

NCDOL Focuses on Improved Park Safety

Ride Safety Initiative Expands to Permanent Parks

By Dolores Quesenberry
Director of Marketing

With summer approaching and fair season just around the corner, labor inspectors with the Elevator and Amusement Device Bureau are gearing up for another busy season inspecting rides at amusement and permanent parks throughout North Carolina.

Although the labor department is responsible for regulating only the mechanical safety of rides, it also focuses on one of the biggest causes of park injuries—human error.

“We can’t turn our heads and ignore the problem of human error simply because we are not responsible for regulating patrons and operators,” said Jonathan Brooks, bureau chief for the Elevator and Amusement Device Bureau. “That’s not how we operate.”

Labor officials kicked off a rider safety program in 2004 that focused on ride operators and patrons after a Banzai ride operator was killed when he accidentally walked into the path of one of its swinging pendulums.

“Our rider safety program was created to raise awareness about some common mistakes we’ve observed over the years that patrons and ride operators make while visiting local fairs,” Brooks said. “A lot of the accidents involve kids, so we are trying to educate their parents too.”

Little research about human error has been conducted in the amusement ride industry. However, industry experts say the rate of incidence because of driver or operator error is as high as the automobile and aviation industries, where 80 percent of accidents are related to driver or operator behavior.



Water Wise Safety Tips

- ◆ Do not try dangerous stunts.
- ◆ No running or horseplay around pool area.
- ◆ Never stand up in a tube.
- ◆ Listen to lifeguards and ride operators.
- ◆ Be sure you are in a safe position before starting down any slide.
- ◆ Be aware of safety signs and pay attention to height requirements.
- ◆ Use swim diapers or rubber pants for diaper-age children.
- ◆ Shower before using any water facilities.
- ◆ Do not use public pools and water parks if you have been sick within two weeks.
- ◆ Parents, remember that you are responsible for your child’s supervision.

Two researchers in Canada recently published a two-part study focusing on human error in the amusement ride industry. The study, called “Rider Responsibility and Amusement Ride Accidents: An Observational and Consensus Study of Rider Behaviours,” was conducted by Dr. Kathryn Woodcock and Janet Tsao, researchers from the School of Occupational and Public Health at Ryerson University in Canada.

The study found that parents play a big role in child safety at amusement parks. The study suggests that parents should set and enforce consequences, regardless of whether the park or carnival enforces its own rules, to ensure that children know unsafe behavior around thrill rides is not tolerated.

Because of liability and other concerns, some states are turning the focus to rider responsibility. Ohio, for example, has implemented a Rider Responsibility Law. Proponents

believe the law serves as a deterrent to dangerous horseplay by patrons, the major cause of amusement ride accidents. In the last four years, officials have determined that more than 80 percent of amusement ride injuries in Ohio have been caused by human error or horseplay unrelated to the condition or operation of the ride.

Labor officials are expanding the rider safety program in North Carolina this summer to include permanent parks. Labor Commissioner Cherie Berry will kick off a safety day on June 10 at Wet ’n Wild Emerald Pointe in Greensboro. Water park safety tips will be handed out to more than 3,000 Girl Scouts. Safety tips also will be distributed at toll plazas to each car or bus entering the water park.

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**From
Commissioner
Cherie Berry**

You've read in previous NC Labor Ledger issues about the N.C. Department of Labor forging safety and health partnerships with construction contractors as they build major projects.

Skanska/Barnhill Contracting signed the first ever agreement after it won the contract to build the Raleigh Convention Center. Whiting-Turner Contracting Co. also formed a partnership with the labor department when it built the new Dell Inc. computer manufacturing center in Forsyth County.

In May, we signed two more safety and health partnerships with two construction companies. Verna and Associates Inc. is building a multi-story condominium complex in downtown Charlotte, and Crowder Construction Co. is building an addition to a sewer treatment plant in Wilmington. Both projects will employ hundreds of workers.

The goal of the partnerships is to reduce injury and illness rates, with each member of the partnership doing its part to accomplish the goal. The labor department provides free training, reviews safety programs and conducts quarterly inspections. The companies develop strong safety and health programs, do frequent job site inspections, and promptly respond to hazards. Subcontractors working on the sites are also a part of the agreement.

The partnerships underscore that these construction companies are going above and beyond the regulatory requirements to ensure the safety and health of their employees. The partnerships provide one of the best examples of business and government working together, and the results have been great.

Despite the massive scope of the projects, we have not had one lost workday to injury. That level of work safety for projects of that size is unheard of.

We look forward to forming more partnerships with other businesses in the future.

