

Concussion Policy and Research

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ThinkFirst Nova Scotia/ QEII Division of Neurosurgery
ACIP 2012 Injury Prevention Conference
October 16, 2012
Main Republic Ballroom 10:15

Concussion Panel

- Dr. Charles Tator – History ThinkFirst
- Matt Eagles – Concussion Survivor
- Dr. JoAnne Savoie – Concussion Management
- Lynne Fenerty – Policy and Research

Historically speaking-It's a relief!

Lets talk about concussion!

Patients/ families/
clinicians manage
concussion

A few clinicians talking
about concussion for a
long time

Body of research
grows

High profile
cases

NOW-many
are ready to
talk about
concussion
over a short
time

Who is Talking Policy and Research now?

**Google Searches
Concussion Policy**

31,900,000 results

Concussion Research

6,250,000 results

Concussion Research Funding

1,290,000 results

What have we learned from Concussion Research?

Lots to date

- Brain needs rest
- Can't see injury on current imaging
- It can be a slow recovery

A lot more in the future

- Should we exercise some?
- New imaging technology, biomarkers
- Future treatments

Policy , Research and behavior change

While others did not...

I got back



Eric Lindros

Adam Deadmarsh

Pat LaFontaine

Keith Primeau



Research, knowledge, education and awareness are changing policy in hockey now.

Athletes are aware now too!

Research, brain banks - CTE (Chronic Traumatic Encephalopathy) found in hockey players-this is changing policy!

Policy -timing

- Policy/Legislation can be the stimulus to push towards a state of education and readiness.

