



at Education Development Center



Work-Related Injuries Are Happening to Youth: Can We Make a Difference?

October 27, 2015

Meeting Orientation

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Moderator



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WVU Injury Control Research Center

Presenters



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Work-Related Injuries Are Happening to Youth: Can We Make A Difference?









Beatriz Pazos Vautin, MPH Sara Rattigan, MS Letitia Davis, ScD Young Workers Injury Surveillance and Prevention Project Occupational Health Surveillance Program Massachusetts Department of Public Health



Overview

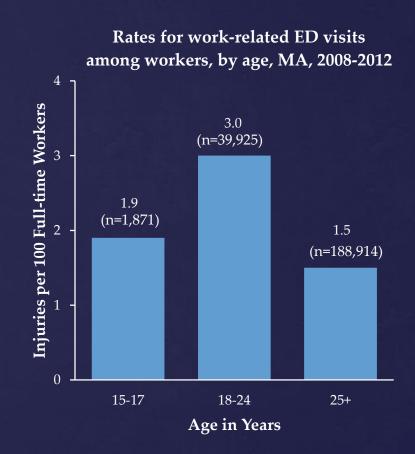
- Why focus on young workers
- * Risk factors for working teens
- Young Workers Injury Surveillance System
- Young worker injury statistics
- Translating data to action

Poll Question 1

workforce

Why focus on young workers?

- In 2013, 13% of workforce was <25
- Young workers have high overall rate of non-fatal injuries compared to adults
- Unique risk factors



Risk Factors for Young Workers

- * Job hazards
- * Inexperience
- * Inadequate training and supervision
- Employment in inappropriate/illegal jobs
- Development characteristics (not just little adults)
 - Physical
 - * Psychosocial
- Balancing school and work

Teens who work long hours may experience:

- Lack of sleep
- Difficulty staying awake in class and less time for homework
- Negative effects on learning
- Increased use of stimulants,
 e.g. caffeine, nicotine
- Increased stress



Massachusetts Young Workers Injury Surveillance and Prevention Project

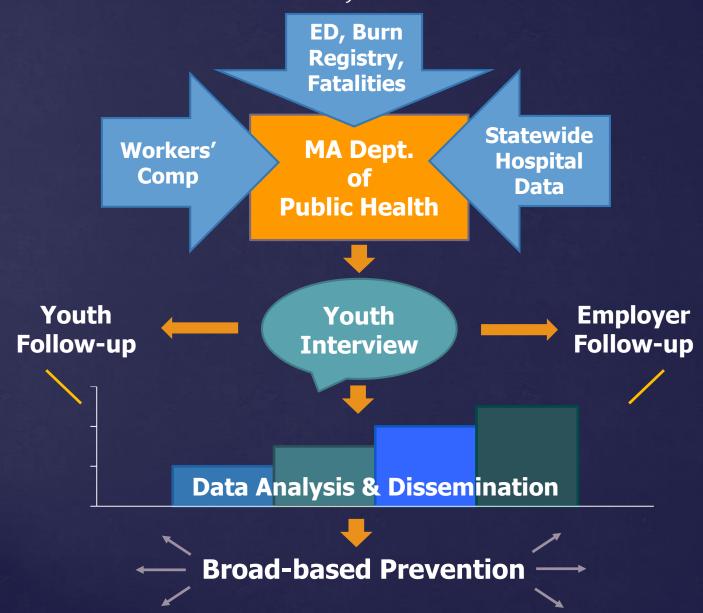
- 1993: Public health
 regulations require hospitals
 and providers to report workrelated injuries to teens
 (persons less than 18)
- * 1993: NIOSH funding obtained to conduct statewide surveillance of teen work-related injuries



