KIDS 'N SAFE PLAY: REGULATION, LITIGATION AND PLAYGROUND SAFETY

By Amy Widman

INTRODUCTION:

A six-year-old girl severed her finger when she went to slide down a slide on the school playground. It turns out that there was an opening with a loose support and the girl’s hand was caught as her body slid down the slide. Her parents sued the school district on her behalf and won.¹

A six-year-old boy injured himself when he fell off a ramp intended for use by older children, even though younger children had been instructed not to use it. The injured child had successfully used the ramp twice before falling on his third attempt. A jury found that the ramp and its use constituted a dangerous piece of equipment and awarded the family damages.²

A nine-year-old fell from a swing when the overhead fasteners came loose and the swing gave way. The court awarded damages to the family, stating that ordinary inspection would have revealed the impending danger.³

Another nine-year-old fell from the ladder of a 14 foot high slide at school, while climbing up for the purpose of sliding down. The jury found that the school was negligent in allowing such a dangerous piece of playground equipment to be used by children.⁴

Litigation explosion? Well, no. These cases all took place before 1946 and, even more troubling, similar cases today might not fare so...
well for victims, due in part to the efforts of organizations dedicated to wiping out such lawsuits. Recently, some corporate-funded “tort reform” groups have seized on children’s playgrounds as a new area to exploit to further their “tort reform” agenda. Misquoting child psychologists and manipulating data on lawsuits, these groups publish op-eds and articles arguing topsy-turvy notions like safe playgrounds are bad for our children.

Unfortunately for them, most parents, caregivers, pediatricians, and emergency room doctors would disagree. These are the people who see first hand what it means to have an asphalt ground covering in a playground, or an ill-designed play structure.

The Consumer Product Safety Commission also disagrees, after studying just how many playground injuries are easily preventable with a few design modifications and how much those needless injuries cost ($1 billion in 1998). Many playground historians disagree as well because, it turns out, those old playgrounds were not only unsafe, they were boring too. Since the mid-1980s, traditional steel on asphalt playgrounds have been increasingly replaced by play areas featuring brightly colored and molded structures with imaginative play spaces and interesting climbing equipment over soft ground covering, reflecting both safety and development improvements.

Regulations and lawsuits have played a joint role in creating much safer and more stimulating playgrounds for our kids. Sometimes a lawsuit was pivotal in bringing about necessary regulations. Other times the regulations were sound policy decisions by lawmakers, and lawsuits served to help ensure the regulations were followed. Lawsuits also increase awareness, which in turn informs busy parents about dangers that are hard to see, like arsenic in the wood used to build play structures.

Although manufacturers and their corporate-funded “think tanks” like to blame lawyers for just about everything, it turns out that there are fewer lawsuits being brought today than back in those nostalgic days of yore, and the reason is that playgrounds are becoming safer. Even so, we are not finished improving playgrounds, and recent studies have shown a majority of playgrounds still contain dangerous and defective materials.

A LITTLE PLAYGROUND SAFETY HISTORY

Modern playgrounds began around the turn of the century, and usually contained the equipment with which most of us are familiar: swings, slides, seesaws, jungle gyms, and merry-go-rounds. These playgrounds were conceived as a respite for impoverished urban children and primarily a place for exercise. The 1960s saw another boom in playground development, spurred by John F. Kennedy’s Council on Youth Fitness. Again, the dominant purpose was exercise, and the playgrounds were mostly the same: paved ground, chain-link fences, and commonly, steel structures.

Playground designers, child psychologists and play theorists have criticized these “traditional” playgrounds for years. The main criticisms are that these traditional
playground models focused only on exercise, not imagination. Traditional playgrounds have also been heavily criticized for aesthetic reasons.\textsuperscript{12}

But the newest type of criticism has spurred the greatest changes in playground design: playground safety.