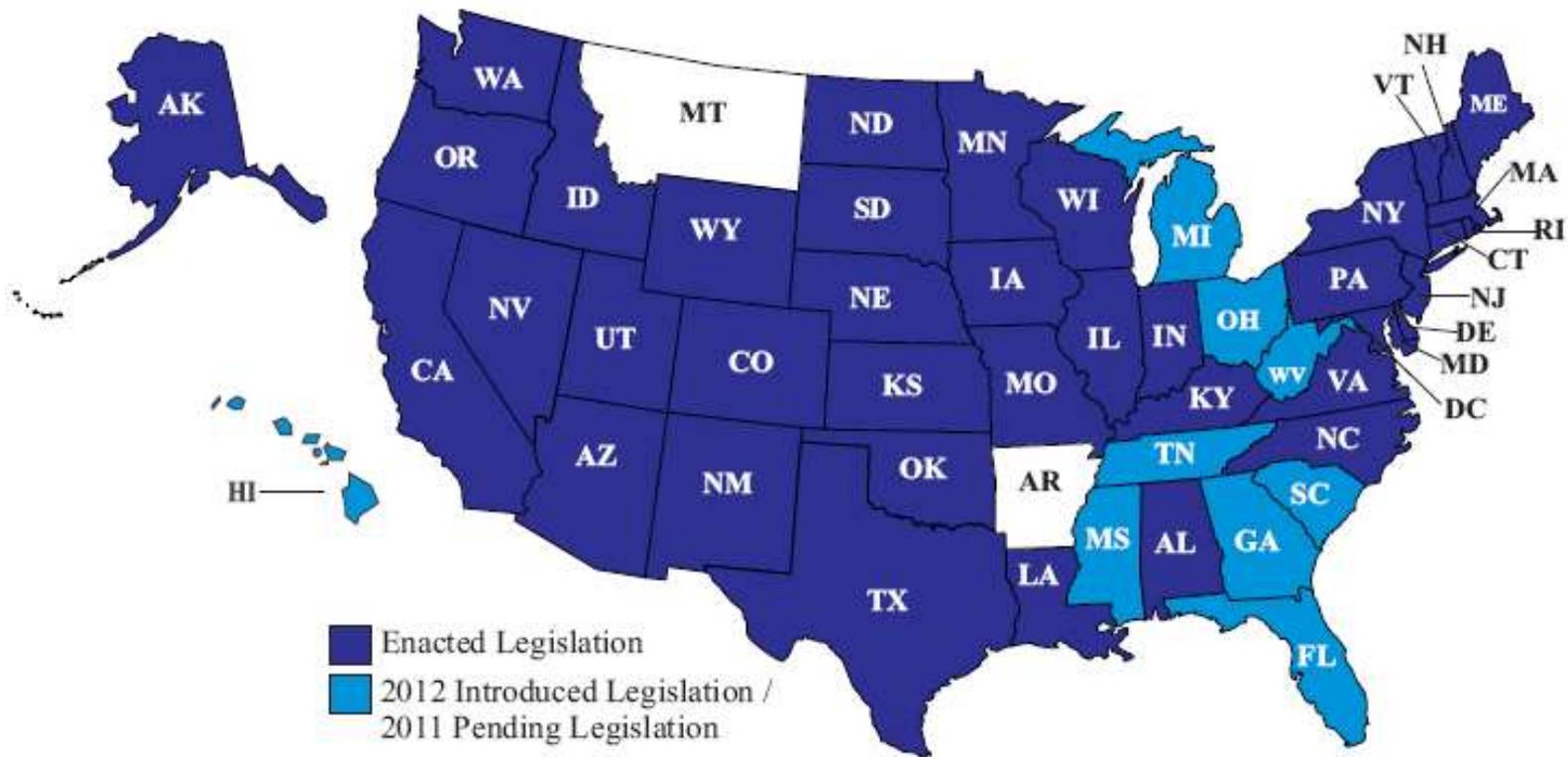
OR

- Education and readiness first and then implement policy/legislation.

Principals of Policy

- Policy development based on research and best practices.
- Concussion policy across full spectrum of concussion.
i.e. medical and community readiness for policy such as, return to play.

Enacted Legislation Targeting Youth Sports-Related Concussions



Source: National Conference of State Legislatures, 2012.

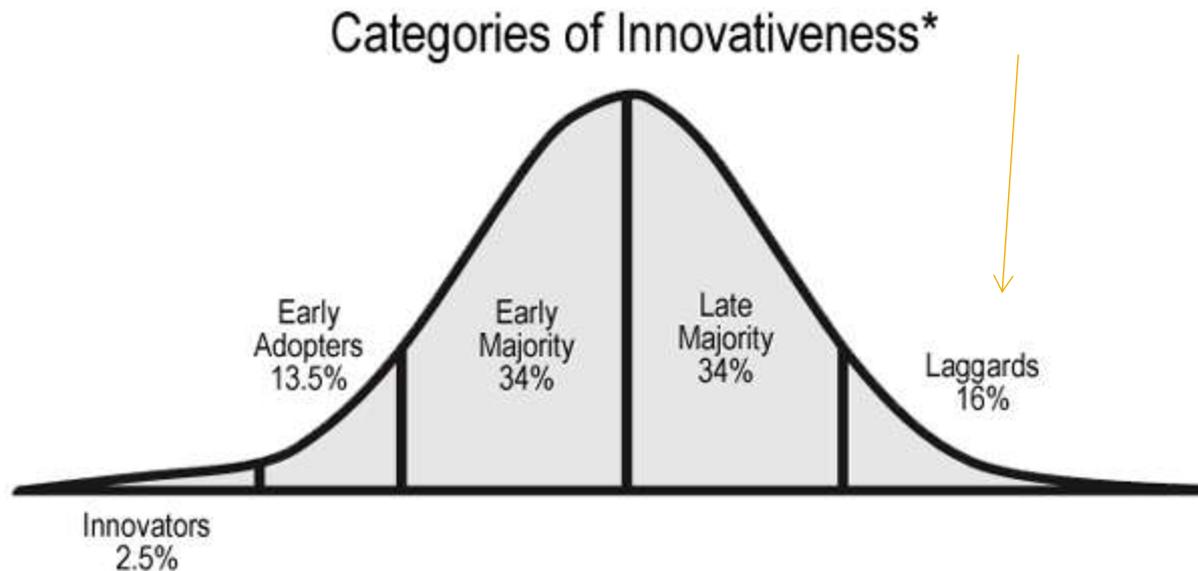
Canada

- Ontario is the first province in Canada to introduce legislation on concussion in schools
“The Education Amendment Act (Concussions)”
- B.C. Proposed private members bill.
“The Concussions in Youth Sport Safety Act ”

Behavioral Change

Laggards often need extra push !

Policy often directed at the Laggards



*From E.M. Rogers, *Diffusion of Innovations*, 4th edition (New York: The Free Press, 1995)

Nova Scotia-Research and Policy

Getting the work done!

- Neurosurgery interest in injury prevention dates back 22 years +
- Aligned Injury prevention work with research, advocacy and policy
- NS Population 921,727 (2011), 42 % HRM
- Dedicated, collaborative injury prevention network

Collaborative Research and Policy Department of Health and Wellness

Healthy Communities | Health and Wellness | Government of Nova Scotia - Windows Internet Explorer provided by Capital District

http://www.gov.ns.ca/ohp/cdip/helmet-policy.asp

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Healthy Communities

Injury Prevention

Nova Scotia Non-Legislated Sport and Recreation Helmet Policy Paper

This policy paper was compiled by the Division of Neurosurgery, QE II Health Sciences Centre, Halifax, Nova Scotia at the request of the Department of Health and Wellness. It identifies activities where helmets may be effective in preventing or reducing the severity of brain injuries. This is useful information for government and our partners to help guide policy discussions; however, it is not a policy recommendation by the Department of Health and Wellness.

