

# Selecting, Implementing, and Evaluating Environmental and Population-Based Prevention Strategies

## How To Use Science in Practice

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# Goals

- Goal 1: Learn about population-based prevention approaches and “environmental strategies”
- Goal 2: Learn what local prevention need to do in assessing, implementing, and evaluating environmental strategies, i.e., strategic planning.
- Goal 3: Learn how to evaluate environmental strategies

# What are some popular beliefs about environmental prevention strategies?

1. Environmental strategies are difficult to implement. Too costly.
2. Environmental strategies will not work in our community.
3. We are already doing environmental strategies.
4. ATOD abuse is more an individual problem and environmental strategies are not relevant.
5. Environmental strategies can not be evaluated.
6. Environmental strategies do not work with children and pre-teen youth.

# Biggest Current Mistakes in Prevention?

- Doing many things that have little or no effect....
- “Not incorporating best prevention research into assessment, planning, and evaluation”

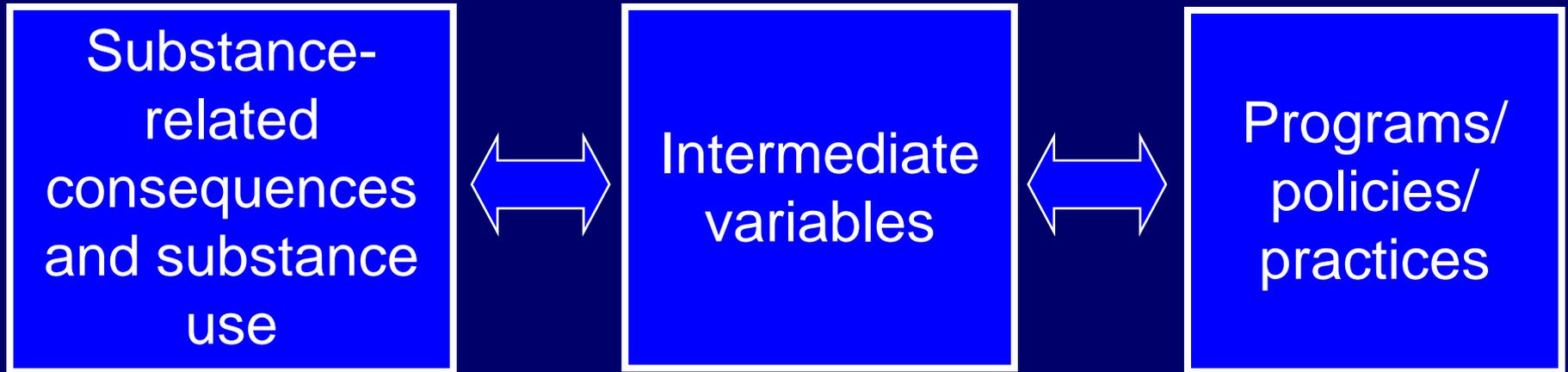
# Current Challenges and Opportunities for Prevention

- Public Requirement of Outcomes  
Recommendation: Develop outcome data to show results
- Health Care Reform  
Recommendation: Take advantage of emphasis on prevention and outcomes in Health Care Reform documentation
- State Budget Cutbacks  
Recommendation: Demonstrate cost-effectiveness

# Just What *Is* Environmental Prevention, Anyway?

- Environmental strategies in a community seek:
  1. To bring about system-level change (including physical space, local community policies, availability of drugs and alcohol, etc.) in order
  2. To reduce substance abuse problems at the population level. That is **Public Health**.
  
- *Both conditions must be met.*

# Outcomes-Based Prevention



## Implementing the Strategic Prevention Framework

Planning, Monitoring, Evaluation, and Replanning

**States are familiar with logic models:**

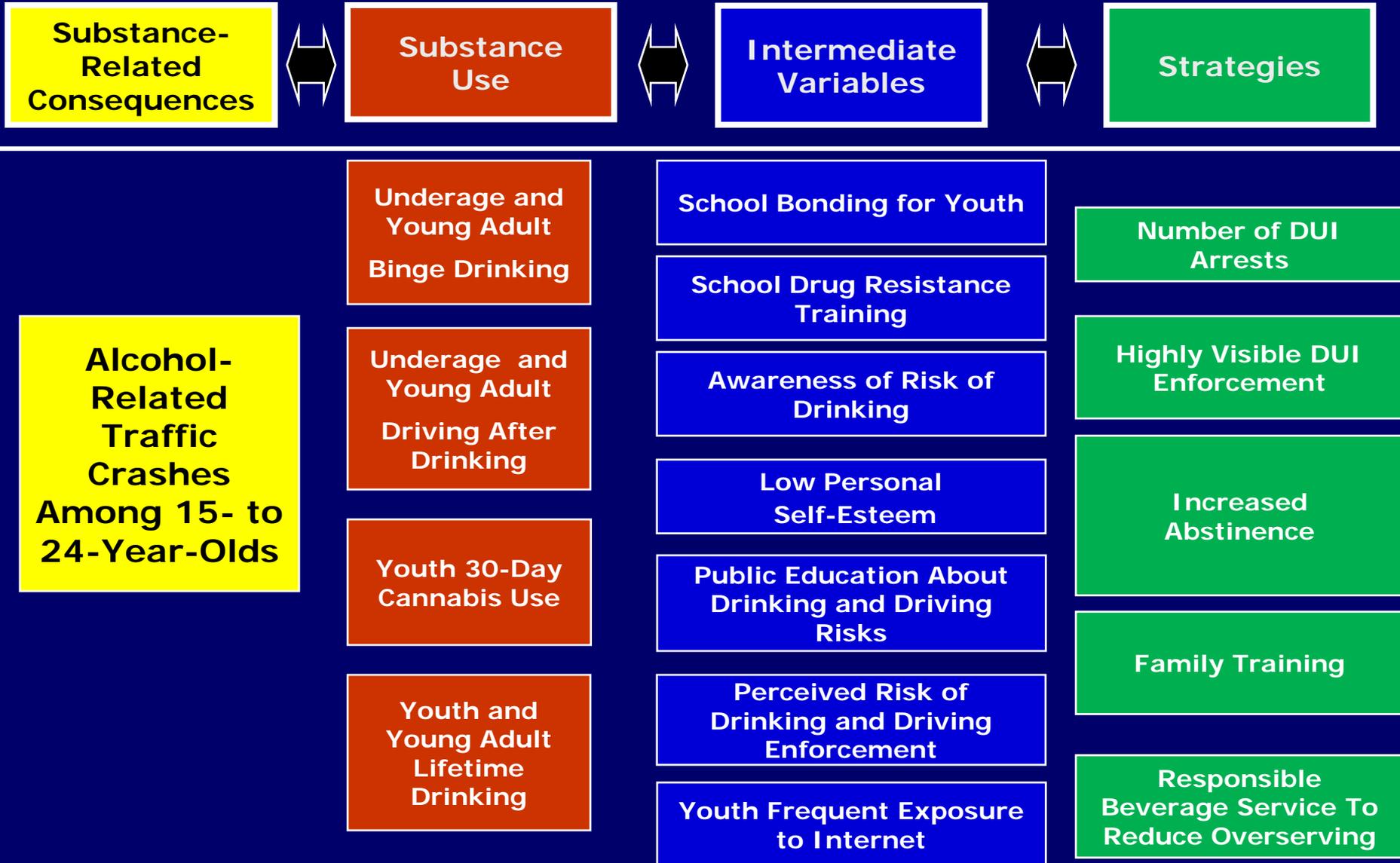
*Tools for assessing, planning, implementing,  
and evaluating prevention.*

