#### **Background & Significance**

The Maine Department of Labor (MDOL) in partnership with the Workers' Compensation Board has initiated some early studies regarding injury among young workers. In a 1994 MDOL Report titled "Youth in the Workforce... How are they getting hurt"<sup>1</sup>, data indicated that 2,516 (16.0%) of lost time injuries occurred to workers aged 16-24 years old. Over 60.0% of these injuries involved workers having less than a year of service. In 1995 the Workers' Compensation Board reported that workers with less than one year of service accounted for over 35 percent of all claims, highlighting the fact that "newness" to the job or work environment and maybe the lack of experience are contributing factor to workrelated injuries.

In 1995, over 70.0% of the teens that filed for workers' compensation claims worked in restaurants, food stores, and places of amusements. Fifty percent of the injured teens were employed as food service workers, laborers or stock handlers/baggers. The MDOL issues over 6000 work permits each year to 14 and 15-year-old young workers. The majority of them will be working part-time or during summer vacation, most have little experience. A majority of them will be employed in the service industry, which had the third highest injury rate in Maine in 1997<sup>2</sup>.

A literature review revealed limited resources have been dedicated to the development of injury surveillance program for young workers. There is also a lack of employment data on this group of young workers. Little is known about the work patterns or injuries among young workers at national or state level, especially those under 16 years old.

Castillo, et al.<sup>3</sup> in their study on occupational injury deaths of 16 and 17 year-old workers recommended that research on training, job experience, supervision, and job stressors be conducted to offer a better understanding of the circumstances of how young workers are being killed or injured while working.

Despite protection under the Fair Labor Standards Act (FLSA), recent studies <sup>4,5,6,7</sup> have shown that many teens were working under conditions that violated the FLSA. A study by Belville et al.<sup>8</sup> on occupational injuries among adolescents recommended further research to identify work situations and events associated with work-related injury among young workers.

#### **Goal of the Pilot Program**

The goal of the Maine Department of Labor (MDOL) is to establish a young workers surveillance system to supplement the limitations of the existing system. Currently, both the Maine Workers' Compensation First Report of Injury and the OSHA Injury Log do not require the reporting of no lost time injuries. This limitation will result in the potential under-reporting of work related injuries among young workers because injuries to young workers may be minor, not requiring medical attention. However, it points to the underlying problem that the work environment may not as safe and young workers maybe engaging in unsafe work behaviors. The results of this program can be used to assess the gaps in injury surveillance of the current system, enhancing the capacity of the MDOL in OSH surveillance.

The young workers surveillance system will be developed and implemented by linking the various MDOL economic program databases, young workers permitting system and the Wage & Hour Division. This linkage will enabled the MDOL to enhance its technological capabilities and generate unique and resourceful uses of its numerous economic data system for OSH surveillance. Successful implementation of the program can serve as a model to other states, particularly health departments involved with OSH surveillance to collaborate with its own department of labor in a similar manner.

The data from the young workers surveillance program will enhance the MDOL ability to effectively direct its outreach and child labor law enforcement activities. Since 1995, the MDOL has developed and implemented various programs to reduce injuries among young workers through education and training. Listed below are some of the programs: 1) Annual Summer Safety Institute for Educators - train teachers to teach occupational safety and health in schools, 2) Safety Certificate Program - A grant awarded to the Maine Association of Vocational Education Administrators to develop a certificate program for students in vocational programs, 3) School presentations - Safety training for teens in schools, 4) The MDOL participates in both the Northeast Young Worker Network and the National Young Worker Network

From July 1999-July 2004, the Wage & Hour Division has conducted over 12,000 inspections on wage and hour violations and of these inspections, 15.0% (1,899) were child labor violations. The Wage & Hour Division has only 5 inspectors to cover the whole state of Maine. The young workers surveillance program will be able to identify the strengths and limitations of the permitting system and also generate data on hazards reported by the young workers, it will enable the Wage & Hour Division to direct its resources effectively to address the OSH issues with specificity

#### **Purposes of the Pilot Program**

- 1) Assess the extent of work-related injuries among the permit holders
- 2) Assess the availability of safety and health training offered to young workers
- 3) To supplement and assess the gap in reporting a work-related injury among the existing surveillance programs administered by the Federal Occupational Safety and Health Administration, Federal Bureau of Labor Statistics and the Maine Workers' Compensation First Reports of Injury.
- 4) Data gathered from program will enable the MDOL's Wage and Hour Division to ascertain if young workers were working "out of scope", i.e. working in a job other than those permitted by their work permits.
- 5) Explore the feasibility and utility of linking the various Maine Department of Labor economic databases for occupational safety and health surveillance efforts.

