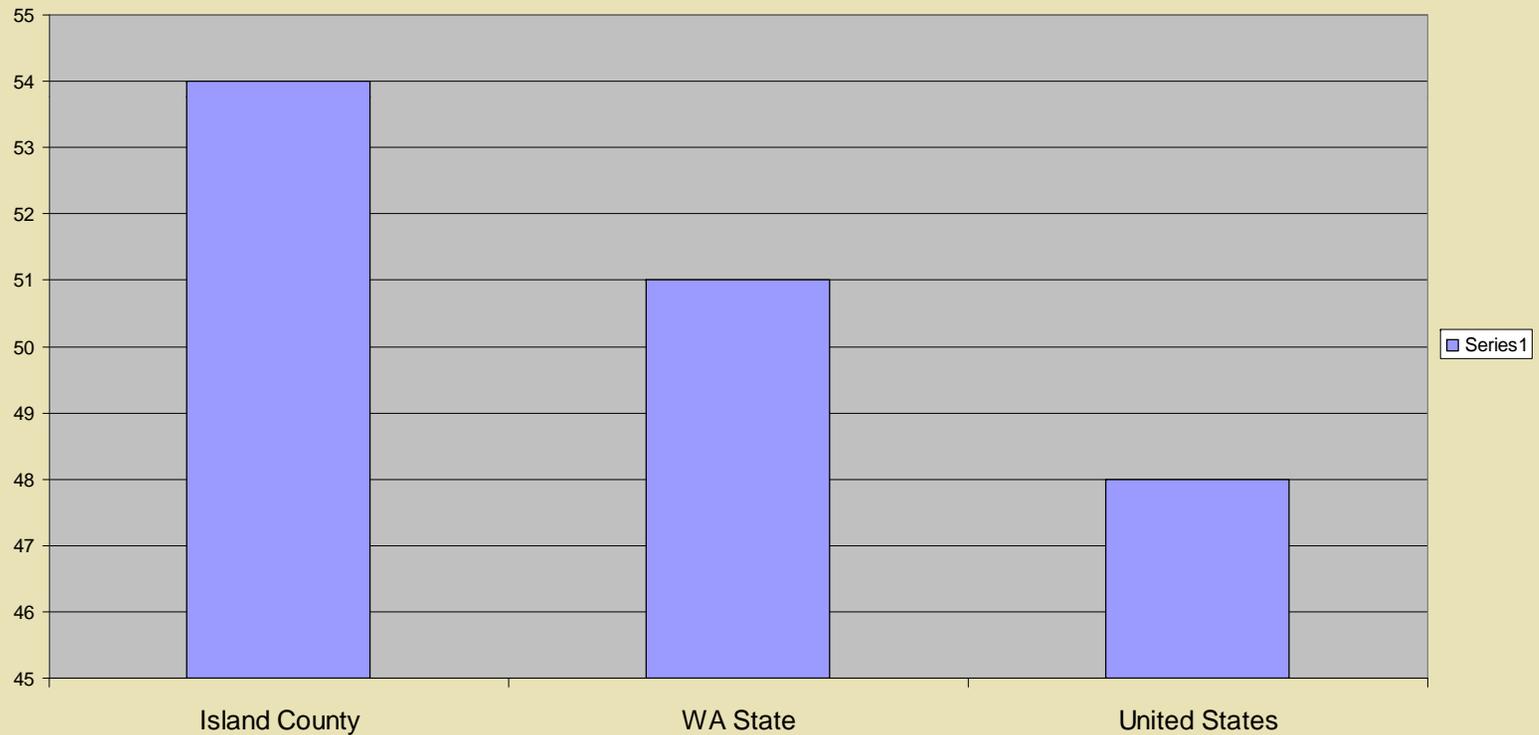


## IC Indicators that are **Worse than the State** and **Trends are Worse?**

- ◆ Teen physical activity
- ◆ Treated Chlamydia infections
- ◆ Adults overweight
- ◆ Adults poor mental health
- ◆ Maternal smoking
- ◆ Teen smoking
- ◆ Adult dental care

