

**Coordinating National & State  
PFD Observation Studies**

**Thomas W. Mangione, Ph.D.**

**Heather Parsons, MA**

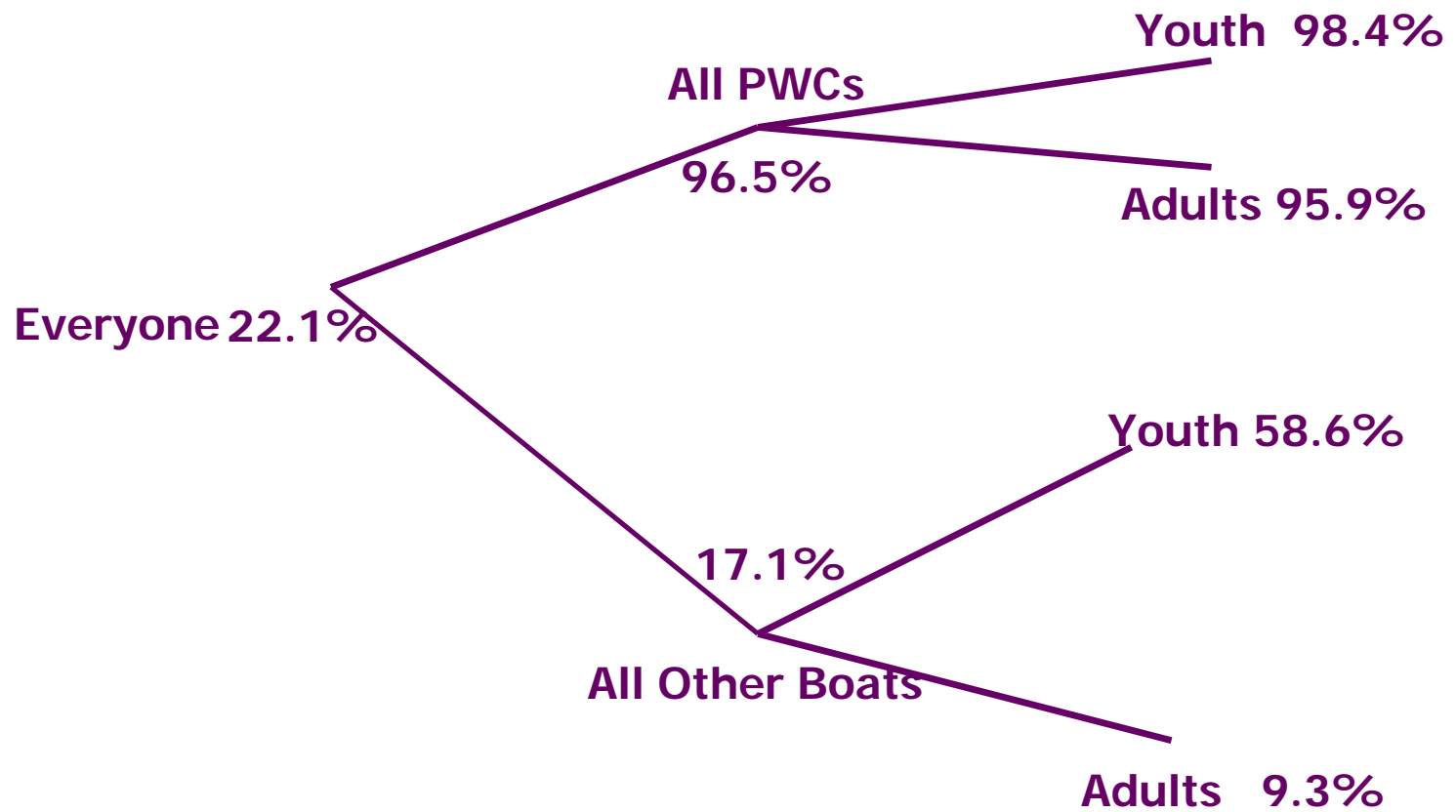
**JSI Research & Training Institute, Inc.**