# Logic models are composed of:

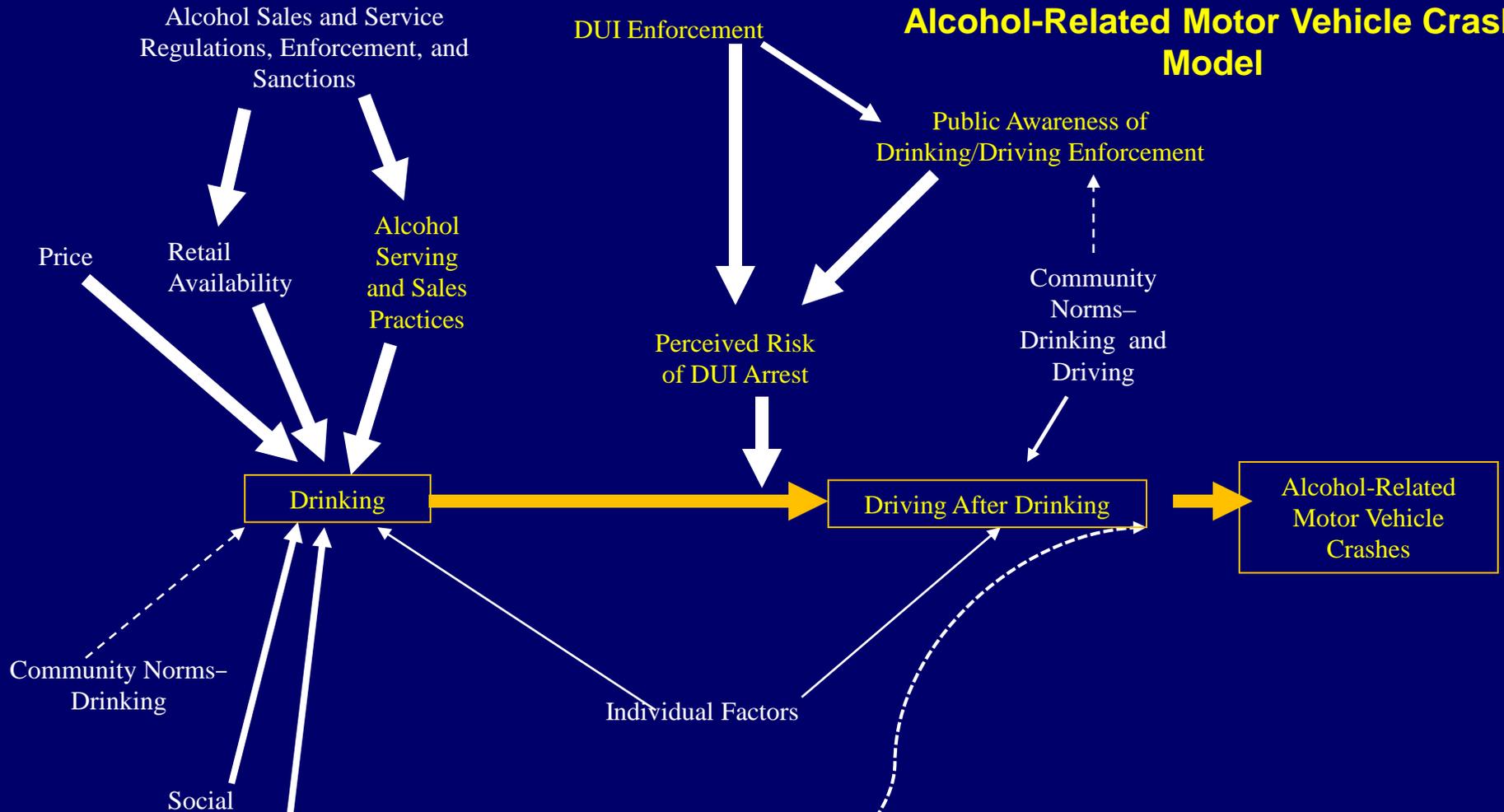
- 1. Prevention goal, *i.e.*, specific ATOD outcome to be reduced or changed**
- 2. Intermediate variables or factors, *which need to be changed (or considered) in order to achieve the goal***
- 3. Intervention strategies *to change intermediate variables.***