# Additional Years a 20 Year-Old is Expected to Live in Good/Very Good/Excellent Health

Years of Healthy Life Expected at Age 20 (2006-2007 combined)





# Island County Key Health Indicators

Developed by CHAB/ICPH, staffed by ICPH Assessment & Healthy Communities staff

Purpose: To develop key indicators of health for Island County to:

- Monitor trends in health status
- Identify emerging issues
- Raise awareness of health status
- Focus CHAB planning and actions
- Make policy, program & project recommendations to BOH, ICHD, and community partners



# Why CHAB Developed a Key Indicator Report?

- Measures local trends (specific geographic area)
- ◆ Provide snapshots of community's health & quality of life
- ◆ Help decision-makers understand key issues and set priorities
- ◆ Increase community members' understanding of issues
- ◆ Mobilize resources
- ◆ Fosters collaborations to address health issues
- ◆ Targets community interventions with community-level outcomes (evaluation)
- ◆ Identify where additional effort or resources may be needed
- ◆ Create and work toward a community vision for health



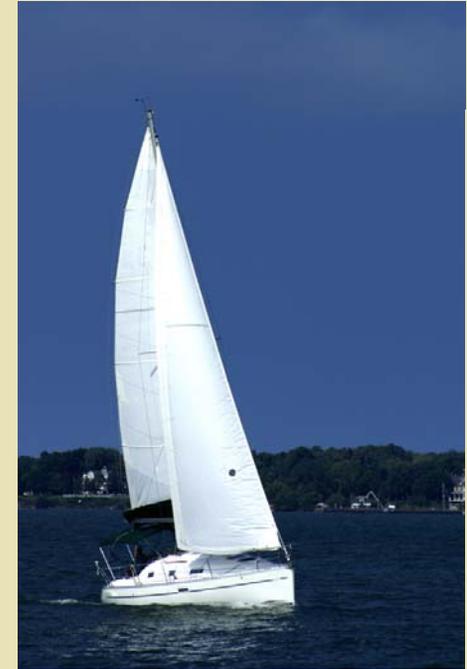
# Indicator Characteristics

- Ideally we wanted data-based indicators
  - **To come from a reputable data source**
  - **Actual local data**
- Data is available over time to use as a baseline, monitor trends, set targets/outcomes, and track progress
- Comparable to the nation and the state
- Associated with a HP 2010 goal; another national or state-level goal; association goal (e.g. AAP); or created our own goal(s)



# Criteria for Indicators

- ◆ Simple
- ◆ Understandable
- ◆ Acceptable
- ◆ Measurable
- ◆ Defensible
  
- ◆ Others include: validity, availability & timeliness, stability & reliability, responsiveness, policy relevance, representativeness





# Selection of Key Health Issues

Is this something Island County (ICHD or BOH) could work on? Is an intervention currently in place in the county? How widespread is it? What has been the impact of the intervention to-date? Are there other national or state interventions in place?

What are the known community-based interventions for this issue? How effective are they considered to be (i.e. smoking cessation programs 25%)? Do they impact population-based change or individual behavior changes?

Are there effective health education/social marketing programs to combat this issue?

Are there policy recommendations we could make to combat this issue?

Rate known interventions on whether they will make major improvements in health and whether the interventions will be difficult or easy to accomplish?

Are there other community partners who could take the lead in addressing this issue?