Goals of the Young Workers Project

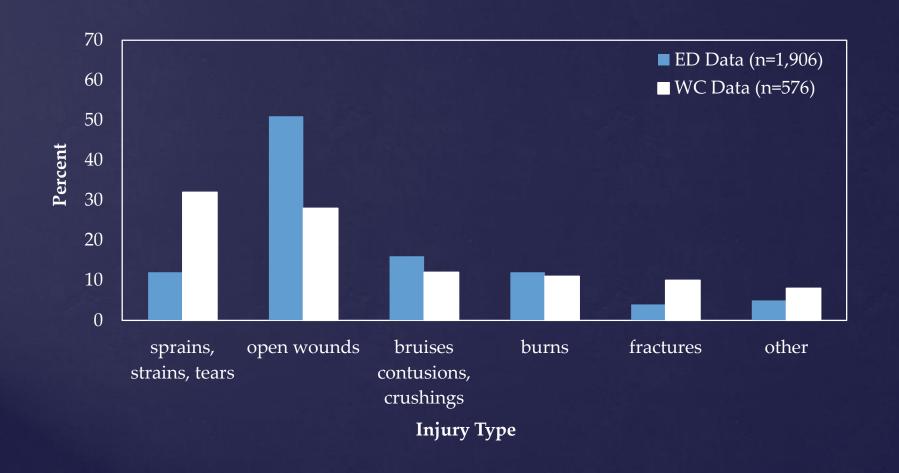
- To identify sentinel cases
 - To target work site follow-up
 - Gather more detailed information about circumstances of injury
 - Case studies
- To generate summary data to target broad-based prevention efforts
- Use data to promote prevention activities at state and local levels

Massachusetts Surveillance System for Work-Related Injuries to Youths <25



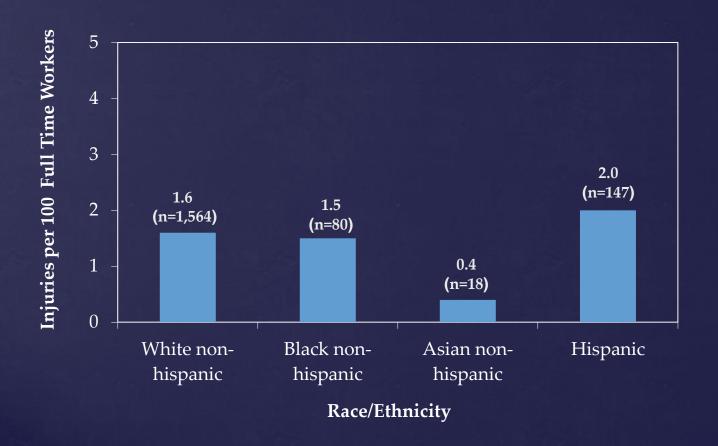
Injury Statistics

Distribution of work-related injuries among 15-17-year olds, by injury type and data source Massachusetts: 2008-2012

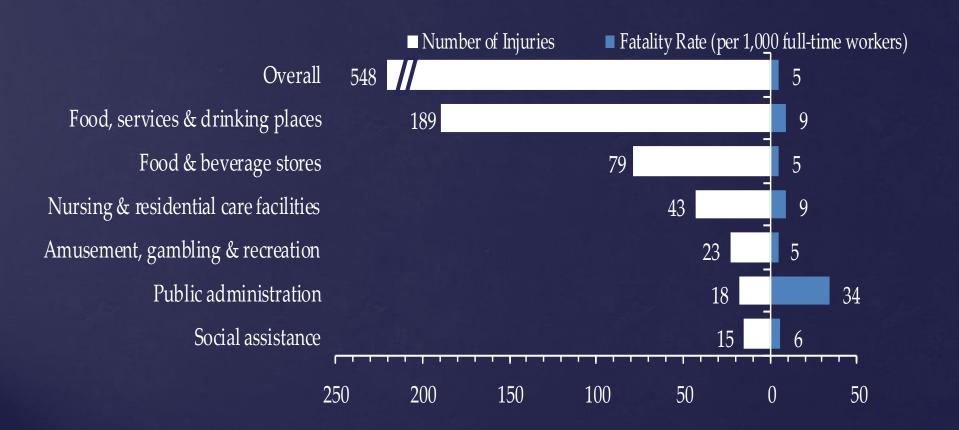


Average annual rates of emergency department visits for work-related injuries among 15- to 17- year-olds, by race and ethnicity

Massachusetts: 2008-2012



Average annual rates of workers' compensation claims for injuries among 15- to 17- year-olds, by industry Massachusetts: 2008-2012



Interviews with Teens Injured at Work Massachusetts: 2008-2012



^{*} Anticipated permanent pain, limited sensation or loss of movement.

Narrative Results

 10% reported that the equipment being used was malfunctioning or a safety device had been removed.

"The french fryer was low in oil partly because it hadn't been working properly. We had notified the owner and manager but nothing had been done about it."

* 9% appeared to be performing a task or working hours prohibited under the child labor laws.