# Example Logic Model for Substance Abuse Prevention

*What is wrong with this picture?*



# Alcohol-Related Motor Vehicle Crash Model



## Research Evidence

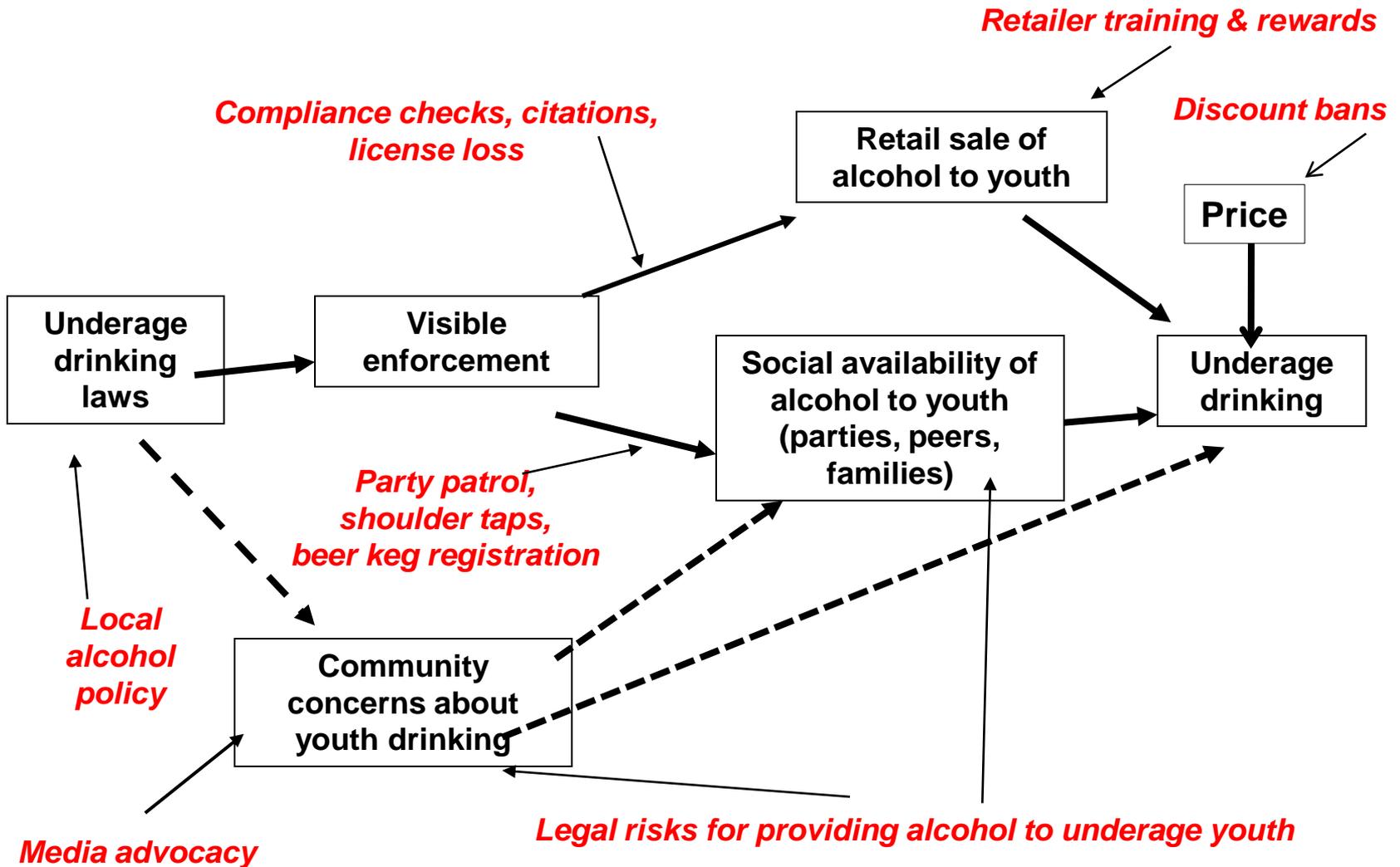
-  Strong Relationship
-  Moderate Relationship
-  Minor Relationship
-  Little Research Evidence but Logical Relationship

# Review of Research Evidence for Logic Models

[WWW.PIRE.org](http://WWW.PIRE.org)

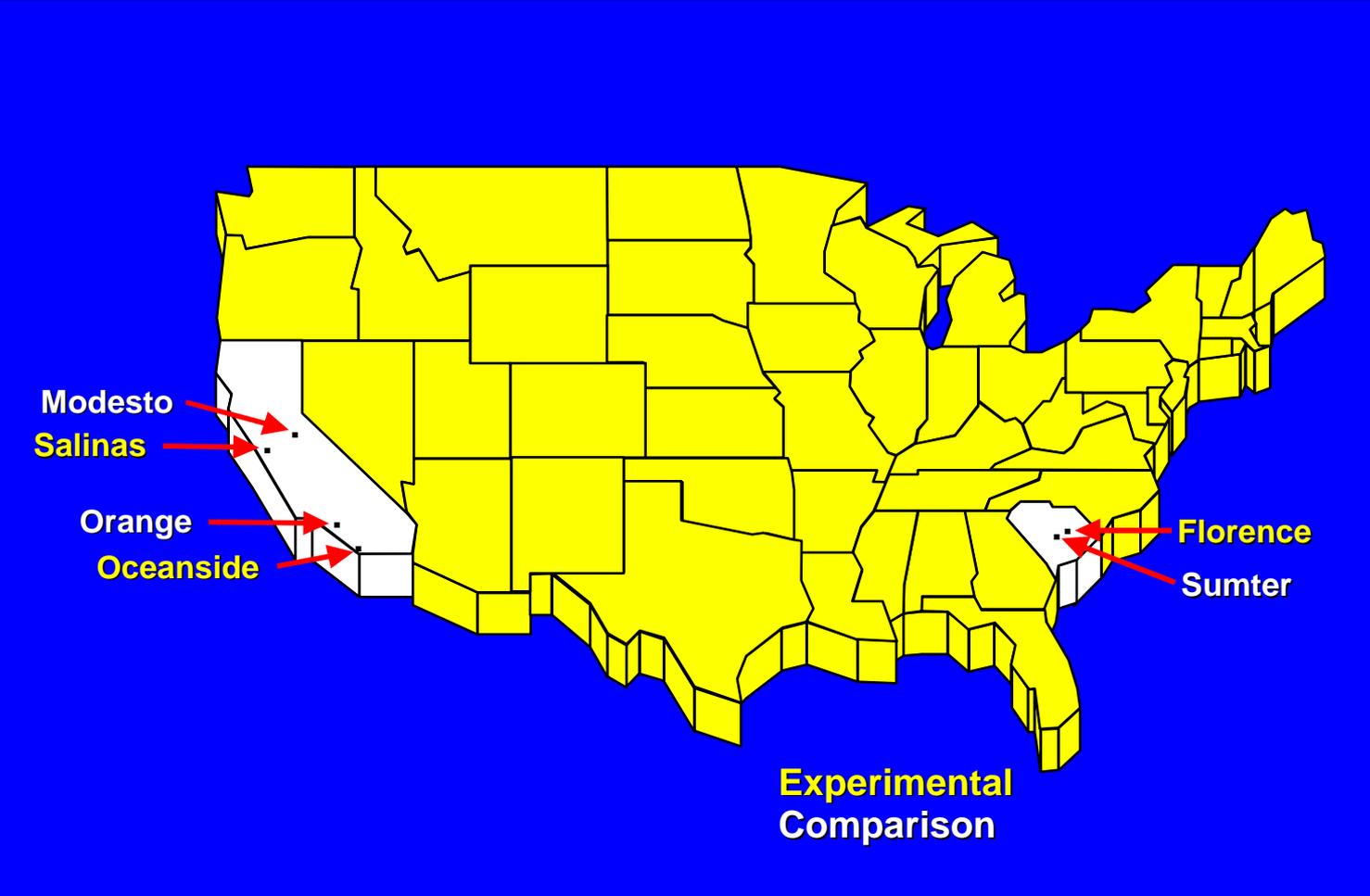
Under “Featured Websites” to “Logic Models  
for the Prevention of Alcohol, Tobacco, and  
Other Drug Problems,”  
select tab in right-hand column.