[Nova Scotia Non-Legislated Sport and Recreation Helmet Policy Paper \(PDF\)](#)

Injury Prevention

- [Cost of Injury](#)
- [Injury Prevention Strategy](#)
- [Injury Prevention Strategy Highlights](#)
- [Injury Prevention Best Practices Resources](#)
- [Falls](#)
- [Road Safety](#)

Internet 120%

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Nova Scotia Experience

Research informing

1. advocacy efforts
2. policy development

Research measuring the effectiveness of Injury Prevention

- a. Education
- b. Legislation
- c. Enforcement

Only Possible via Collaboration!

Nova Scotia Examples

Research Translation and Policy

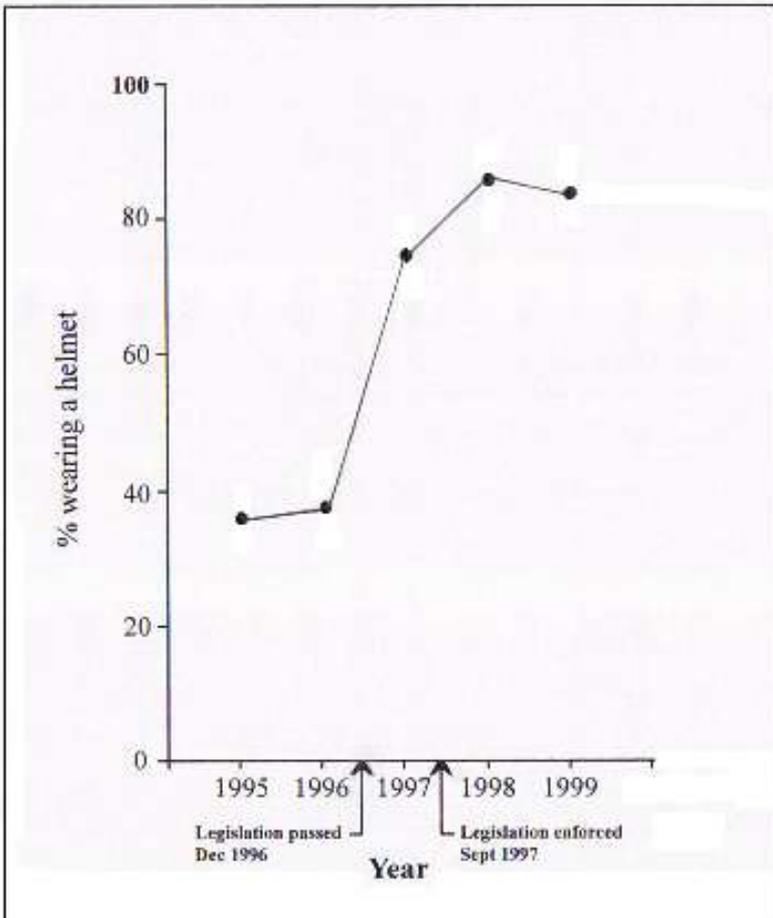
Helmets- Wheeled activities-legislation

Helmets -Skating-policy

Helmet -Skiing and snowboarding -legislation

Helmet use across time in NS

Pre -legislation –post- sustained

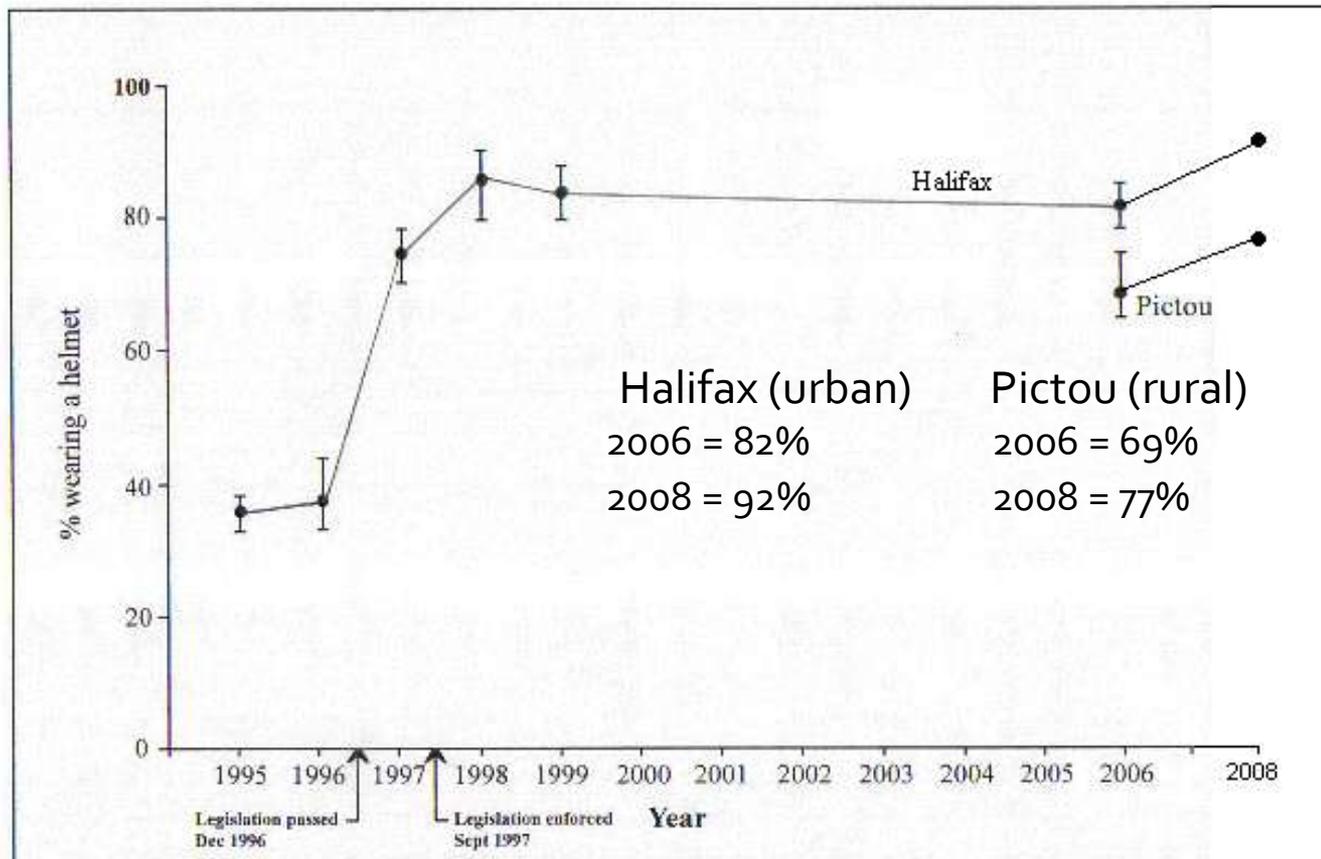


Helmet Use Rates
for Halifax

Year	Rate (%)
1995	35.9
1996	37.7
1997	75.3
1998	85.5
1999	83.8

LeBlanc et al. (2002)