# In the beginning...

- Used the 13 categories from *The Health of Island County*
- Determined 2-4 indicators per module to represent the module or specific conditions of interest (issue identified earlier, something we wanted to highlight)
- Determined whether good data on the selected indicator was available and made recommendations on future data collection
- Compiled and synthesized the data into the first Island County Key Health Indicator report (2005, used 2000 BRFSS data and 1996 as baseline)



# Scoring of Key Indicators

- Compared local data to state and nation
- Reviewed data trends, using 1996 as a baseline when possible, then 2000 and 2005/2006
- Assessed how we were meeting Healthy People 2010 goals (or other national/ state goals or our own goal)
- $\text{State} + \text{Nation} / 2 + \text{Trend} + \text{Goal}$



# How Individual KHI Scored?

- ◆ **Best Key Health Indicator Score (+)**
  - ◆ Motor Vehicle Accidents
  - ◆ Smoking rates among youth
  - ◆ Adults who perform regular, preferable daily, moderate physical activity 30 minutes day
- ◆ **Worst Key Health Indicators (-3)**
  - ◆ Children who receive all vaccines that have been recommended for universal administration by at least 5 years or school entrance
  - ◆ Falls (age-adjusted mortality rates)
  - ◆ Firearms (home with loaded and unlocked firearms)
  - ◆ Non-institutionalized adults > 65 immunized for flu
  - ◆ Prenatal care access in the first trimester



# Health Module Composite Score

For each health module/topic we combined the indicator scores to come up with a measure to determine whether we are Healthy (**Green**), need to have Caution (**Yellow**), or are in a Critical (**Red**) range.

Formula:

**State+Nation/2+Trend+Goal/#of  
Indicators**

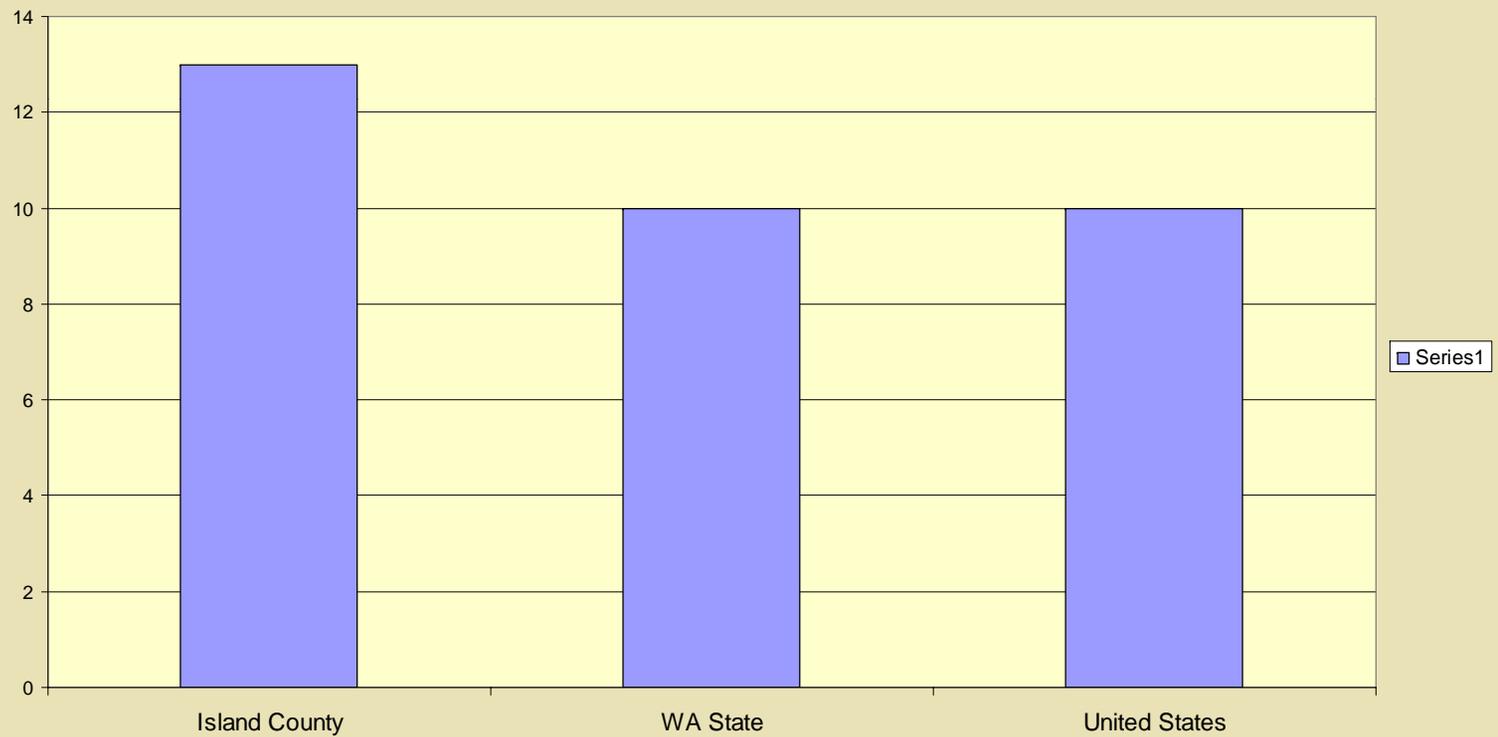
# Scoring by Module

Topic	2005	2008
Sociodemographic/Economic	Yellow	Green ↑
Quality of Life/Social Context	Green	Green ↔
General Health Status	Green	Red ↓
Health Access, Satisfaction, Care	Red	Red ↔
Environmental Health	Green	
Unintentional Injury	Red	Red ↔
Communicable Disease	Red	Red ↔
Chronic Disease & Physical Activity	Yellow	Green ↑
Maternal-Child Health	Red	
Oral Health	Green	Green ↔
Mental Health	Red	Yellow ↑
Substance Use	Yellow	Green ↑
Crime & Violence	Yellow	
Emergency Preparedness	N/A	Yellow



# Percent of Women Giving Birth who Smoked any Time during Pregnancy

Women Smoking During Pregnancy



# Example: Maternal cigarette smoking



**Plan** – choose an indicator needing improvement and determine how to improve it

**Do** – implement the strategies to address the barriers

**Use the data to implement change**

Decrease the number of women who smoke during pregnancy

**Plan a change**

Make smoking cessation resources available to all pregnant women

**Do a change**

Every woman receiving prenatal care will be offered smoking cessation help

**Study the change**

Less women are smoking during pregnancy

**Act on change as needed**

Expand the smoking cessation to women before pregnancy

**Act** – modify the plan as needed to see continued improvement in the indicator

**Study** – the results to see if the intended plan is working



# Next Steps

- ◆ Start to solicit for funding partners for the IC BRFSS
- ◆ Reexamination of past KHI and recommendations for changes (CHAB), includes reviewing how we compare to state and nation and IC trends
- ◆ Continued examination of previously identified issues—how to encourage first trimester prenatal care (private vs public insurance?), pregnant women smoking, and community partner engagement
- ◆ ICPH Management Team review findings relative to our strategic plan, program planning and next budget



# BRFSS

- ◆ Community partners value and fund BRFSS (\$29K raised for 2006 Island County BRFSS)
- ◆ Partners active in questionnaire development, assessment, prioritizing, and action

## THANKS BRFSS FUNDERS!

- ◆ United Way of Island County
- ◆ Whidbey General Hospital
- ◆ Whidbey Island Hospital Foundation
- ◆ Oral Health Coalition
- ◆ Island County Health Department
- ◆ IC/Stanwood Community Network
- ◆ Skagit Valley Hospital



# Summary & Questions

- ◆ Importance of understanding background of indicators
- ◆ Thank you for your continued support of Public Health and your dedication and commitment to making Island County a safer and healthier place to live!
- ◆ This presentation helps meet Public Health Standards 😊
  - Standards 1.1B, 1.2B, 1.3B, 3.2B, 4.1B, 4.2B, 5.1B, 7.1B

# Our Job: Making the Healthy Choice the Easy Choice !