# Underage Drinking Logic Model

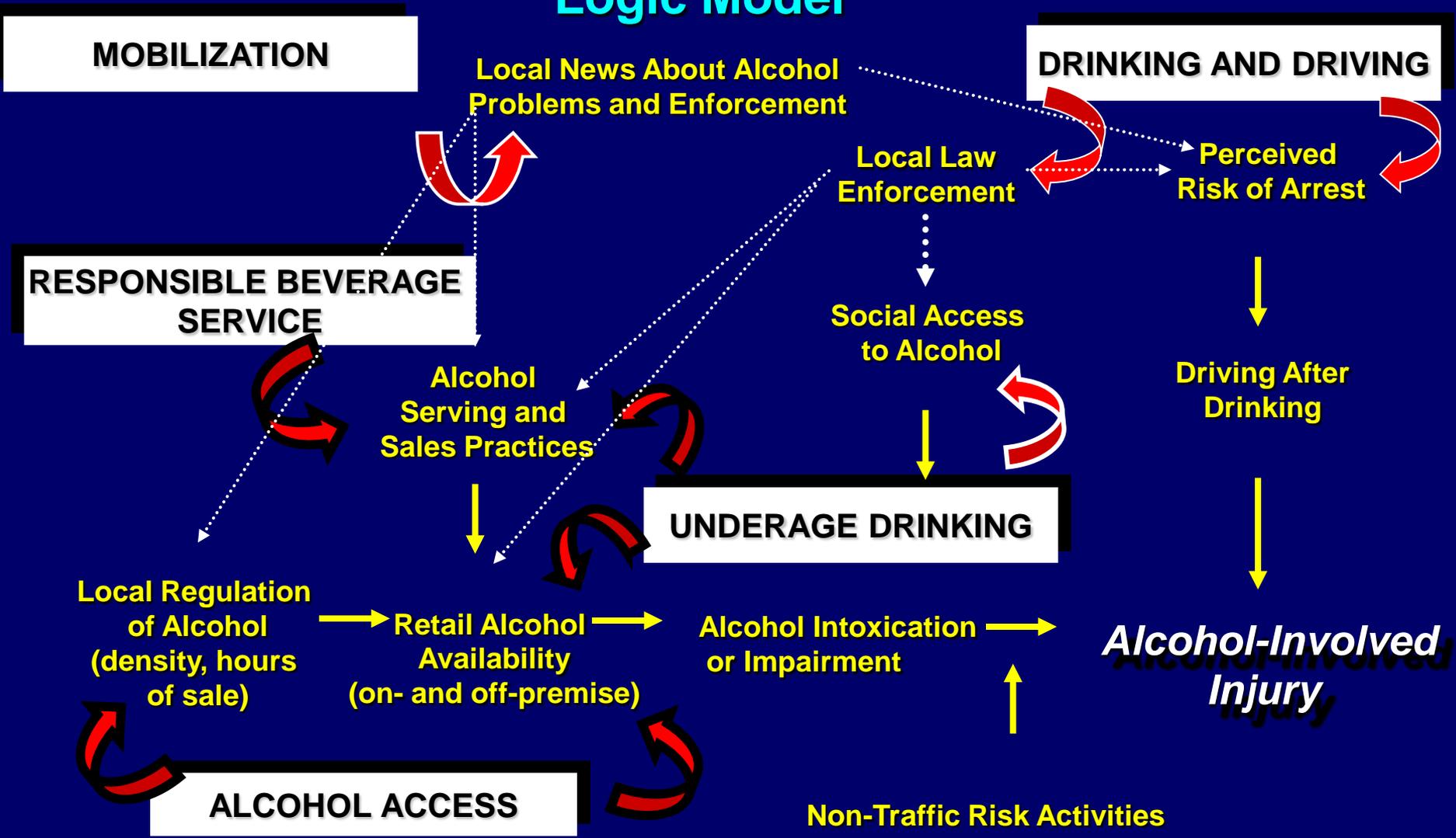


# **Examples of Effective Local Prevention Projects Utilizing Environmental Strategies**

# National Community Trial To Prevent Alcohol-Involved Trauma



# Alcohol-Involved Trauma at the Community Level: Logic Model



# Restaurant Service



83% of Salinas, CA residents believe an alcohol server should take steps to prevent a customer from getting drunk



**Highly visible and increased  
actual drinking and driving  
enforcement**

Section

**B**

Sunday, February 27, 1994

The Blade-Citizen

# North County

B-2 Blade-Citizen

Sunday, February 27, 1994

## Team increases DUI arrests in Oceanside

OCEANSIDE — The Police Department's new focus on catching drunken drivers has yielded immediate results in Oceanside, according to a press release.

In January of this year, 111 drivers were arrested for driving under the influence, the release stated.

During the same month in 1993, only 56 were arrested.

There were 57 arrested in January 1992.

Oceanside police, using the zero-tolerance law that took effect Jan. 1, also have seized the licenses of eight drivers under 21 years old allegedly caught with alcohol on their breath.