In 1972, the federal Consumer Product Safety Commission (CPSC) was created and one of its first undertakings was a comprehensive study of emergency room injuries in order to create statistics on product-related injuries and deaths. The CPSC discovered that playground equipment was a major cause of injuries.\textsuperscript{13} The agency followed up with a more detailed study of playground injuries in 1975 and this study prompted issuance of the Handbook for Public Playground Safety, voluntary standards for playground equipment, released in 1981. The Handbook has been periodically updated.\textsuperscript{14}

The focus by the CPSC and the resulting handbook reflected a new understanding that those manufacturing, marketing, or providing play equipment had a duty to make sure the equipment was safe and to maintain and inspect playground equipment. For example, the surface covering underneath playground equipment must be resilient enough to avoid serious injury due to a fall (i.e., not concrete, packed earth or grass), there should be no sharp edge hazards, no platforms without rails, no protrusion or entanglement hazards, spacings between bars and railings should be at a safe distance to avoid entrapment, the natural environment around the play area should not contain trip hazards, and so on.\textsuperscript{15} The Handbook also requires maintenance and inspection of playground equipment, so children injured by a slide or swing in disrepair have support for claiming that the playground provider should have known about and corrected the dangerous condition. The goal of all these standards is reducing playground injuries.

Since 1981, the CPSC has continued to study and update its standards and the awareness of these standards has permeated almost all discussions of playground design and safety. The standards outlined by CPSC remain voluntary, but some states are adopting or debating adoption of CPSC standards by statute, requiring that all playgrounds in these states conform to the safety standards outlined in the CPSC Handbook.\textsuperscript{16} In those states where the CPSC Handbook sets the standard for playground design, recent studies have shown that the playgrounds rank higher in terms of safety than in states with no mandatory guidelines.\textsuperscript{17}

But the CPSC has not been alone in finding that increased safety at playgrounds reduces injuries for children. In 2005, the American Academy of Pediatricians journal \textit{Grand Rounds} published an article about the importance of improving safety standards to reduce playground injury rates.\textsuperscript{18} This article examined a Canadian study comparing injuries at playgrounds that followed new Canadian safety standards against playgrounds that did not.\textsuperscript{19} The researchers replaced dangerous or defective playground equipment and removed environmental hazards (poor drainage, hard surfaces, etc.) in the 136 playgrounds that fell under the new safety violations and found that such intervention reduced injuries by almost half.\textsuperscript{20} The 225 playgrounds that did not contain hazards violating the new standards remained unchanged and experienced a slight increase in
injuries. The authors concluded that the safety standards were an effective tool for identifying hazards and that adhering to the safety standards reduced injuries.

Another study conducted by faculty at the University of North Carolina School of Public Health found that safety regulations markedly improved safety on playgrounds. This study analyzed injury rates following North Carolina’s adoption of new playground safety regulations in 1996. The results showed a 22 percent decline in injury rates in the three years following implementation of the regulations. “To our knowledge, this is the first time anyone in the United States has been able to associate a real decline in the risk of child injuries with strengthening regulations for reducing hazards on childcare playgrounds,” said Dr. Jonathan B. Kotch, professor of maternal and child health, and principal researcher for the study.

The Consumer Federation of America has also published a “Report on Model Law on Public Play Equipment and Areas,” which is similar to the CPSC standards. There are now even industry groups and nonprofits interested in playground safety. There is international support to strengthen safety regulations as well, with many countries adopting some form of safety regulations. In fact, the United States lags behind Canada and most Western European countries by not providing mandatory standards for safe playground materials.

ARE TODAY’S PLAYGROUNDS SAFE?

Playgrounds are nowhere near as safe as they could be. Each year more than 215,000 kids go to emergency rooms across the country due to playground injuries. Most of these occur on public playgrounds, and most of the more serious injuries involve falls to hard surfaces, head entrapment and strangulation by entanglement. In fact, a nationwide survey of 760 playgrounds revealed that 43 percent of these playgrounds had at least one of such hazardous piece of equipment. These are curable design or maintenance defects.

From January 1990 to August 2000, the U.S. Consumer Product Safety Commission received reports of 147 deaths to children younger than 15 that involved playground equipment. According to another report, a child is injured on playground equipment every 2.5 minutes. Also troubling, the playground equipment-related injury rate among children ages 5 and under has doubled since 1980. Even with soft ground covering and height restrictions, a few medical studies argue that height restrictions still should be lowered.