"I was using the deli slicer to cut up lettuce."

"I was working at 2:30 a.m. at a retail bakery."

Narrative Results

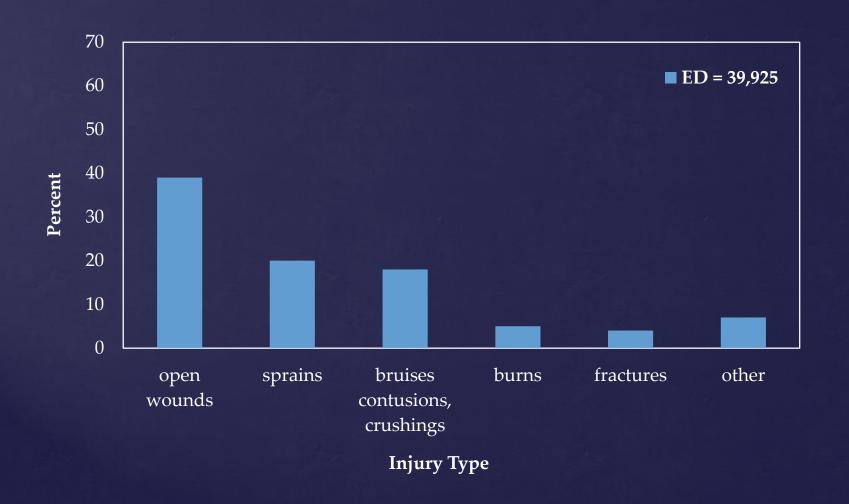
10% waited a day or more before seeking medical treatment.

"When I woke up in the a.m., my hand was swollen and red and purple, so I went to the ER where I was diagnosed with second degree burns."

* 4% of adolescents reported that their supervisors made them stay at work.

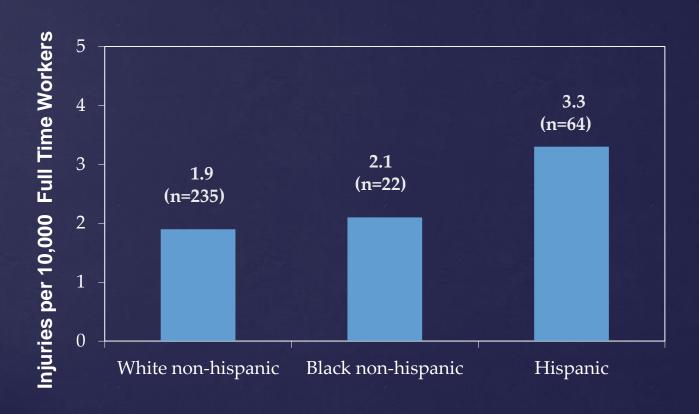
"Then I went to the supervisor who did not want to fill out an accident report and told me to work light duty. I worked 2 shifts that day while my finger kept bleeding."

Distribution of work-related emergency department visits among 18-24-year olds, by injury type Massachusetts: 2008-2012



Average annual rates of hospitalizations for work-related injuries among 18- to 24-year olds, by race and ethnicity

Massachusetts: 2008-2012



Race/Ethnicity

Poll Question 2

activities

Putting Data to Work: The Three E's

* Education

* Enforcement/Policy Change

* Environment/Engineering

Education

Educational Materials



Health and safety training



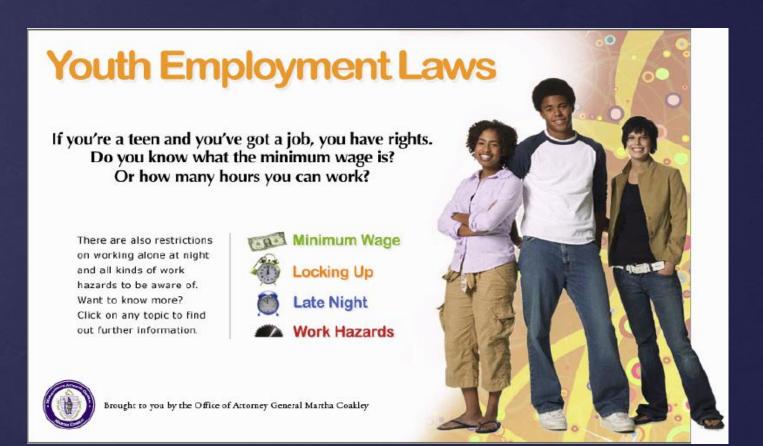
Massachusetts Youth Employment & Safety Team (YES Team)