**NASBLA 2007 Conference**

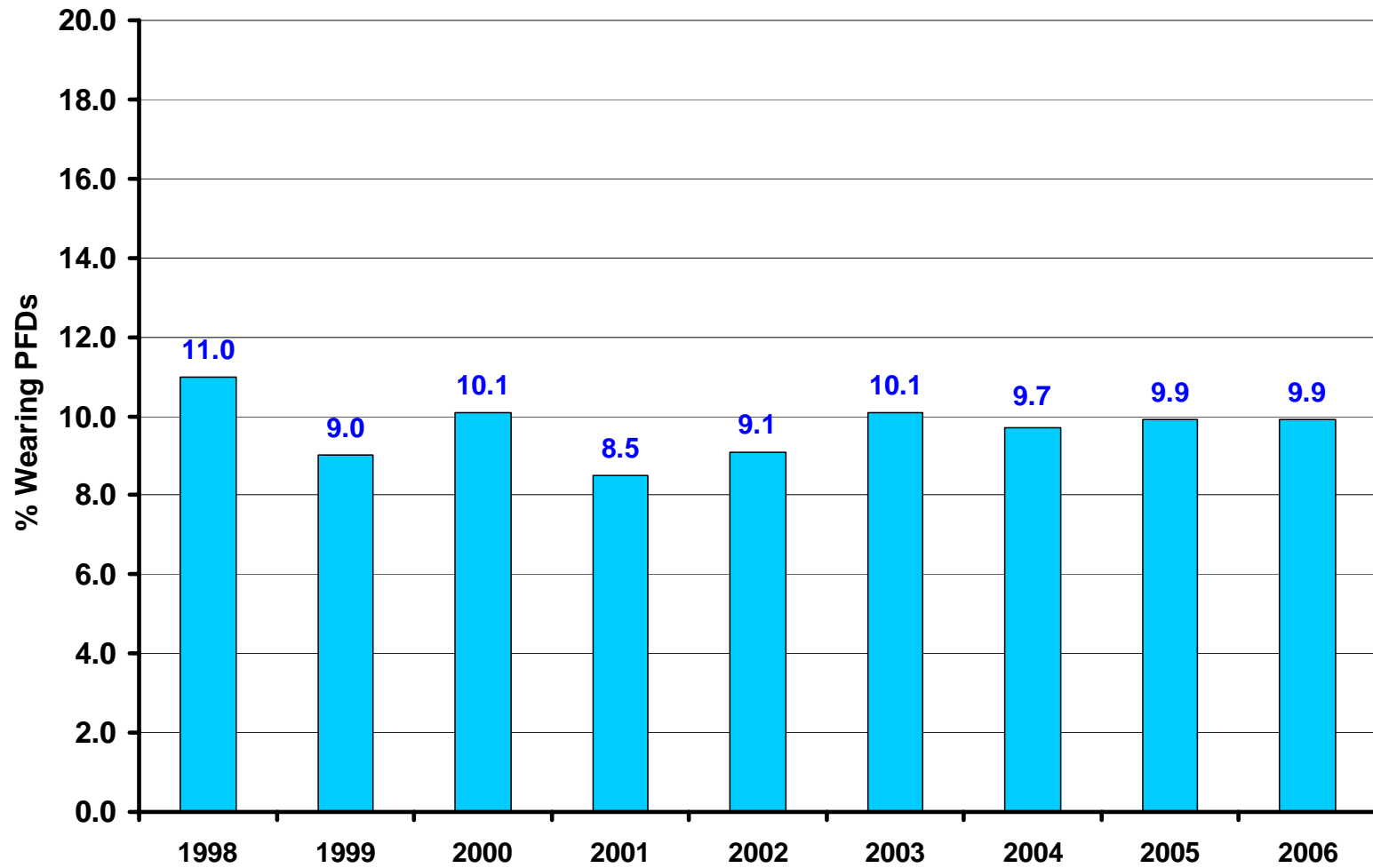
**Burlington, Vermont**