Another study revealed that 75 percent of public playgrounds lack adequate protective surfacing, meaning that the surfaces below the equipment are not adequate to shield a fall. According to Kieran J. Phelan, M.D., a pediatrician and lead author of a playground injury study, “[p]laygrounds provide obvious benefits for children, but they should be engineered to provide safety from falls, including rubberized or other soft surfaces to
absorb the impact.\textsuperscript{33} Phelan’s study found that injuries from playground equipment were more severe than auto and bicycle crash injuries.\textsuperscript{33} A 2002 Public Interest Research Group (PIRG) study of playground safety in 36 states found that 75\% of the 1,067 playgrounds studied did not have adequate protective ground coverings to shield falls.\textsuperscript{34} And an analysis of lawsuits in New Jersey and New York covering the years surrounding the establishment of the CPSC standards found that a primary problem with playgrounds was “provision and maintenance of proper surfacing under apparatus and in play areas.”\textsuperscript{35}

Recently, playground surfaces made headlines in New York City when a toddler sustained severe second-degree burns on his feet due to the excessively hot rubber ground covering. Safety advocates and parents tested black and metal surfaces at area playgrounds and found that these surfaces recorded temperatures as high as 165 degrees on hot sunny days. More than a dozen kids are treated for severe burns from this equipment annually, yet the city has done nothing to make these surfaces safer. There are a handful of lawsuits currently pending regarding this hazard.\textsuperscript{36}

Such lawsuits are important for a variety of reasons, including the impact on insurers, which pay liability claims. In fact, insurers, have played a large role in forcing compliance with CPSC standards and other safety changes. One reason insurers have been particularly active in playground risk management is because many municipalities are now self-insuring. Because self-insuring local governments bear most of their own risk — they collect premiums and pay claims — they are starting to focus far more on minimizing risk and ensuring safety than their former insurers ever did.\textsuperscript{37}

Another type of danger lurking in our playgrounds that has been helped by litigation, is environmental contamination, whether by arsenic in the treated wood of the playground itself, peeling lead paint on metal structures, or playgrounds built too close to toxic land or inundated with pesticides and the resulting dangerous residues. The story of how dangerously treated wood became a viable playground structure material is a telling one. For years, industry lobbyists successfully fought for an exemption from hazardous waste laws for pressure-treated wood, which leaches toxic levels of arsenic.\textsuperscript{38} The arsenic is part of a compound called chromium copper arsenate (CCA), a pesticide that was forced deep into the structure of the wood to provide protection from termites and other destructive forces. However, CCA is known to leach arsenic to the touch and both the EPA and the World Health Organization consider it a known human carcinogen.\textsuperscript{39} This wood, although banned in several countries, remained available in America to build playground structures through as late as 2003. Industry groups continued to maintain in the media and in lawsuits that any arsenic leaching onto children’s hands (and ultimately, into their mouths) was negligible and safe, while at the same time promoting a “safer” and arsenic-free pressure treated wood to the European markets.\textsuperscript{40}

However, numerous studies showed greatly elevated cancer risk in children playing on structures built of pressure-treated wood. The Environmental Working Group published a report finding that “in two weeks, an average five-year-old playing on an arsenic-treated playset would exceed the lifetime cancer risk considered acceptable under federal
pesticide law.” In Florida, a 2001 study showed arsenic levels at playgrounds far higher than that considered safe by hazardous materials specialists.

In 2001, environmental groups and consumer advocates began pushing for a ban on pressure-treated wood, filing a lawsuit in 2002 to require warnings as to the dangers associated with this wood. Consumers filed a federal class action for failing to warn of the dangers with pressure-treated wood and people injured from exposure to extremely toxic levels of arsenic in this wood filed personal injury lawsuits. These lawsuits demanded, among other relief, that the $4 billion-a-year wood industry seal existing structures and clean up contaminated sites.