Eight state & federal agencies w/interest in protecting and promoting the health and safety of MA young workers:

- Department of Public Health
- Attorney General's Office (AGO)
- Department of Labor Standards
- Department of Industrial Accidents
- Elementary and Secondary Education
- Commonwealth Corporation (workforce development)
- ❖ OSHA Regional Office
- US DOL Wage & Hour Division



Statewide Public Awareness Campaign



Labor Low Down | www.laborlowdown.com

Safe Jobs for Youth Poster Contest Awards Ceremony



Safe Jobs for Youth Poster Contest Winners, 2011-2014

TEENS SHOULD BE ABLE TO RECOGNIZE

UNSAFE CONDITIONS

IN THE **WORKPLACE**AS EASILY AS
THEY RECOGNIZE
THESE ICONS.







Enforcement/Policy Change

New MA Protections for Vocational Students and Teachers

Worksite follow-up of amputation in school shop class



Changes in statewide school health and safety policy

INJURY INVESTIGATION REPORT

Occupational Health Surveillance Program August 2003 Vol. 6, No. 2 Massackusetts Department of Public Health





A 15-Year-Old Student Amputates Fingers While Operating an Unquarded Table Saw in Woodworking Class - Massachusetts

industrial arts provides students with important opportunities to learn technical skills and introduces them to the work environment. Occupational safety and health is a crucial component of this work preparation, both for safety in the school shop and to develop safe work skills for the future.

Incident: In 2003, a 15-year-old student amputated one left finger (both joints) and a portion of another left finger and thumb while operating an unguarded table saw in a woodworking class at a school. The saw, manufactured in 1991 and equipped with a 10-inch woodworking blade, was located in the woodworking shop, near the shop door. The student was making a lengthwise cut (ripping) and reached around to the back side of the unguarded saw blade to grab the cut piece of wood. The student's two fingers and thumb came in contact with the rotating saw blade, resulting in the serious hijuries to the left hand.



To prevent similar incidents, schools that have woodworking shops should:

- Ensure that the manufacturers' supplied guards are installed on all table saws, and that
 the guards function properly and are used at all times.
- Position tables at the backside of saws to prevent the work pieces from failing off the saws and onto the floor.
- Design the woodworking shop layout to reduce distractions to equipment operators.
- Provide woodworking class conditions that at a minimum meet safety and health standards set by the Occupational Health and Safety Administration (OSHA) and train students about these standards.

REFERENCES

Code of Federal Regulations, 29 CFR 1910:213. Machinery and Machine Guarding Woodworking machinery requirements.

U.S. Department of Labor, Occupational Safety and Health Administration, Small Business Safety Management Services,

A Guide for Protecting Workers from Woodworking Hazards. CSHA 3157 1000.

Delta International Machinery Corporation, Instruction Manual, Ten-inch Contractor's Saw. Model. 34-444, 10-15-91.
National Safety Council, Safeguarding Concepts Bustrated 6th Edition. 1995.

Workplace Violence Added to State Plan Addressing Youth Violence



- State \$\$\$\$ for community based project for youth
- Leadership
 Education and Action
 to Promote Safety
 (LEAPS Academy)



Massachusetts Child Labor Laws Strengthened



- New civil enforcement proceedings
- Supervision after8 pm
- Revised work permit process