**September 10, 2007**

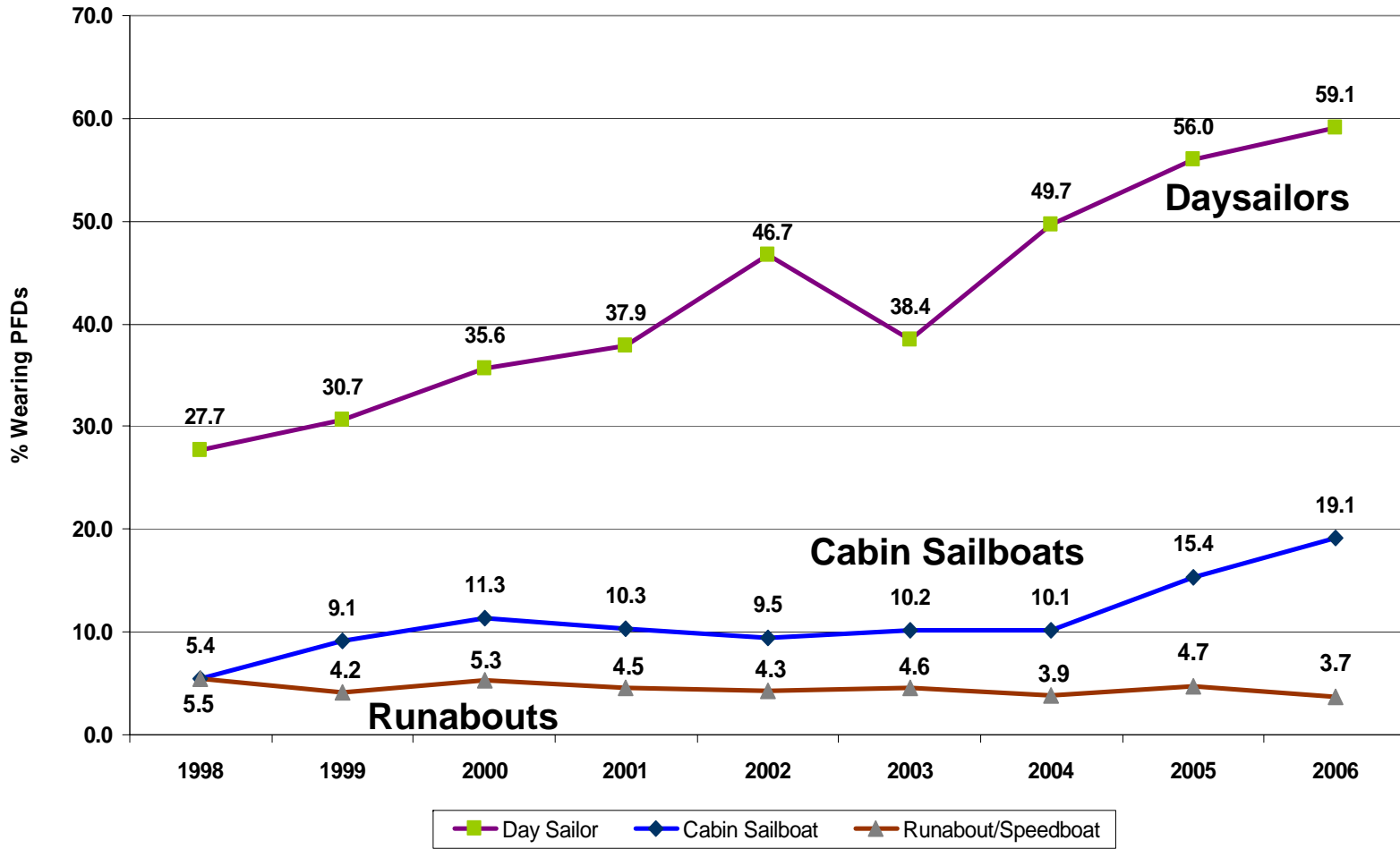
# Overall PFD Wear Rates