Cherie Berry



Cherie Berry
Commissioner

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Otis Crowder (left) and Dane Horrell (right) of Crowder Construction Co. stand with state Labor Commissioner Cherie Berry at a May 23 ceremony to celebrate the formal signing of a partnership between the construction company and the N.C. Department of Labor: Crowder Construction will employ about 200 workers as it builds an addition to a sewer treatment plant in Wilmington.

Gaining Ground in North Carolina

Recent partnerships between the N.C. Department of Labor and private construction companies have led to unprecedented safety levels at major construction sites throughout the state.

Agreements signed by the labor department and major companies have allowed government and company officials to work together to eliminate accidents at these large construction sites.

Starting with the Raleigh Convention Center agreement in 2005, the labor department has since seen a surge in interest expressed by other companies that want to participate in the safety agreements.



Verna and Associates Inc. president Pete Verna (left), Charlotte Mayor Pat McCrory, and Labor Commissioner Cherie Berry shovel ceremonial dirt at the official groundbreaking ceremony of The Park Condominiums in downtown Charlotte. The N.C. Department of Labor and Verna and Associates signed a safety and health partnership for the duration of the project to help reduce injuries at the site.

Heat Stress Deaths Concern Labor Officials

By Heather Crews
Public Information Officer

At least 10 workers have died in the last five years from heat stress in North Carolina, including four last year.

The statistics concern officials from the N.C. Department of Labor, and as the summer heat approaches, the department is urging employers to take extra precautions to make sure their workers are protected.

“Workers who are out in the heat and sun face the constant danger of heat stress during our summer months,” said Regina Luginbuhl, bureau chief of the NCDOL Agricultural Safety and Health Bureau. “Knowing the duress signs can save a worker’s life.”

Farm workers are the first who come to mind when there is talk about the dangers of hot summer work, but construction workers and manufacturing workers are also at risk. Indeed, three construction workers died in the past five years after working in hot temperatures. Medical records indicate they probably died from heat stress.

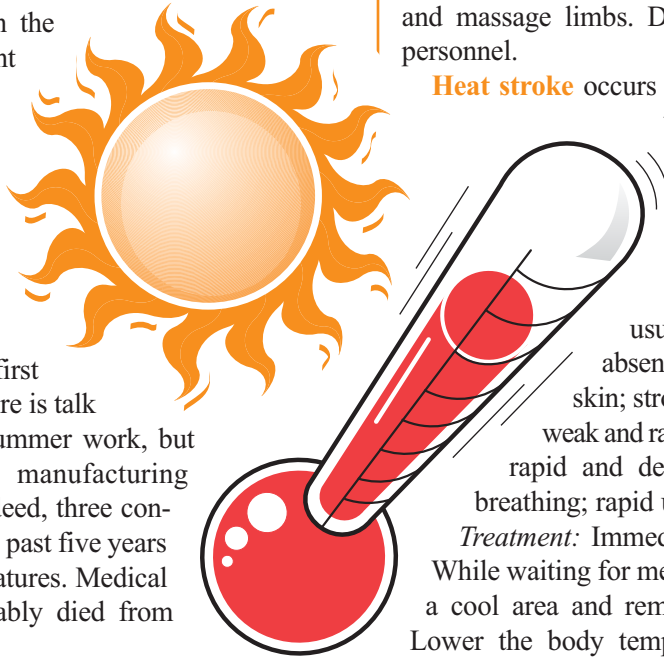
Heat cramps, heat exhaustion and heat stroke are the most serious disorders associated with heat stress and can be deadly if not treated properly. The following information will help you identify heat-related illnesses:

Heat cramps are painful—sometimes severe—cramps of the muscles while working. They usually occur in the arms, legs or stomach, and often occur after work is completed and the employee is relaxing at home.

Symptoms: Cramps and normal to slightly higher body temperature, hot and moist skin, and profuse sweating.

Treatment: Move to a shaded area, drink lightly salted liquids, and wear loose clothing. Seek medical attention if the condition does not improve.

Heat exhaustion occurs when the body’s heat-control mechanism is overactive but has not broken down completely.



Symptoms: Heavy sweating; intense thirst; cool, moist skin; weak and rapid pulse; low to normal blood pressure; fatigue, weakness or loss of coordination; impaired judgment or fainting; tingling in hands or feet; headache; loss of appetite, nausea or vomiting.

Treatment: Move to the shade, and remove or loosen shoes and clothing. Cool the victim as fast as possible, pouring water on the victim if necessary. Elevate the victim’s legs and massage limbs. Drink water with salt. Call medical personnel.

Heat stroke occurs when the body depletes its salt and water supply, sweating stops and heat loss by evaporation of sweat is blocked. Heat stroke is life threatening and has a high death rate.

Symptoms: High body temperature, usually over 103 degrees Fahrenheit; absence of sweating; hot, red or flushed dry skin; strong and rapid pulse that may become weak and rapid as the worker’s condition worsens; rapid and deep breathing followed by shallow breathing; rapid unconsciousness and convulsions.