Results - Enforcement and Helmet use



Skating Helmet Rules in NS

All-Ages 2009 baseline



Yes



No

All-Ages Helmet Rules in NS 2011-one year post Dal arena policy



Yes

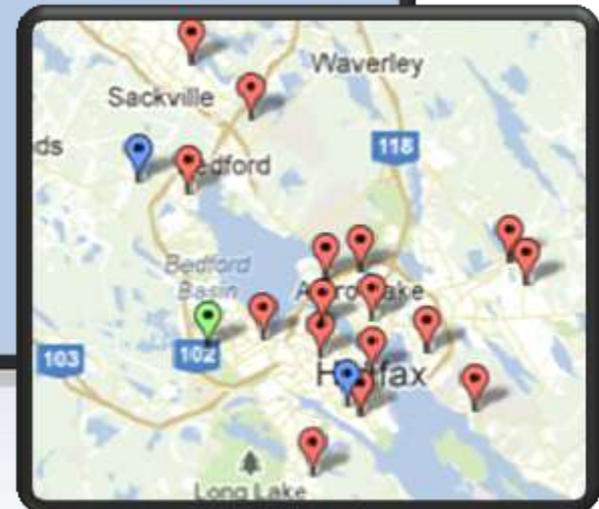


No

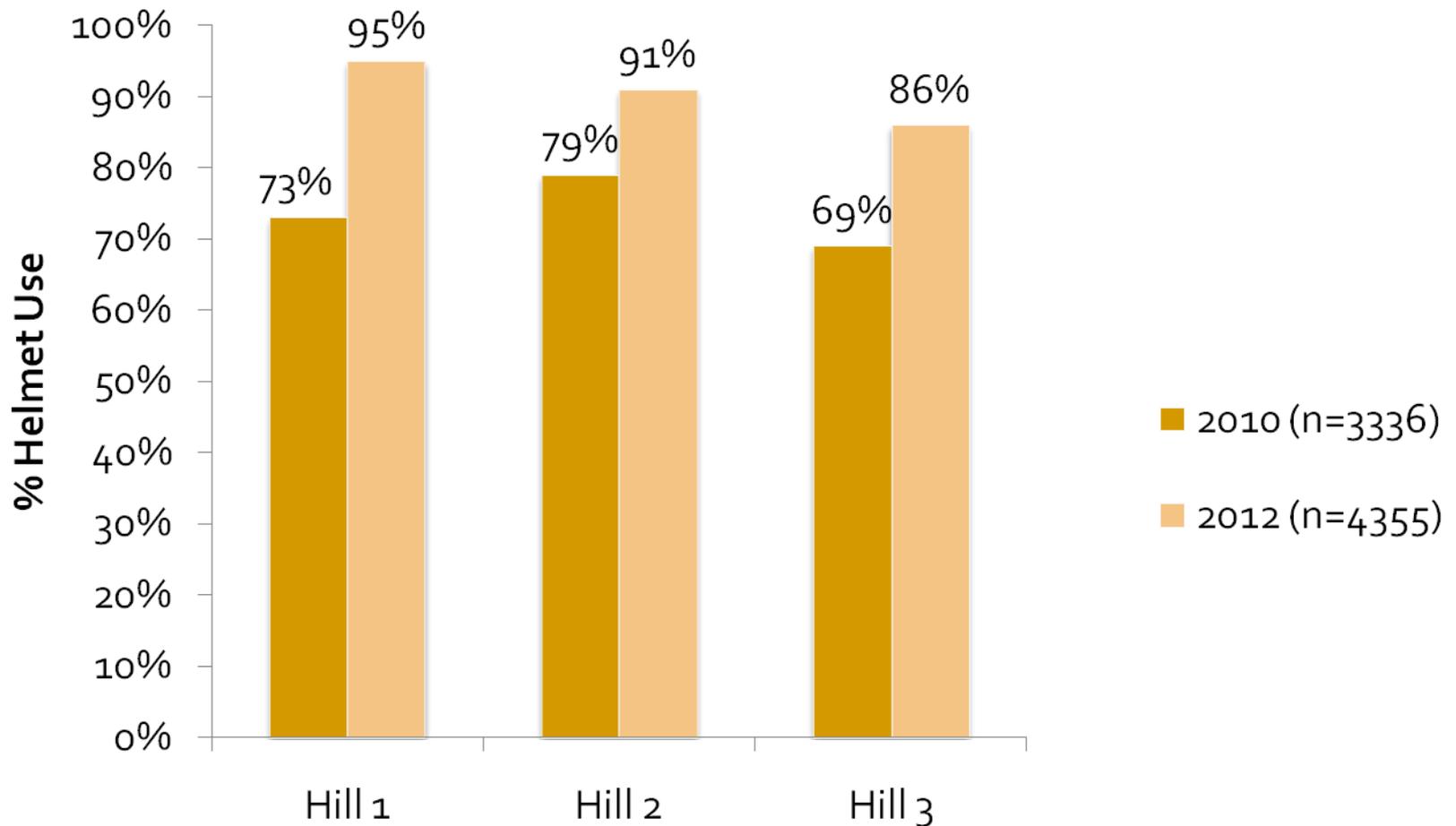
Current All-Ages Helmet Rules in NS-growing interest-readiness