The legal pressure has had some effect. Almost immediately, at least one maker of arsenic-treated wood playground structures switched to non-arsenic preservatives. And, not long after, the Environmental Protection Agency decided to phase out the use of arsenic treated wood by 2003. The phase out meant that no new wood could be treated with CCA (the arsenic-laden preservative) and eventually the remaining stores of CCA-treated wood would be sold off. The Environmental Protection Agency also released a comprehensive study in 2003 concluding that 90 percent of children face an elevated cancer risk due to arsenic-treated wood. These lawsuits also led the American Wood Preservers Institute, a chemical industry-funded lobby group that had fought to keep the dangerous wood on the market for decades, to close its Florida office in 2003.

Yet, although no new playgrounds are built with this wood under the new regulations, arsenic-treated wood still remains on older playgrounds and remains hazardous.

Lead paint is another environmental hazard on many playgrounds. In a survey of 26 playgrounds, CPSC found that 62% had lead levels that could exceed the amount used by the federal government to determine lead hazards. The Center for Disease Control recently issued a health advisory recommending that artificial turf surfaces be tested for lead after unexpectedly high levels of lead were found in three New Jersey playing fields.

Playgrounds are sometimes built on toxic land, without adequate environmental testing to assure the area is safe for children. In the past few months, at least two playgrounds have been closed for environmental testing after it had become known that they were built on former industrial sites that had not been properly remediated. In 2007, a playground in Baltimore closed after investigations revealed that the Allied Chemical Company had been spewing arsenic and other pesticide residues onto land that became a playground. Investigations showed toxic levels at the playground greatly exceeding safe levels.

So clearly, much still must be done to make playgrounds as safe as they should be.
ARE TODAY’S PLAYGROUNDS FUN?

Common Good, the group behind most of the “dumbed-down playground” articles, likes to quote playground historians and theorists to support their argument that modern playgrounds are no fun anymore. They wrongly blame lawyers for this change in how kids play. In fact, lawsuit results have been squarely in line with the views of play theory and safety advocates, as well as playground architects.

Use of safer shapes and materials, including soft surfaces and rounded edges, have not only allowed playgrounds to continue to be “fun”, but also they result in safer equipment that is less likely to send a child to the hospital. As one medical study on playground injuries put it:

“The value of play to children’s physical and mental development is not challenged; however, it must also be balanced with the child’s right for minimal risk to disabling injury. Head injury or serious fractures with lifelong consequences should not be considered part of growing up.”

“Tort reform” groups misquote play theorists and advocates in attempts to bolster their claims of dumbed-down playgrounds, but law professor Benjamin Barton, an expert in tort law and economics, uncovered this misleading use of authority in his article on tort reform and playground design. Following up on Common Good founder Philip K. Howard’s shot across the bow that the new playgrounds are boring, Barton writes:

As support for this position he uses “Lori Macmillan Johnson, a professor of landscape architecture at the University of Arizona” and an anecdote about children crashing their bikes into the new, boring playground equipment. In all honesty I was somewhat flummoxed by this criticism of the new playgrounds. I seriously doubted there is an epidemic of children crashing their bikes into playground equipment.

So, I emailed Professor Johnson and asked her two questions. First, was there empirical support for a bike-crashing trend? The answer, unsurprisingly, was no. Second, I asked her if, despite her misgivings with the cookie-cutter nature of current playgrounds, she preferred them to the “prison yard” playgrounds of yore? The answer was a qualified yes.

Barton’s article is mostly focused, however, on the real economic effect of safety regulations on playground design. He argues, in direct opposition to corporate groups, that, in fact, safety challenges encourage innovative design and creative thinking about playspaces that benefit children in two ways: by giving them safe places to play and by making those spaces interesting. His thesis is borne out by the recent trend in playground architecture and design by celebrated architects. Playground design has become so innovative and interesting that noted architects Frank Gehry and David Rockwell are currently designing playgrounds for downtown Manhattan. Gehry’s playground will
emphasize environmentally friendly products.