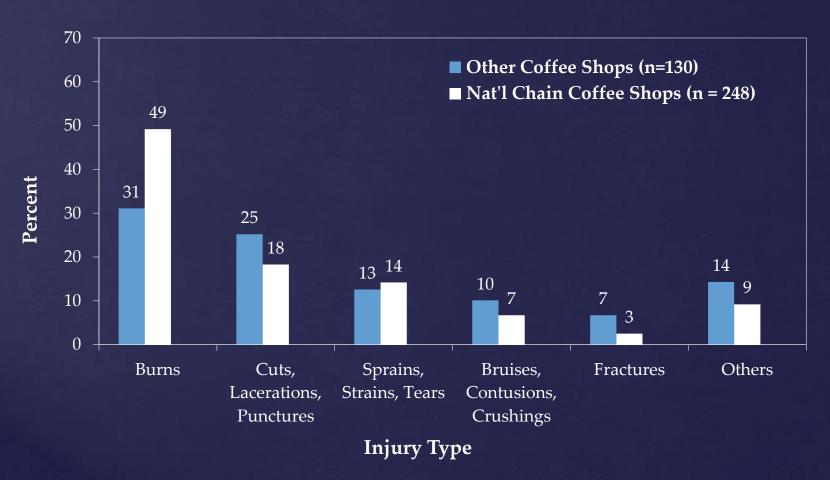
Environment/Engineering

Case Study – YWP & Coffee Shops

1998: Injury to teen worker initiates closer look at retail bakery industry data



Occupational Injuries to Teens Working for Nat'l Chain and Other Coffee Shops, by Injury Type, Massachusetts, 1993 - 2002



Source: Massachusetts Department of Public Health, Teens at Work Injury Surveillance System

1999: The Burn Culprit – Coffee

Interviews

- Follow-up interviews with injured teens, 1993-1999 (N=33)
- Similar stories:

 Hot coffee/grounds
 spilled over hand
 when pulled out brew
 basket



2000: Compelling the Customer

- 100's of franchise owners and corporate staff present
- Summary data compelling to franchise owners
- Sparked corporate communication w/manufacturer

2003: Brew Basket Retrofit



$SplashGard^{\circledR} Funnels$

and innovative idea from BUNN that safety of your beverage brewing process.

ice its funnel design to further reduce the risk of injuries to food hadvertantly remove the brew funnel too soon or too quickly and hands. Our development work led to an improved funnel design to may not have totally dripped out away from the person's hand.



ith traditional funnel



Gard* funnels will come ll new and refurbished fter early June 2000 at cement funnels will be Gard* design and re listed on the back

advantage of this new of your food service questions please call





The Mark of Quality in Beverage Equipment Worldwide

BUNN-O-MATIC CORPORATION 1400 Stevenson Drive Springfield, Illinois • 62703 (800) 637-8606 • Fax (800) 542-4967 www.bunnomatic.com

2011: Burns Were Still Occurring

Interviews, 2006-2011 (N=14):

"I was changing the coffee filter and did not realize it was still going... as I was taking it out, the grinds went all over my left arm."

"I was pulling out the coffee filter to make more coffee **but it was still brewing**. Hot coffee and grounds poured over my hand and wrist."

Recent Developments

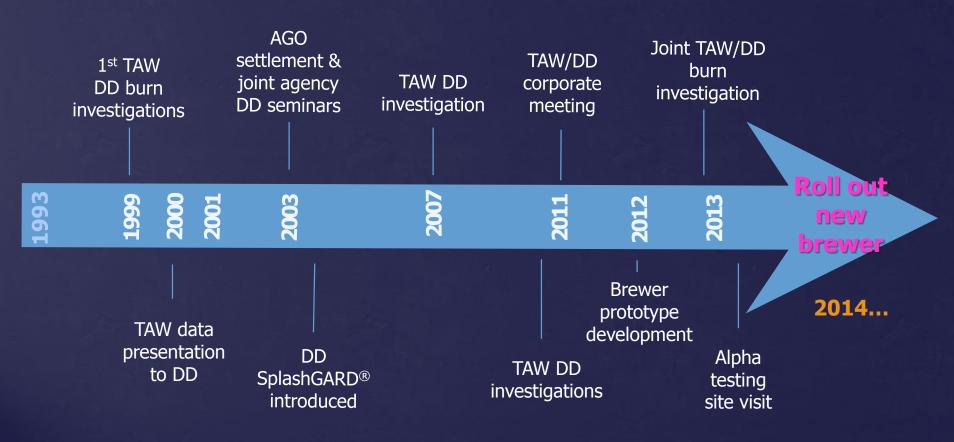
- 2011: Meeting with Coffee Chain corporate headquarters
- * 2012: Follow-up report on corporate meeting highlights
- * 2013: New brewer prototype developed
- * 2014: Brewer alpha testing site visit by TAW

2014: Interlock Brewer Rollout

- New interlock: Basket <u>cannot</u> be pulled out until brewing is complete
- ❖ 3,730 units sold, 1,200+ restaurants nationwide
- Potential impact: 13,000 franchise locations