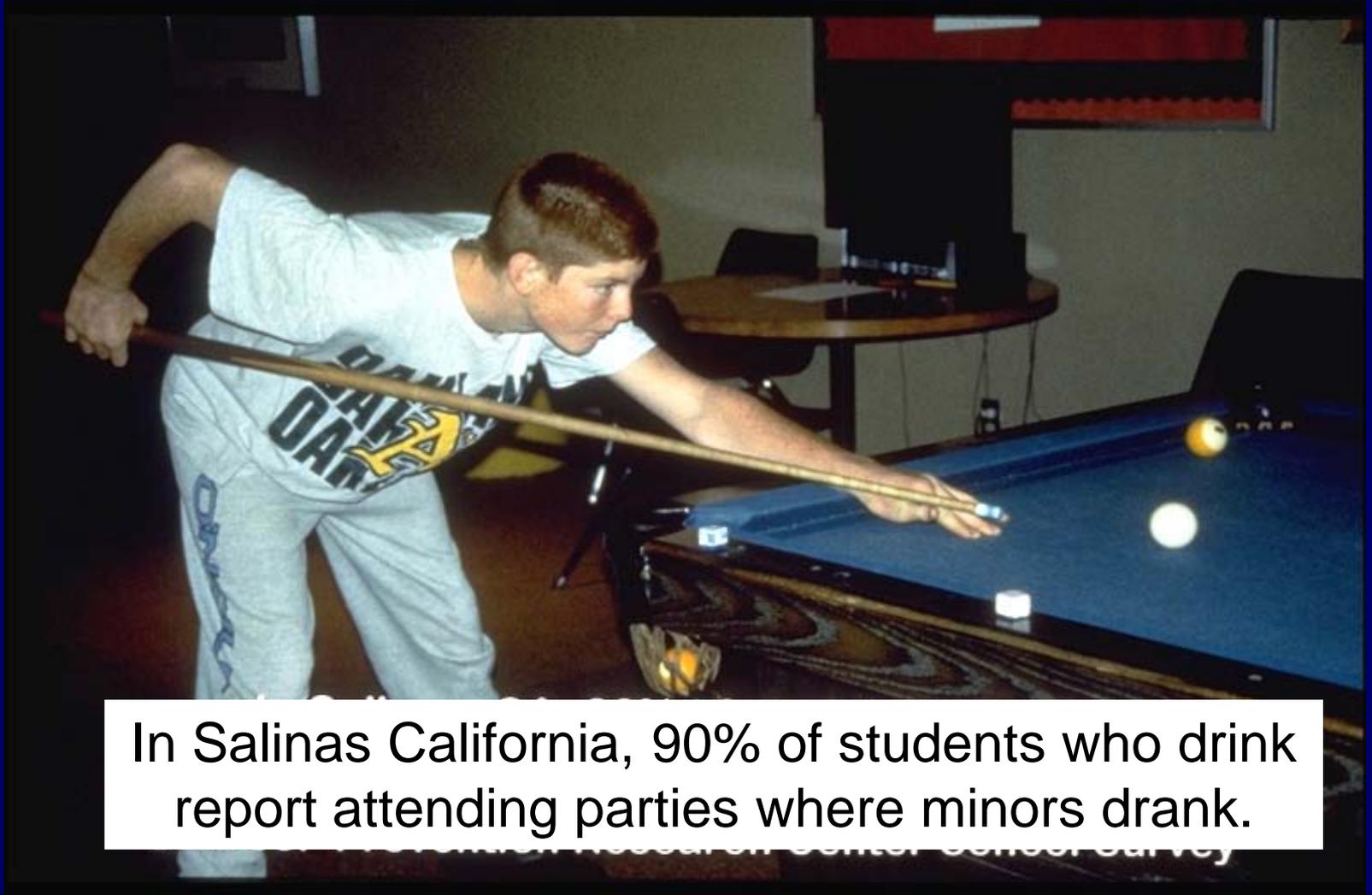
Under the new state law, police

can revoke for one year the license of any driver under 21 caught behind the wheel with a 0.01 blood alcohol level or higher. The legal limit for drivers 21 or over is 0.08.

Since two Oceanside officers were assigned in November to hunt for drunken drivers full-time, the average number of arrests per day for driving under the influence has increased from 1.71 to 2.53, the release stated.

"We're just getting started," Officer Ken Cowing said in the release. "For the safety of our citizens and all who drive on our streets, it's important that people realize that impaired driving will definitely not be tolerated in Oceanside."

# Underage Drinking



In Salinas California, 90% of students who drink report attending parties where minors drank.

# Intermediate Variable and Strategy Data



# North County

Friday, December 10, 1993

Blade-Citizen B-3

## Underage drinkers targeted

By David Hicks  
Staff Writer

OCEANSIDE — Have a drink, lose your license for a year.

After Jan. 1, it will be that simple for drivers under the age of 21 who are caught with any alcohol on their breath.

The state calls it "Zero Tolerance." The goal is to cut down on injuries and fatalities caused by drunken drivers, and a good 10 percent of those are the fault of youths who are under the legal drinking age, authorities said.

"Legally, they're not supposed to have access to alcohol in the first place," said George Gaumont of the Oceanside Substance Abuse Prevention Coalition, which plans to start a major campaign to publicize the new law with a big splash today at El Camino High School.

"This law is a lot stronger. It has a lot more teeth than the DUI laws do now," Gaumont added.

Under the new state law that will take effect on the first of the year, officers carrying portable Breathalyzers will immediately seize the license of any driver under 21 caught behind the wheel with a blood-alcohol level of 0.01 or higher. Current law makes it illegal to drive with a 0.08 blood-alcohol level or higher.

The youth will lose his or her license for one year, said California Department of Motor Vehicles spokesman Evan Nossoff. Once the officer takes the license, he will

give the driver a 30-day temporary driving permit, then mail the original to the DMV. The driver will have that month to appeal the suspension; otherwise, officials will revoke driving privileges for a year, Nossoff said.

All the paperwork will be handled by the DMV, with the suspect never going to court, Nossoff said.

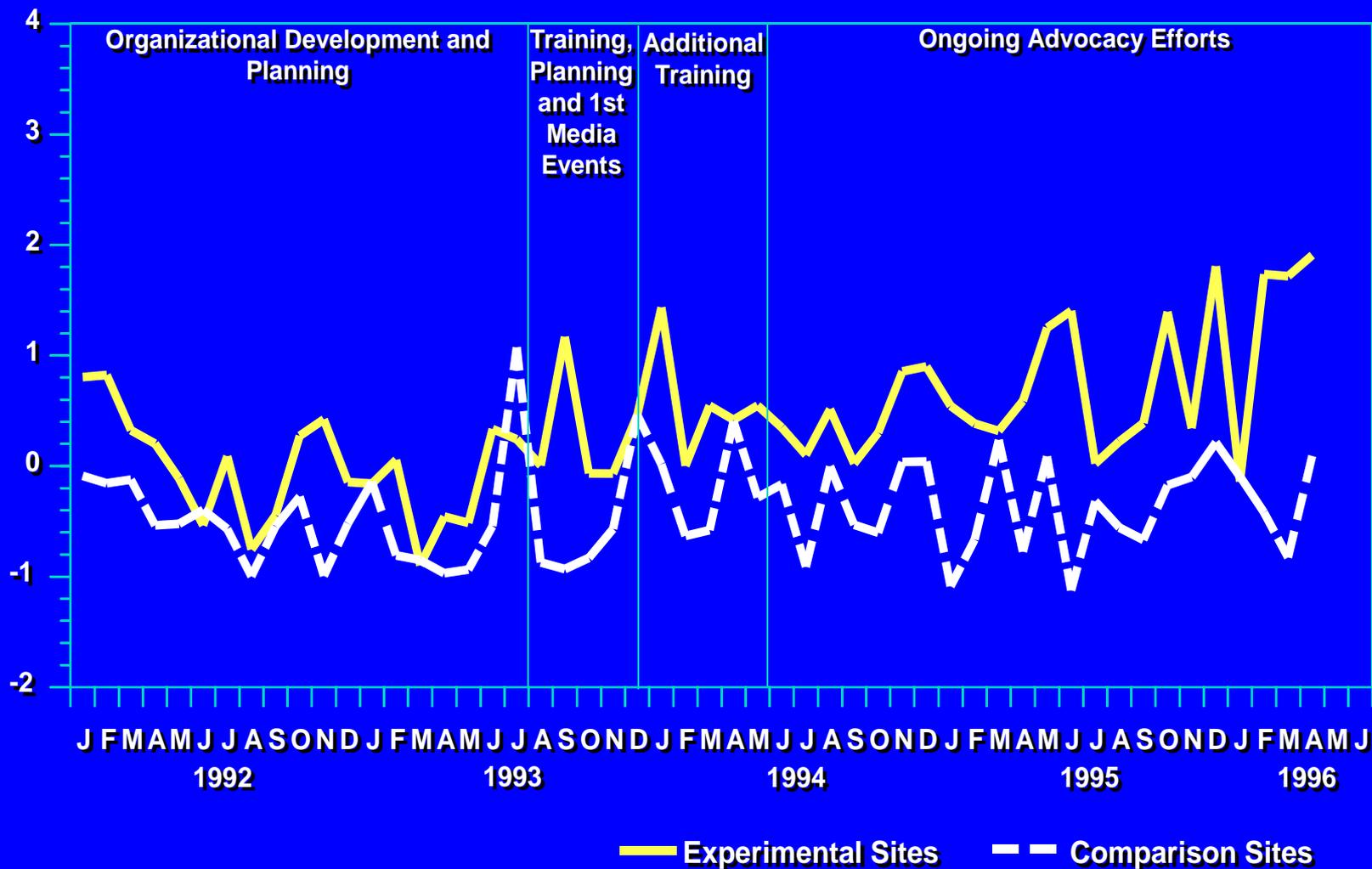
"We're less interested in whose license gets yanked than that teenagers draw a consequence between drinking and driving," he said. "We're not looking to increase arrests; we're hoping that it reduces fatalities, injuries and accidents."