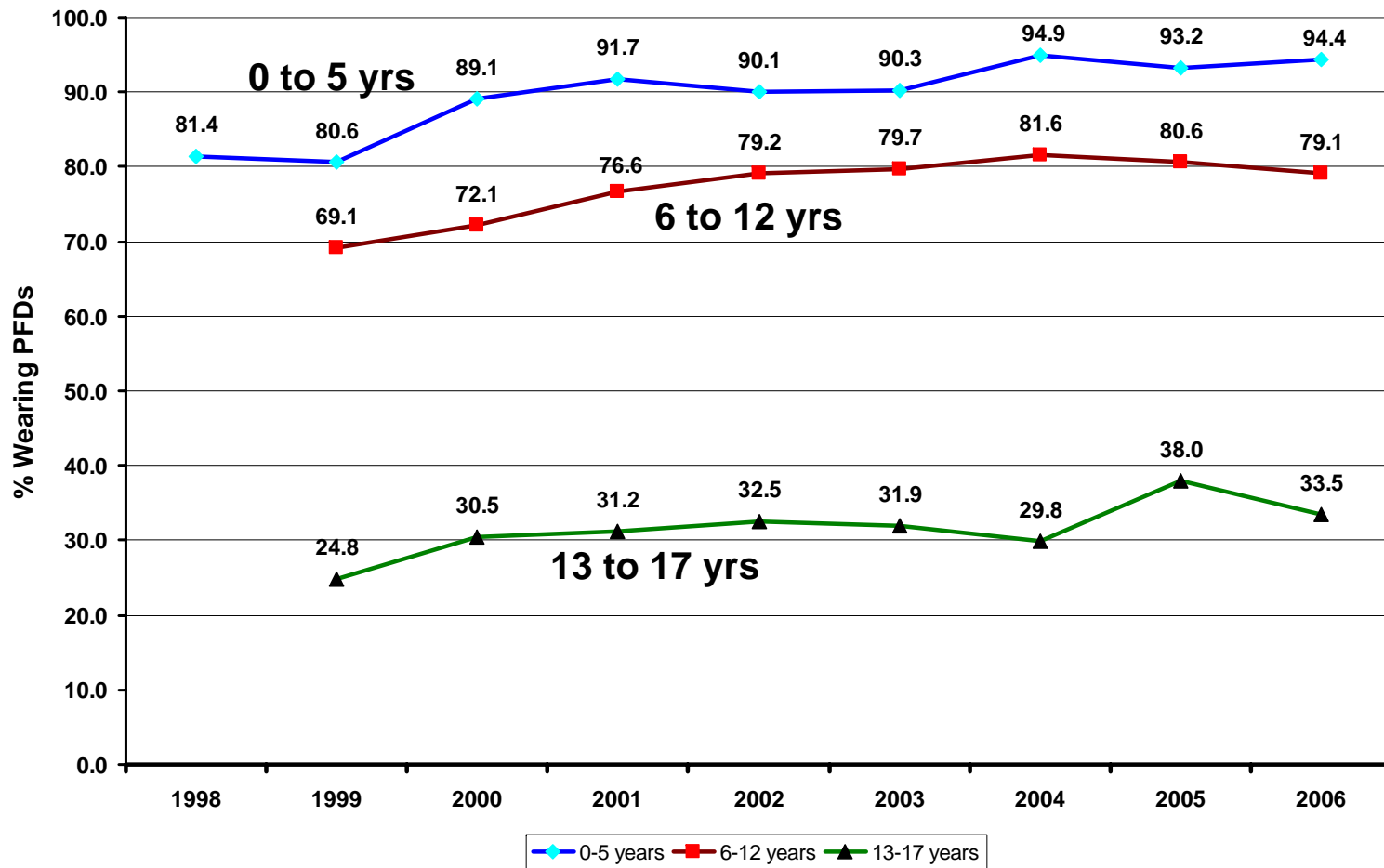
## Trends in Adult PFD Wear Rates



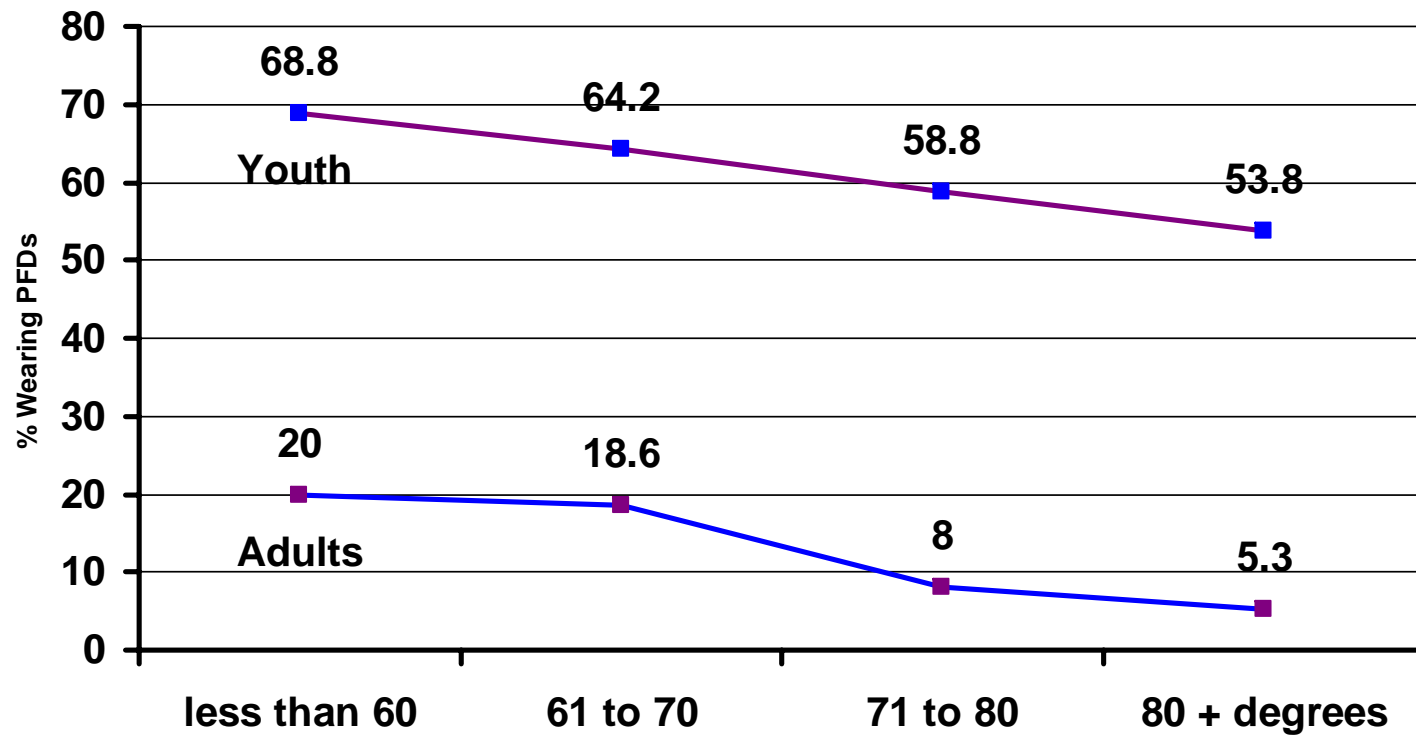
### PFD Wear Rates on Day Sailors, Cabin Sailboats, & Runabouts for Adults 1998-2006