Treatment: Immediate medical attention is necessary. While waiting for medical personnel, move the worker to a cool area and remove as much clothing as possible. Lower the body temperature with a cool bath or cold compresses if a bath is not available. Do not give liquids to unconscious victims.

Heat Stress Prevention Tips

- Know symptoms of heat-related illnesses; monitor yourself and co-workers.
- Block out direct sun or other heat sources.
- Use cooling fans or air-conditioning, and rest regularly.
- Drink lots of water, about 1 cup every 15 minutes.
- Wear lightweight, light colored, loose-fitting clothes.
- Avoid alcohol, caffeinated drinks or heavy meals.

A poster detailing the signs of heat stress—and what to do if a worker shows signs of a heat-related illness—is located on the NCDOL Web site, www.nclabor.com, under Publications.

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NCDOL Focuses on Improved Park Safety

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“We hope that visitors at Emerald Pointe will take the safety tips seriously,” Berry said. “They sound elementary, but you would be surprised at the number of people who don’t obey the rules. Let’s face it, a kid that holds his hand up in the air while a ride is in motion stands a greater chance of being thrown from a ride than one who doesn’t.”

Wet ’n Wild Emerald Pointe is the largest water park in the Carolinas with more than 36 rides and attractions. The park opened Memorial Day weekend and concludes Labor Day.

“To create safer parks in North Carolina, we must create greater awareness among the general public of the importance of rider responsibility,” said Tony Brancazio, general manager of Wet ’n Wild Emerald Pointe. “We hope our partnership with the N.C. Department of Labor does just that.”

The labor department rider safety campaign also helps ride operators to review state rules and regulations about what operators must do in the event of an accident. Operators also must know how to prevent a reoccurrence.

“We just want all visitors to water parks, permanent amusement parks and county fairs to be safe,” Brooks said.

Don't fret!



will return in the next issue!

DEADLY Mistakes

*By Steve Sykes
State Plan Coordinator*

Fatal Event: On
Sept. 17, 2005, a 26-

year-old diver died when he was inspecting the head gates of a hydroelectric dam.

Investigative Results: Electric power producing equipment must be routinely maintained to ensure proper operation at hydro stations. An underwater service company was inspecting the head gates that control water flow over the dam turbines to produce electricity. Although the gates had been replaced three years earlier, they sometimes failed to seal properly when closed. The victim was a diver with the service company and had been employed less than four months. Before beginning work, hydro station operators told the diver about an open filler valve, warning that water could be flowing at that point. An open valve raised the possibility that a diver near the valve could be sucked into the opening. Later interviews by the labor department revealed that other dive team members were not aware of the danger.

Communication with the diver was interrupted during the dive, and the line tender was told to pull the life line to retrieve the diver. The rescue was unsuccessful. The dive team decided not to send a second diver when it learned that the force of the flowing water could have trapped the first diver in the valve opening.

Instead, workers lowered the water level to retrieve the first diver. The team found that the diver’s safety harness had gotten caught on a protruding bolt. The snagged harness had negated efforts by the dive team to pull the diver to safety. The diver had been drawn into a gate valve opening by the tremendous water pressure, which led to compressional asphyxia.

Discussion: The N.C. Department of Labor regulates certain commercial diving operations. Although diving activity is relatively low compared to activity in manufacturing and construction, the potential for severe injury, illness or death is high because of the hazards associated with diving operations. Diving activity can include inspection and repair, emergency response, and recovery operations. Scientific diving—normally for research and educational activity—is performed by some of the state universities and is not generally covered by the NCDOL standards. Safe diving relies on adequate training and supervision, properly functioning equipment, effective rescue resources, and proper work practices.

Recommendations:

- ✘ Each dive team member should have the experience or training necessary to perform assigned tasks in a safe and healthy manner.
- ✘ The employer must develop and maintain a “safe practices” manual.
- ✘ The planning of diving operations must include, among other things, an assessment of surface and underwater conditions and hazards likely to be present at the time of the dive.
- ✘ All dive team members must be briefed on any unusual hazards or environmental conditions likely to affect the safety of the diving operation.
- ✘ Scuba diving operations should include a standby diver when a diver is in the water.
- ✘ During scuba diving operations, a diver should be line-tended from the surface or accompanied by another diver in the water with continuous visual contact during the diving operation.



Wet 'n Wild Emerald Pointe employee Jacob Pinnix (left) signs his youth employment certificate as state Labor Commissioner Cherie Berry (center) and Angel Wyrick, Emerald Pointe office manager, watch. Jacob used a new online program called YEC Auto to apply for his certificate.