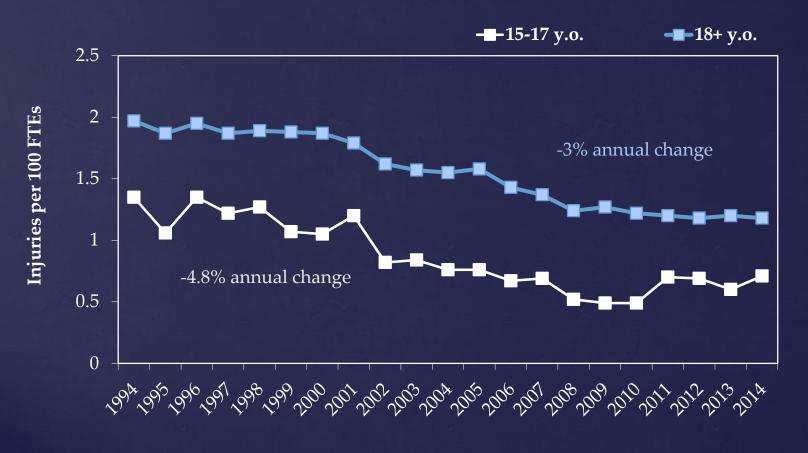


Surveillance to Practice in MA Coffee Shops



Can we make a difference?

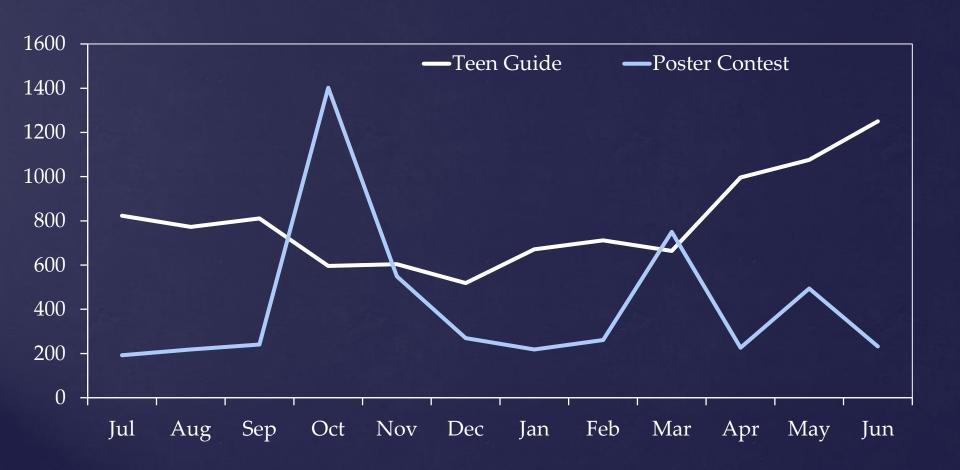
Rates of workers' compensation claims filed for work-related injuries by age Massachusetts, 1994 - 2014



Poll Question 3

Social media

Active dissemination of data produces requests for educational materials



Social Media Increases Awareness







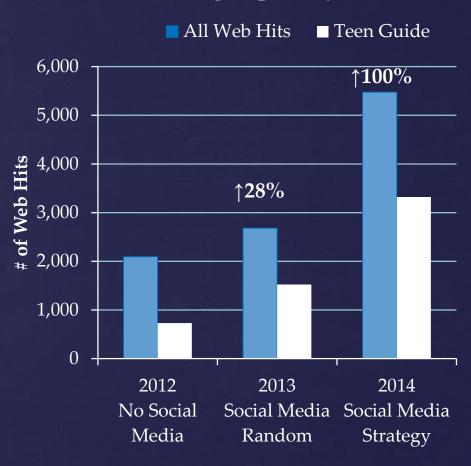


The Conversation Prism – Brian Solis & JESS3

Social Media Impact?

- * 2012: Barely used social media
- 2013: Actively used social media to promote project activities
- 2014: Piloted social media strategy to promote project activities

Web Hits – Surveillance Update Mailing (Apr-May)



Year of Outreach

Awareness on Social Media

2013 Retweet by Mass Governor

Twitter share



Conclusions

- Young worker injuries need to be addressed
- * Statistics paired with stories can be powerful
- Change can take time (more than you think)
- * Partnerships are crucial to success

Thank you!

Please take a moment to complete our short evaluation:

https://www.surveymonkey.com/r/X93LYQF

Contact Information

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www.ChildrensSafetyNetwork.org

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