Donna Thompson, executive director of the National Program for Playground Safety, also makes the point that playground equipment need not be considered “fun” from an adult perspective, it is instead imperative that the equipment be both safe and interesting from a child’s perspective:

In general, we think that the manufacturers are finally beginning to produce some new products. If they would hire some childcare personnel on their staff and produce some products that fit the needs of children, they would probably help reduce injuries even more. They have done a good job of making products that do not have head entrapments, but they need to continue to meet the needs of children, rather than making equipment that adults think would be fun. Some equipment companies are doing that and probably have reduced injury rates, as well.56

CONCLUSION

In contrast to the views of corporate lobbyists and “tort reform groups, pediatricians, parents, governments, and consumer advocates all agree that safety improvements to playgrounds are a win-win situation. Children are more likely to survive falls when safer surfaces and lower equipment is used, and the new designs provide more imaginative playspaces. Lawsuits serve a crucial purpose by ensuring that guidelines are followed and equipment is well-made and well-maintained.

But while playgrounds are getting safer and more interesting, the numbers of playground injuries that still occur clearly highlight that regulations must be stronger to do what they were intended to do – keep kids safe. Moreover, “tort reform” efforts have weakened the ability of legal system to enforce standards, as in states where public schools are immune from liability for dangerous and defective playground equipment.57 The result is that children are still being hurt and playground manufacturers are not being held fully accountable for these injuries. Such laws should be repealed in the interest of making all children safer.
NOTES

3 Kelley v. School Dist., 102 Wash 343, 173 P 333 (1918)
4 Holt v. School Dist., 102 Wash 442, 173 P 335 (1918)
9 National Play Safety Institute, State Reports (showing a nationwide average grade of C+ when assessing playground safety). Available on-line at http://www.playgroundsafty.org/research/state.htm
10 Benjamin Barton, “Tort Reform, Innovation, and Playground Design,” 57 Fla. L. Rev. ___ (forthcoming) [hereinafter, Barton] (citing Arthur Leland & Lorna Higbee Leland, Playground Technique and Playcraft (1909); George D. Butler, Recreation Areas: Their Design and Equipment (1947)).
11 For more on this, and many sources describing the development of playgrounds in more detail, see Barton at 29-31.
12 Id.
15 Id.
16 California was the first state to statutorily enact the standards. Connecticut, Michigan, New Jersey, North Carolina, and Texas are following suit.
17 Email to Center for Justice & Democracy from Donna Thompson, Ph.D., Executive Director, National Program for Playground Safety, October 8, 2007.
20 Id.
21 Id.
22 Id.
24 Id.
26 See, e.g., IPEMA (The “International Playground Equipment Manufacturer’s Association”) and NPPS (the National Program for Playground Safety).
27 Monty Christiansen, “International Perspectives of Playground Safety,” Parks & Recreation, April, 1997 (discussing regulations in U.K., Sweden, Malaysia, Australia, New Zealand, Germany, France).
29 http://www.playgroundsafty.org/research/index.htm
31 http://www.nsc.org/library/facts/plgrdgen.htm  
33 Children’s Hospital Medical Center of Cincinnati, news release, July 25 (2001). [announcing study in Ambulatory Pediatrics]  
34 Rachel Weintraub and Alison Cassady, “Playing it Safe,” Consumer Federation of America, June 2002  
35 Id.  
39 Rachel Weintraub and Alison Cassady, “Playing it Safe,” Consumer Federation of America, June 2002  
43 Id.  
44 Id.  
50 See, e.g., Shiela Robinson, “Environmental agency Checking Playground for Toxic Materials,” Shawnee News-Star, July 11, 2008. Also, in the Gowanus section of Brooklyn, investigators from a gas company are digging into the ground of a playground built on land contaminated from 100 year old coal factories.  
54 Barton at 37-39. The description of the old traditional playground as a “prison yard” was also Professor Johnson’s.  
56 Email to Center for Justice & Democracy from Donna Thompson, Ph.D., Executive Director, National Program for Playground Safety, October 8, 2007.  