In California during 1992, about 3,100 drunken drivers under 21 were involved in injury accidents, according to statistics released by the California Highway Patrol. Almost 200 of those youths died, statistics showed.

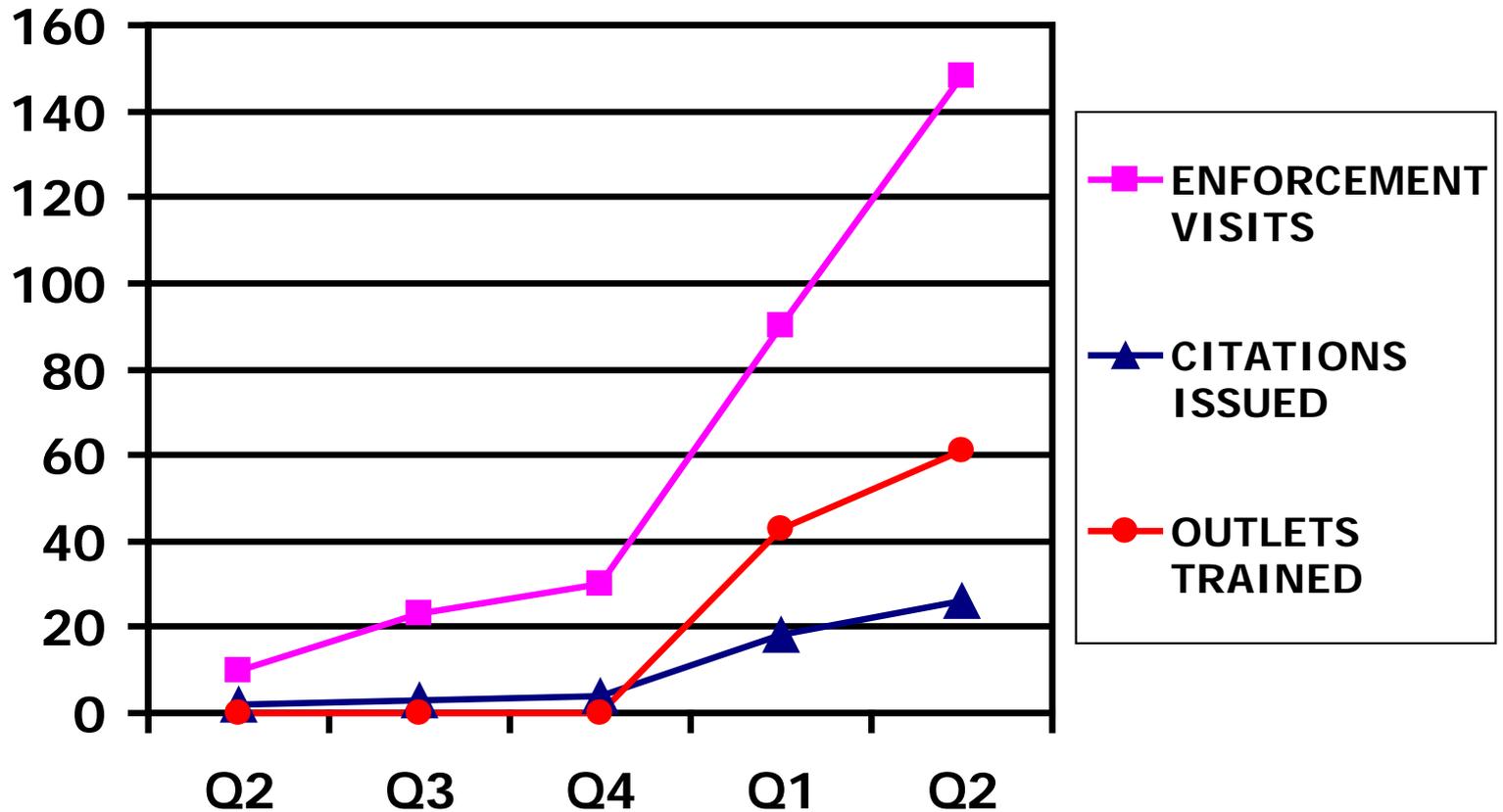
Another statistic indicated a total of 325 people under 21 were killed in alcohol-related vehicle accidents in 1992, and another 10,435 were injured.

"The No. 1 killer of teens in the United States is alcohol-related highway deaths," Oceanside police Capt. Mike Poehlman said. "If you're under 21, you cannot possess or drink alcohol. Anyone who is doing that and driving is going to lose their driving privilege."