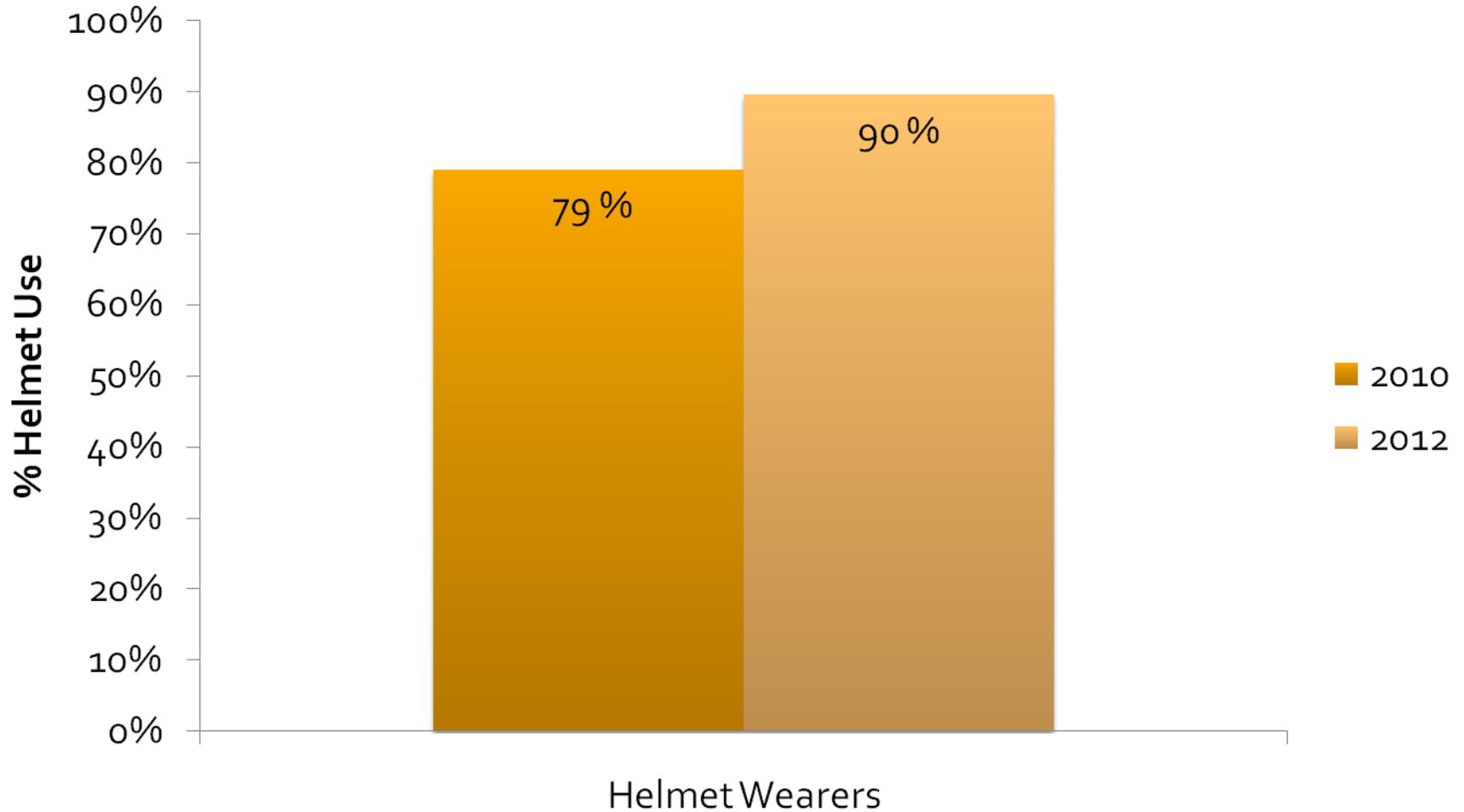
-  Yes
-  Maybe
-  No