Water Park Helps Kick Off New Program

By Heather Crews
Public Information Officer

One of the largest seasonal employers in the Triad joined the N.C. Department of Labor in May to kick off a new program aimed at making the youth hiring process easier for school kids and their employers.

Wet 'n Wild Emerald Pointe tried out the Labor Department's new online program—called YEC Auto—to apply for youth employment certificates this year.

The certificates, or youth work permits, are required for any worker under 18. Wet 'n Wild Emerald Pointe annually hires about 600 seasonal workers, many of them teenagers, and must get youth employment certificates for all of its summer workers.

"We're really excited to help the Department of Labor kick off this new program," Wet 'n Wild general manager Tony Brancazio said. "It will make the youth employment process a lot simpler for us, youths and their parents."

Labor officials met with Wet 'n Wild Emerald Pointe teen employees and their parents to introduce the new program.

In the past, teenagers who were 14 to 17 took a blank job certificate to their local social services department for approval. Now teens can apply online, print out a copy of the certificate and give it to their employers. Applications can be approved in minutes.

"With all of the new technology out there, the old procedure for getting youth employment certificates was outdated," state Labor Commissioner Cherie Berry said. "We're just trying to make the process a little easier on everyone while still ensuring the safety and well-being of North Carolina's young workers."

The work permits ensure teens are not working in hazardous or detrimental jobs that are not permitted under the N.C. Wage and Hour Act. Work hours also are restricted for 14- and 15-year-olds.

To get a work permit, go to the NCDOL Web site, click on "Youth Work Permits."

Have labor-related questions?

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Top 10 Violations

The N.C. Department of Labor Occupational Safety and Health Division found more than 9,000 serious violations at nearly 5,000 workplaces in 2005.

The following list shows the 10 most frequently cited serious violations in both construction and general industry. The categories provided below are followed by the specific OSHA standard. Statistics are for the public sector only.

Construction

Daily inspections of excavations were not made by competent person—1926.651(k)(1)

Excavation unprotected from cave-ins by an adequate protective system such as sloping, benching, shoring or use of trench box—1926.652(a)(1)

Spray finishing—hot surfaces, electrical and other sources of ignition located in spraying area—1910.107(c)(3)

Spray finishing—combustible residues allowed to accumulate on electrical equipment—1910.107(c)(5)

Spray finishing—lamps were not adequately protected, fully enclosed or separated by partition, where used at spraying area—1910.107(c)(6)

Spray finishing—fan rotating element did not provide adequate source of ventilation—1910.107(c)(7)

Lack of proper personal protective equipment where exposed to hazard—1910.132(a)

Lack of hazard assessment for workplace—1910.132(d)(1)

Employer did not instruct each employee in the recognition and avoidance of unsafe conditions to control or eliminate any hazards or other exposure to illness or injury—1926.21(b)(2)

General Industry

Employers shall provide a workplace free from recognized hazards (General Duty Clause)—N.C. General Statute 95-129(1)

Lack of suitable facility (i.e., eye wash/shower) for quick drenching or flushing where exposed to injurious corrosive materials—1910.151(c)

Means of egress not provided—NCAC 7F.102 Life Safety Code

Lack of hazard assessment for workplace—1910-132(d)(1)

Lack of proper eye and face protective equipment where exposed to hazard—1910.133(a)(1)

Lack of electrical path to ground—1910.304(f)(4)

Lack of proper covers and canopies for electrical cabinets—1910.305(b)(2)

Missing machine guard—1910.212(a)(1)

Hepatitis B vaccine not offered when required—1910.1030(f)(2)

Unused openings in electrical boxes or fittings—1910.303(b)(2)

Violations were cited Oct. 1, 2004, through Sept. 30, 2005. Information also will be provided—including number of violations—on the NCDOL Web site, www.nclabor.com, under Statistics.



Bulletin Board

30-Hour General Industry Workshop

June 12-16

Cape Fear Community College, Castle Hayne

Register at www.nclabor.com/calendar.htm

10-Hour General Industry Workshops

July 18-19

Southminster Retirement Community, Charlotte

Contact Nancy Culp at nculp@southminster.org to register

Mine and Quarry Training

June 19 and July 10

Part 46 New/Experienced Miner Training

Hanson Training Center, Wake Forest

June 20

Part 46 New/Experienced Miner Training

Statesville

June 21

Part 46 Annual Refresher Training

Statesville

June 26 and July 17

Part 46 Annual Refresher Training

Hanson Training Center, Wake Forest

Contact our Mine and Quarry Bureau at (919) 807-2790 for more information.

56th Annual Wilmington Safety School

July 26-27

Wilmington Hilton, Wilmington

www.wilmingtonsafetyschool.com

Carolina Star Safety Conference

Sept. 20-22

Sheraton Hotel at Four Seasons, Greensboro

www.carolinastar.org



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