**Methodology:** The survey involved a sample 14 and 15-year-old young workers who had been issued work permits by the Maine Department of Labor . A sample of work permits issued between April 15 - August 15 was generated. This is the peak employment period for young workers seeking summer jobs in Maine. The surveys were mailed out in September to the parents or guardians of permit holders. To participate in the survey, parental approval is required. The survey was piloted tested with some teens and revised accordingly. It consisted of questions pertaining to work-related injuries and near miss incidents, assessment of their knowledge and attitudes about OSH issues such as child labor laws (Appendix 1).

A total of 2,813 surveys were mailed out and 786 were completed returned. The pilot program generated a response rate of 28.0%.

#### Results

#### Young Workers' Perception of Safety at Work

A majority of the young workers reporting feeling safe at work, however, about 20.0 % reported that they did not get training on injury prevention. The top three businesses that did not provide training were eating establishments, amusement/recreational businesses, and grocery stores. Coincidentally, these businesses employ many young workers during the summer vacation months.

Perception of Safety at Work	Frequency (n=763)	Percent
<mark>Very Safe</mark>	608	79
Safe Enough	151	20
Not Very Safe	4	0.5
Very Unsafe	0	

Table 1: Young Workers' Perception of Safety at Work

#### Young Workers Injured on the Job

Twenty-one (2.7%) of the young workers reported being injured on the job. About 43.0% of these reported injuries occurred in eating places while 14.0% of young workers were injured while working in Amusement/Recreation parks type of business.

Table 2: Business where young workers was injured on the job

Type of Business	Frequency (n=21)
Eating Establishments	9
Amusement/Recreation Parks	3
Amusement Parks	2
Administrative Social & Manpower Programs	1
Dance Studio	1
Hardware Store	1
Land, Mineral, Wildlife Conservation	1
Legislative Bodies	1
Single Family Housing Construction	1
Vegetable and Melon Farming	1

In contrast, 18.3% (n=144) of the young workers reported that they were almost injured on the job. Again, Eating Establishments was the businesses that accounted for these reported near-miss incidents.

Type of Business	Frequency
	(n=144)
Eating Establishments	66
Amusement and Recreation	25
Grocery Store	13
Sporting/Recreational Camps	8
Amusement Parks	5
Elementary/Secondary School	5
Hotels/Motels	5
Retail Bakeries	5
Civic and Social Associations	3
Apparel/Accessory Stores	3
Public Golf Course	3
Trailer Park/Campsite	3

Table 3-Young worker almost injured on the job (near-miss incident)

#### Young Workers using equipment prohibited under Maine Child Labor Laws

About 37.% of the young workers reported that they had used equipment that are prohibited by the Maine Child Labor Laws. The data points to the fact that some employers and young workers lack awareness of the types of equipment that young workers are prohibited from operating.

Table 4- Young Workers using equipment prohibited under Maine Child Labor Laws

Type of Equipment	Frequency (n=291)
Ladders and Scaffolding	106
Food slicers	46
Deep Fat Fryers	45
Power Tools	43
Mower or weedwhacker	28
Drove Car or Truck	6
Box Crusher	8
Dough Rolling Machine	6
Forklift	3

#### Summary

#### Findings:

- Over 95.0% of the young workers reported they felt safe at work
- About 40.0% of the young workers reported that their parents or relatives were their source of information on injury prevention.
- About 20.0 % reported not getting any safety and health training.
- The top three businesses that did not provide safety training were eating establishments, amusement/recreational businesses, and grocery stores.
- About 12.0% of the young workers reported noticing some sort of danger on the job.
- About 2.0% reported that they were asked to do something they thought was dangerous.
- The survey revealed that some young workers reported working with equipment prohibited under Maine Child Labor Laws. The prohibited equipment reported being used by some of the young workers included ladders, scaffolds, meat slicer, fat fryer, power tools, mower or weed whacker, drove a car or truck for work used box crusher and dough rolling machine and forklifts.

#### Conclusions

The results of the pilot program indicated that few young workers were injured on the job but the potential for severe injuries or fatalities were evident when some young workers reported working with equipment prohibited under Maine Child Labor Laws. The prohibited equipment reported being used by some of the young workers included ladders, scaffolds, meat slicer, fat fryer, power tools, mower or weed whacker, drove a car or truck for work used box crusher and dough rolling machine and forklifts

The top three businesses that did not provide safety training were eating establishments, amusement/recreational businesses, and grocery stores and these businesses employ many young workers during the summer vacation months.