# Newspaper Factor Score - Local Stories



# Underage Alcohol Prevention Activities

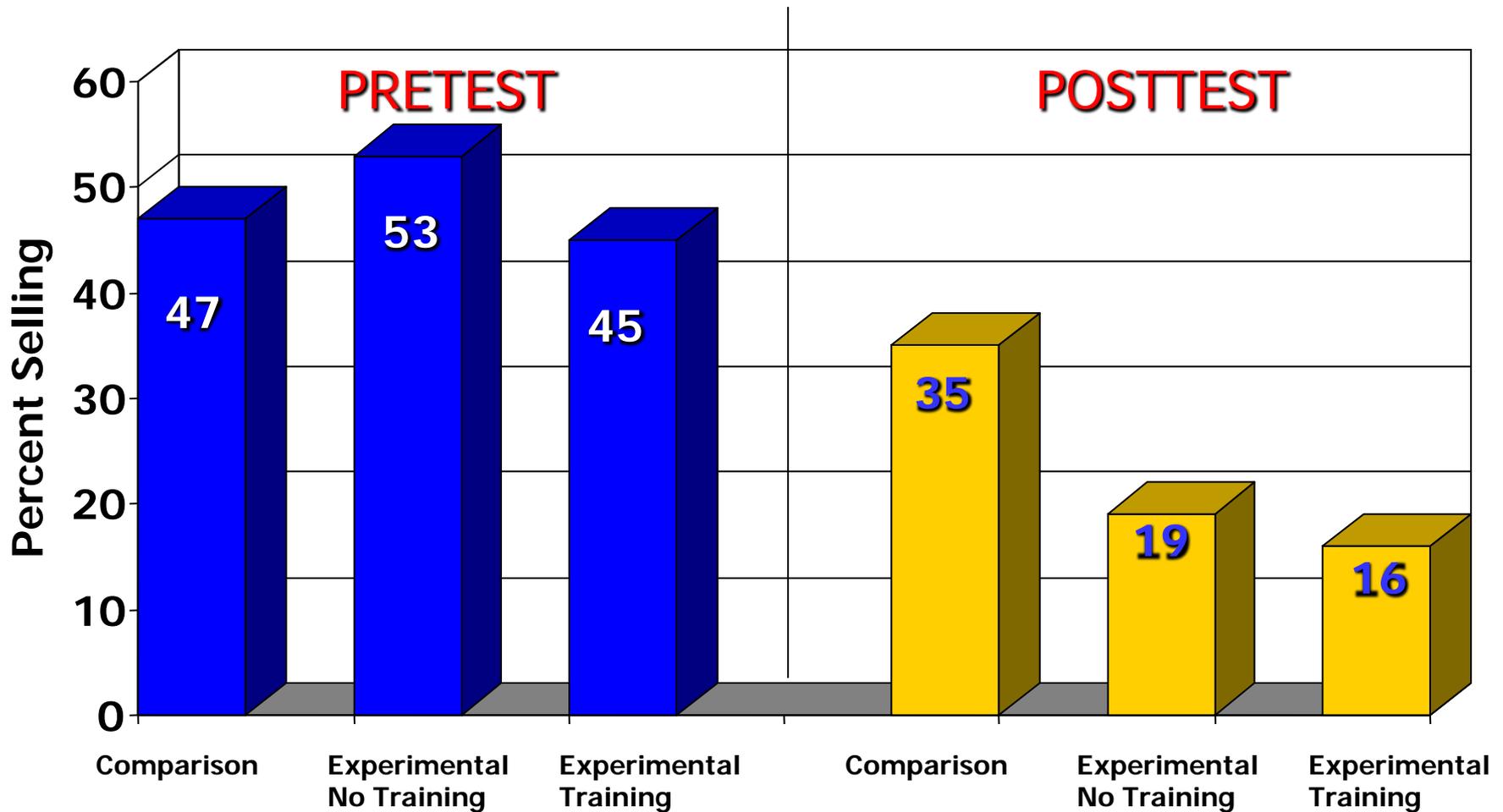




**“Mountain of Beer”**

# Underage Alcohol Purchase Survey

## *Experimental and Comparison Communities*

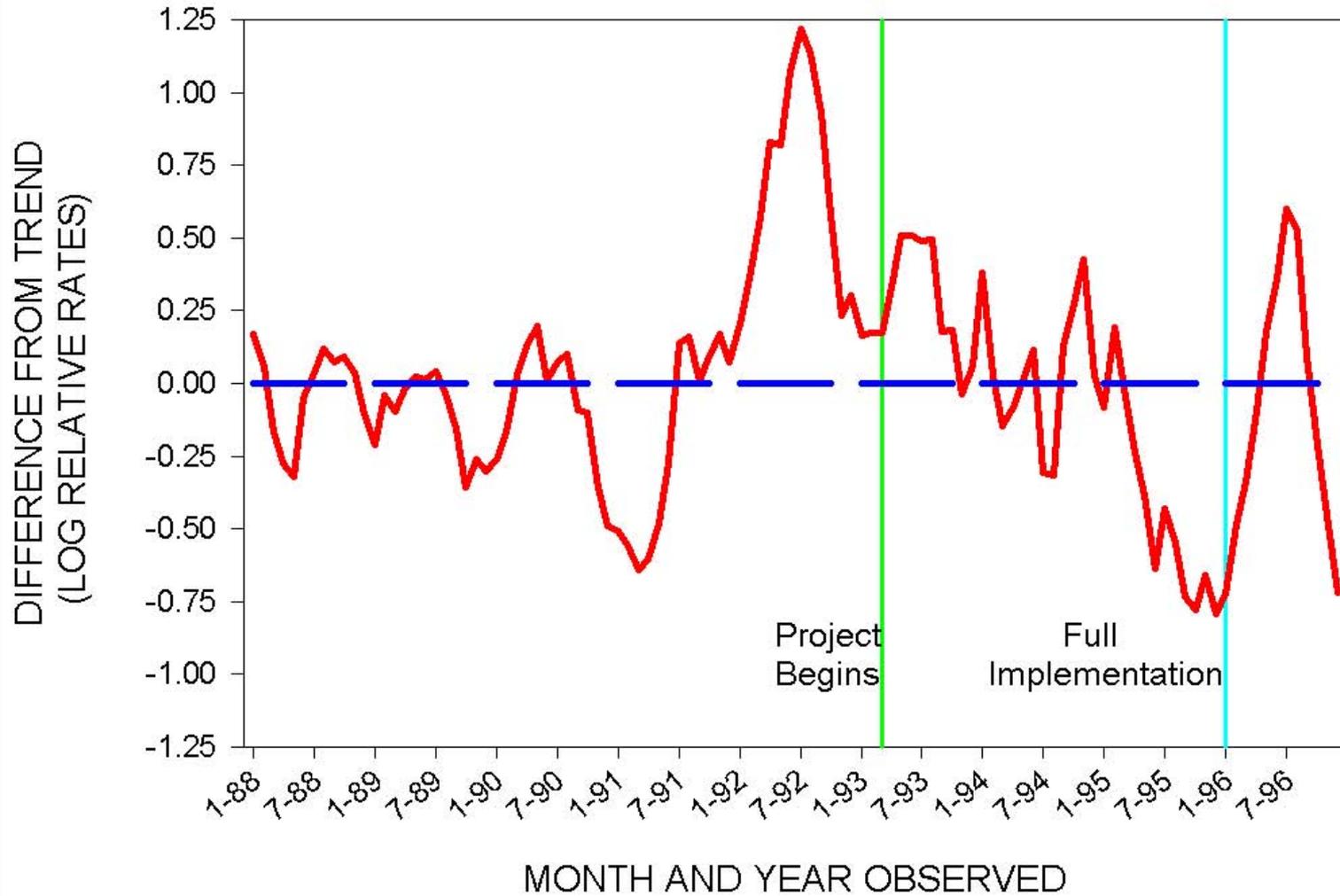


*Holder, et al., J. American Medical Association, 2000*

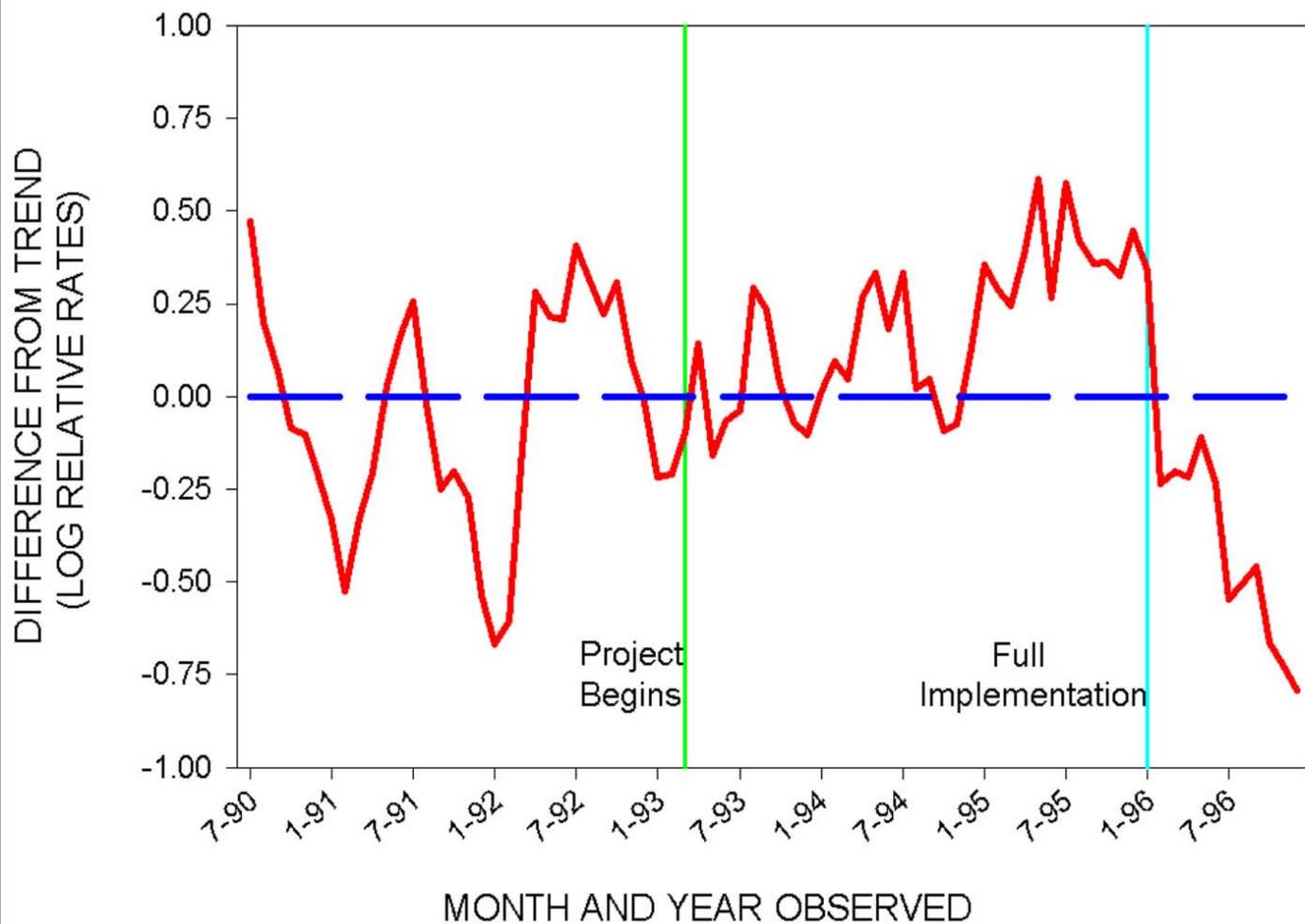
# Outcomes

**What were final results?**

# NIGHTTIME INJURY CRASHES (Numbers per Month; 3 E, 3C)



# HOSPITALIZED ASSAULT CASES (Cases Discharged per Month; 2E, 2C)



# Examples of Community Action Projects for Environmental Prevention

<b>COUNTRY</b>	<b>GOALS</b>	<b>STRATEGIES</b>	<b>RESULTS</b>
United States			
California, South Carolina	<b>Reduce alcohol injury and death</b>	<ul style="list-style-type: none"><li>• DUI enforcement</li><li>• Alcohol service</li><li>• News coverage</li><li>• Underage sales</li><li>• Alcohol outlets</li></ul>	<ul style="list-style-type: none"><li>➤ 10% reduction in alcohol crashes</li><li>➤ 43% reduction in violence</li><li>➤ Lower alcohol sales to youth</li></ul>
Minnesota	<b>Reduce youth drinking</b>	<ul style="list-style-type: none"><li>• Local sales policies and enforcement</li></ul>	<ul style="list-style-type: none"><li>➤ Lower alcohol sales to youth</li><li>➤ Reduced traffic crashes</li></ul>
Massachusetts	<b>Reduce alcohol crashes</b>	<ul style="list-style-type: none"><li>• News coverage</li><li>• DUI enforcement</li><li>• Alcohol outlet surveillance</li></ul>	<ul style="list-style-type: none"><li>➤ 25% reduction in fatal crashes</li></ul>