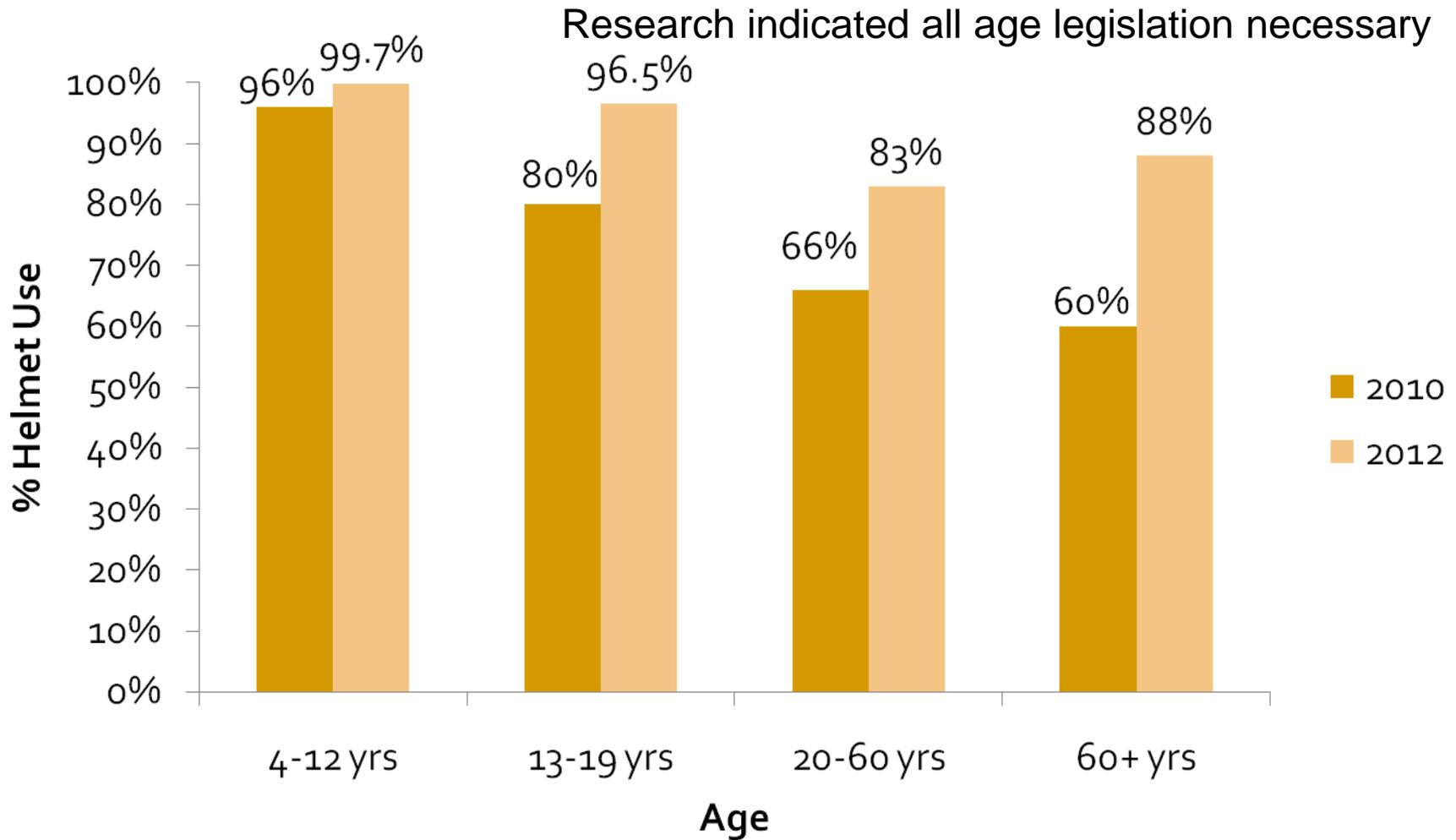
Skiing and Snowboarding Helmet use 2010 vs. 2012 -Hills