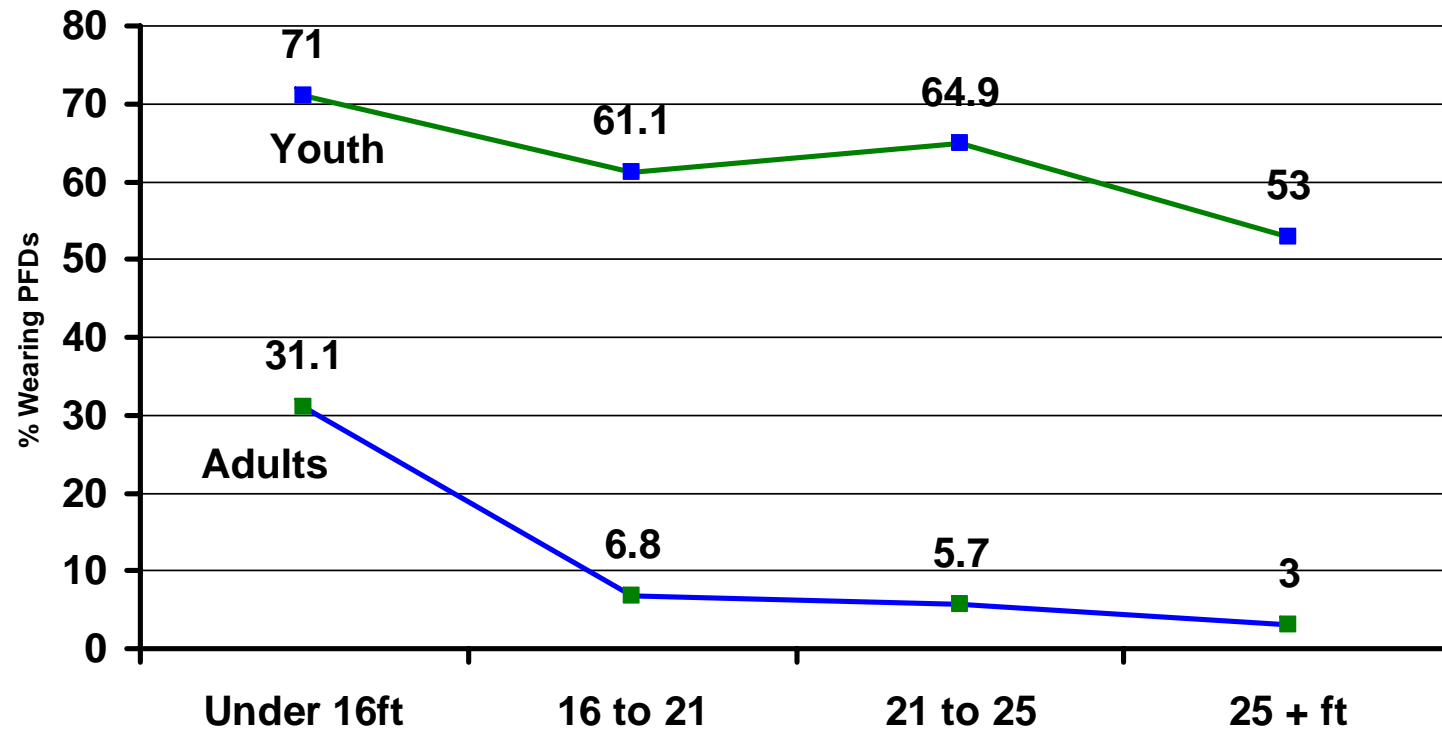
### PFD Wear Rates for Youth, 1998-2006



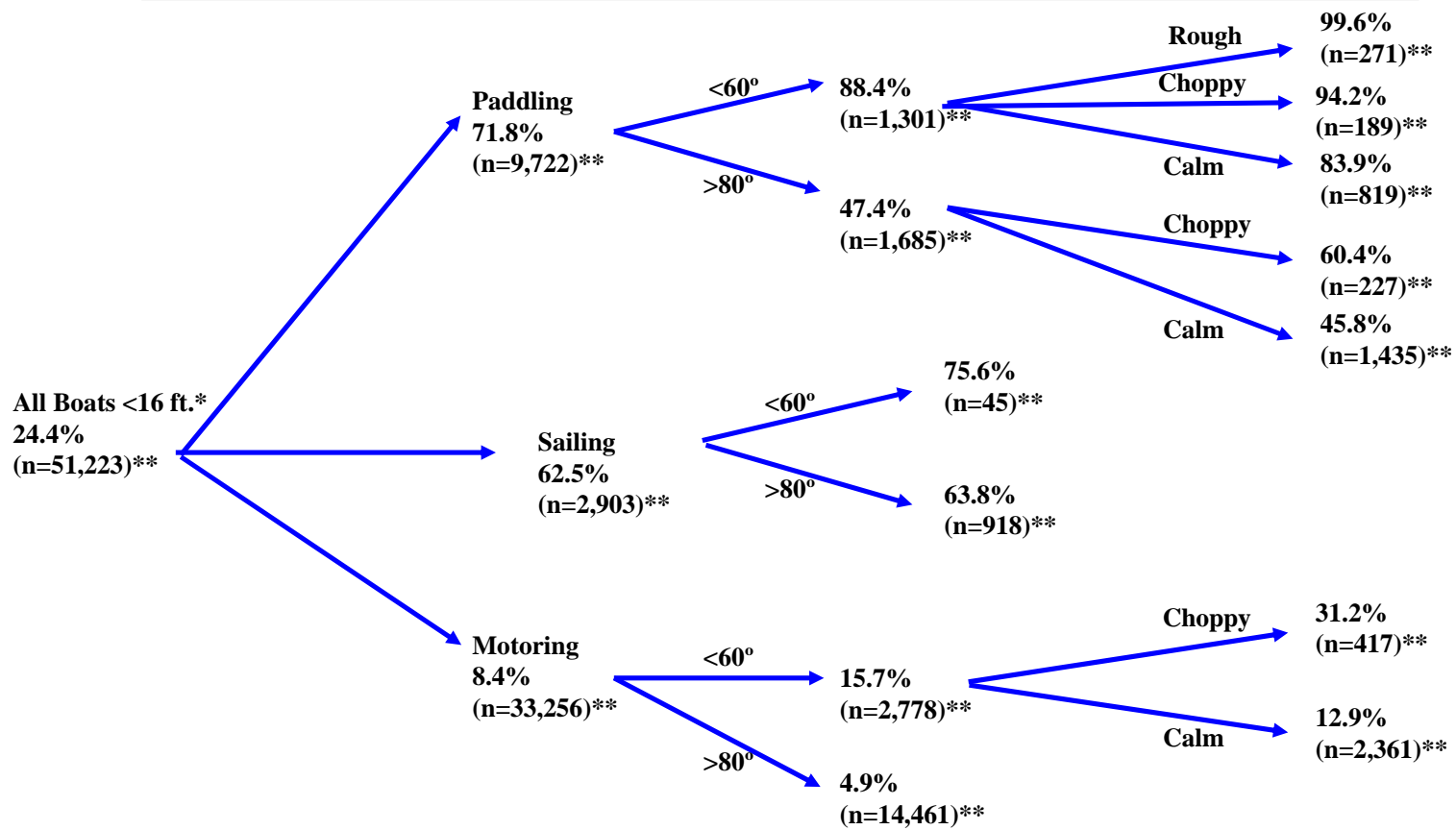
# PFD Wear Rates by Water Temperature



# PFD Wear Rates by Boat Size



## Life Jacket Wear by Adults on Boats Under 16 Feet\* Effects of Type of Operation, Water Temperature and Wave Height 1998-2006 Data



\* Includes boats <16 ft., excluding PWC and adults who are waterskiing

\*\* Indicates the number of adults (18 or older) observed.

## **Why Should Individual States Supplement the National Observation Findings?**

- Provide information to states/territories not in national sample
- Allow for more detailed analyses within a state
- Measure use in different seasons of the year
- Measure trends for subgroups
- Measure use in a greater variety of water venues

## **What Is Necessary for Synchronization**

- **Measure same information**
- **Use same procedures**
- **Ensure that data analyst understands national study analysis methods**
- **Consult with JSI on implementation plans**

## **What Information is Measured**

- **Viewing Site Characteristics**
  - **Careful documentation of exact viewing location**
  - **Water & Air Temperature**
  - **Type of Body of Water**
  - **Date & Time of Observations**
  - **Weather (visibility, wind speed)**
  - **Water Conditions (current, wave height)**

## What Information is Measured

- **Boat Characteristics**
  - Boat Type
  - Size
  - Engine Type (None, Outboard, Sterndrive/Inboard)
  - Movement (Motoring, Sailing, Paddling, Drifting, Anchored)
  - Activity (Fishing, Intent to Fish, Water skiing, Whitewater, Pleasure, Other)