# Examples of International Community Action Projects for Alcohol Prevention

<b>COUNTRY</b>	<b>GOALS</b>	<b>STRATEGIES</b>	<b>RESULTS</b>
Sweden STAD Project Stockholm	<b>Reduced local alcohol and drug problems</b>	<ul style="list-style-type: none"><li>• Responsible Beverage Service</li><li>• Joint parent/police enforcement of sales to youth</li><li>• Club policy and drug recognition by door security</li></ul>	<ul style="list-style-type: none"><li>➤ Reduction in sales to intoxicated patrons (47% to 5%)</li><li>➤ Violent crime down by 29%</li><li>➤ Refusals of drug impaired patrons increased by 300%</li></ul>
Australia Surfers Paradise Safety Action Project	<b>Lower alcohol-involved violence</b>	<ul style="list-style-type: none"><li>• Community forum and alcohol safety audit</li><li>• Model house policies</li><li>• Increased enforcement of alcohol-licensed premises</li></ul>	<ul style="list-style-type: none"><li>➤ Reduction in violent events: original site from 9.8 to 4.7 and replication sites from 12.2 to 3.0</li></ul>

# What Have We Learned to This Point?

- Environmental prevention can produce measurable results.
- Logic Model in environmental prevention must be based on empirical evidence about intermediate variables.
- Environmental strategies must be selected that have been shown to work—that is, impact **key** intermediate variables.
- Do few things well. High “dosage” to be effective.

## Next

- Learn tools and approaches to monitor and evaluate environmental strategies.
- Discuss ways for communities in more effective in environmental prevention.