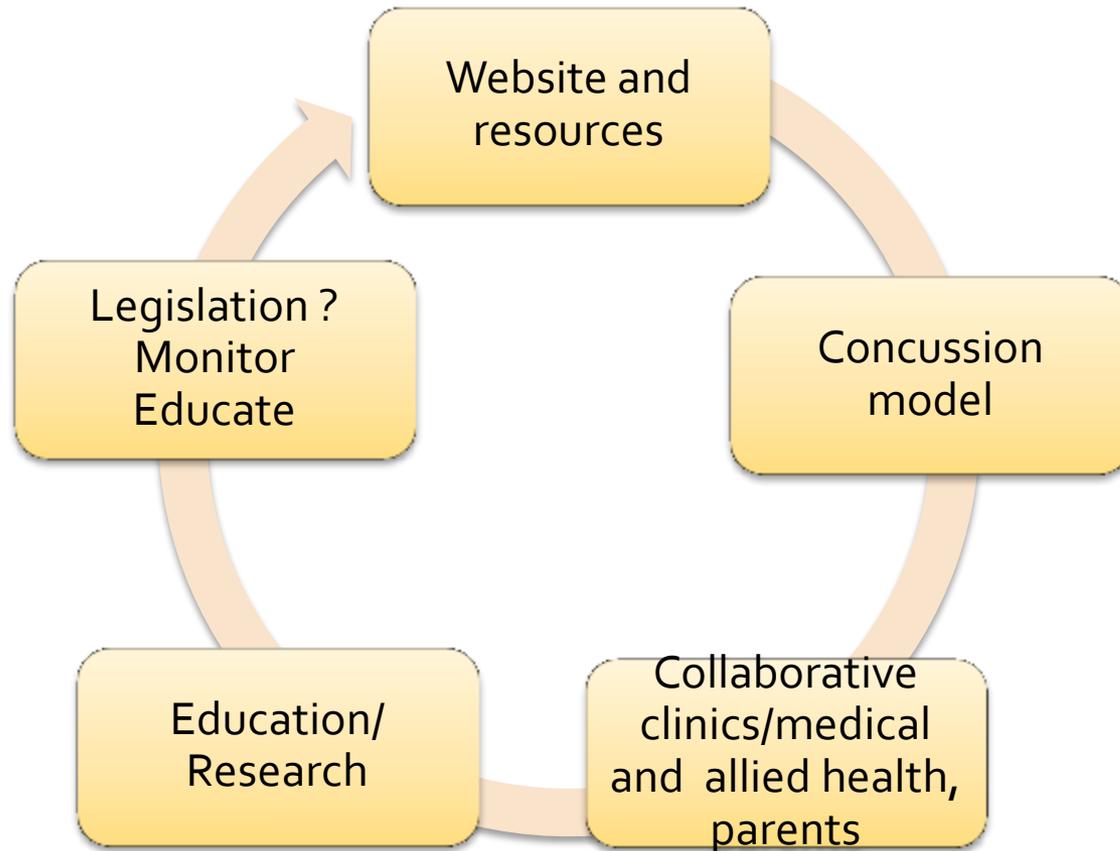
Skiing Snowboarding Overall



2010 vs. 2012 across age groups

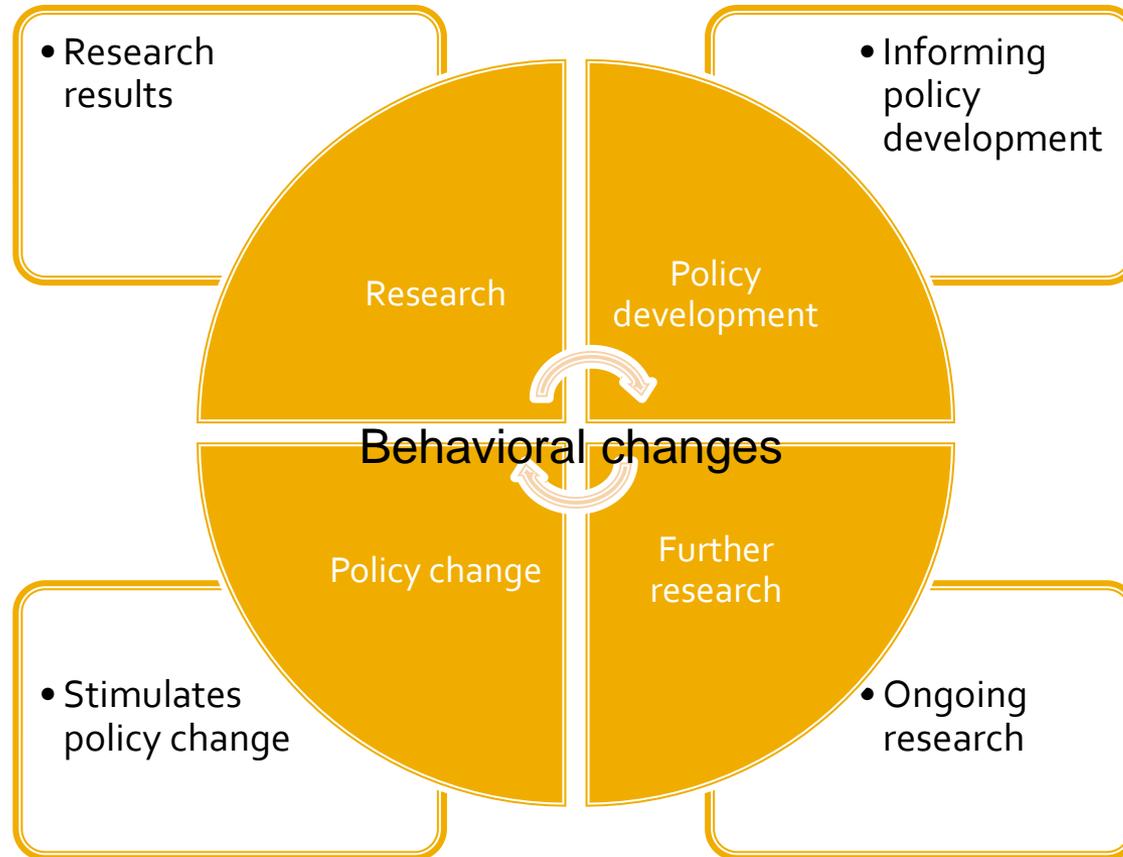


Concussion in NS- early stages



Research driving policy

Policy driving research



Future

Bright future

- Research
 - Education
 - Policy/Legislation
- Most importantly
...improved *prevention*
so patients will NOT
suffer concussions
 - For those with
concussions ...*a better
management
experience and
improved outcomes !*

Readiness and Timing = Now



**Improving Patient
Outcomes
Preventing and
Managing Concussions
Together**

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Thank You!