## What Information is Measured

- **Person Characteristics**
  - Gender
  - Age (0-5, 6-12, 13-17, 18-64, 65+ )
  - Operator or Passenger
  - Wearing PFD
  - Type of PFD (traditional, inflatable)

## Key Procedures

- **Selection of Sites**
  - Variety of water venues, representing variety of boating venues, high accident areas, high volume, low volume/remote areas
- **Method of Observation**
  - On shore, 2 person teams, high powered image stabilizing binoculars
- **Processing Data**
  - Scanning forms, data cleaning, multilevel data structure
- **Merging information with National Data**
  - JSI will provide its state data in return for copy of state's

## **JSI's Commitment**

- **Willing to consult on implementation issues**
- **Willing to provide form masters**
- **Willing to conduct trainings for supervisory staff or observers (for small fee)**
- **Willing to process data (for small fee)**

## **A “Goody” Packet**

- **A “packet” for each state and territory**
- **JSI data tables for each state in study showing state PFD wear rates by major boat type, age, and years**
- **Each state/territory gets comparative national data on wear rates by major boat type, age and years**
- **Observation Guide**
- **Forms**

# JSI Observed States

- Alaska
- Arizona
- California
- Colorado
- Florida
- Georgia
- Hawaii
- Kansas
- Louisiana
- Maine
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Missouri
- New York
- North Carolina
- Oklahoma
- Oregon
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- Utah
- Vermont
- Virginia
- Washington
- Wisconsin
- Wyoming