The results of this pilot program is useful in guiding the Maine Department of Labor with directions and insights on how to address the workplace safety and health issues of young workers in its Work Permitting Program.

### Appendix A Survey 2003 Maine Teenage Workers Survey

This questionnaire uses an arrow  $(\Rightarrow)$  to show you when you need to answer more questions. Follow the arrow when it leads away from an answer you checked. If there's no arrow next to your answer, go down to the next question.

Many of the questions ask you to check one box or several boxes. For example, " $\sqrt{}$  one box" means to check one answer and " $\sqrt{}$  all that you did" means you can check more than one answer. Try to follow the instructions on each question.

- Did you work for pay this summer at the job you got a work permit for?
   No. If no, please skip to Question 19.
   Yes. If yes, please go to question 2.
- 2. How many weeks did you work for pay this summer (from the time school ended until it started again)? \_\_\_\_\_
- 3. About how many hours did you work each week? \_\_\_\_\_
- 4. Most of the time, how safe did you feel on your job this summer? very safe safe enough not very safe very unsafe

5. Did you ever feel unsafe on your job this summer?

6. When you started your job did anyone at work tell you or show you how to keep from getting hurt at work?

No Yes

No

7. Did you ever notice anything dangerous or unsafe at your job?

 $\Box$  Yes  $\Rightarrow$  Did you... ( $\sqrt{No}$  or Yes for each) a)Tell your supervisor? No **Yes** b) Tell a co-worker? No Yes c) Tell a parent? No Yes d) Tell a teacher? No Yes e) Fix it yourself? No Yes f) Fill out a complaint form at your job? No Yes g) Report it to a government agency? Yes h) Do nothing about it? No Yes i) Or, Do something else?  $\Rightarrow$  What?

Yes

8. At work this summer, did you ever ( $\sqrt{No}$  or Yes for each activity)

a)	use a ladder or scaffolding?	No		Yes	
b)	drive a car or truck for work?		No		Yes
c)	use a box crusher?		No		Yes
d)	use a food slicer?		No		Yes
e)	use a dough rolling machine?		No		Yes
f)	use power tools?		No		Yes
g)	use a deep fat fryer?		No		Yes
h)	use a forklift?		No		Yes
i)	use a power mower or weedward	cker?	No		Yes

9. At work this summer, did anyone ever ask you to do something that you thought was dangerous?  $\square No$   $\square Yes \implies Did you (\sqrt{all that you did})$ 

<u> </u>	∐Yes ⇒	Did you ( $\gamma$ all that you did)
		a) Refuse to do it?
		b) Talk to your parent or guardian about it?
		c) Talk to your boss about it?
		d) Do it anyway?
		e) Quit your job?
		f) Do something else? $\Rightarrow$ What?

10. Did you get hurt at work this summer serious enough to get medical help or lose time from work?

 $\square$ No. If no, please skip to question 17. 11.

Yes. If yes, please go to question

11. What kind of injury did you get? ( $\sqrt{\text{one box}}$ )

- a)  $\Box$ Cut or scrape
- b) Bruise
- c) Burn
- d) Sprain or strain, pulled muscle or tendon
- e) Head injury
- f) Broken or crushed bone
- g) Electric shock
- h) Multiple injuries
- i)  $\Box$  Other  $\Rightarrow$  \_\_\_\_\_

12. What were you doing when you got hurt?

13. Was your boss or supervisor nearby when you got hurt?	No	Yes	
14. Did you go to a doctor or hospital because of the injury?	No	Yes	
15. Did you lose a day or more from work because of the injury?		No	Yes

16. Did the injury prevent you	from sports or other	fun activities for	a day or more?
No Yes			

17.	When you were at work this summer, did you ever see another teenager get hurt?	
No	Yes	

18. Did something ever happen at work this summer where you **almost** got hurt or got hurt just a little? For example, if you slipped and fell but didn't get break a bone.

19. Did anyone outside of work ever give you information about how to keep from getting hurt at work?

 $\square No \qquad \square Yes \Rightarrow Who? (\sqrt{all who} did)$ 

a) Vocational teacher?
b) Non-vocational teacher?
c) Coop, JMG, or other work experience teacher?
d) School nurse?
e) Counselor?
f) Parent or other relative?
g) Other adult outside of school?
h) Other ⇒ Who?

Thank you very much for taking the time to answer the questions. We appreciate your help.

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