In March 2007, Ward B. Stone, a wildlife pathologist with the NYS DEC, began testing jewelry bought from several dollar stores around Albany after finding heavily lead-containing bracelets in his own child's jewelry collection.

His findings were alarming: all stores sold jewelry containing high levels of lead, none of which carried a warning label that lead was present in the jewelry. Samples of the jewelry were sent to Edison Laboratories in Schenectady, where the jewelry was found to be made up of at least 380,000 parts per million or higher—over 600 times the established limit of 600 parts per million, according to the Consumer Product Safety Commission (CPSC). Necklaces, bracelets, earrings and toe rings were tested.

Dollar and 99 Cent stores are everywhere across New York State and the nation, with millions of pieces of lead jewelry available to people, especially children. What's more, millions of these lead jewelry items are already in the homes of millions of Americans. This jewelry is most often worn by the young, most of them children in the 3-16 years of age range, who are very sensitive to lead exposures, since it is the critical time for neurological development.

Similar testing found alarmingly high levels of lead in children's jewelry sold at various Rochester retailers in 2005. The testing, pioneered by Judy Braiman, president and founder of the Empire State Consumer Association, lead the CPSC to recall nearly 150 million pieces of toy jewelry nationwide. However, as Dr. Stone's findings point out, leaded jewelry continues to be sold. A study published in the Bulletin of the Environmental Contamination and Toxicology found that the majority of bracelets, rings, necklaces and earrings bought from big chain stores leached enough lead to cause minor neurological damage with just 20 seconds of daily contact.

Braiman states that lead is not just in children’s jewelry, but in fashionable adult jewelry too, from cultured pearls from China to necklaces from NY & Co, along with many other familiar brand names. The Center for Environmental Health in California also tested items of jewelry purchased from major national retailers and found nearly a third of the pieces contained lead. Their website contains a list of companies, retailers and brand names of jewelry that tested positive for lead.

In 2006, Assemblyman David Koon and Senator James Alesi introduced legislation, A.7726/S.5300, to ban the sale and distribution of jewelry containing lead, to protect children from this danger.

**Health Effects of Lead**

Any level of lead can be dangerous, even deadly. Lead can be absorbed directly through the skin or ingested if the jewelry is put in the mouth, resulting in the buildup of lead in children’s tissues. Small pieces are also easily swallowed. Even at low doses of exposure, lead can pose a serious threat to neurological development in infants and children and may result in learning disabilities, behavioral problems and hearing loss.

The problems caused by lead are irreversible. Within the human body, lead damages the nervous system, circulatory and blood forming system, reproductive system, kidneys, and gastro-intestinal tract. In children, because the brain has not yet fully developed, lead poisoning can cause learning disabilities, attention deficit disorders, lowered IQ, anti-social behavior, and adversely impact their development. When a pregnant woman is exposed to lead, it can cross the placenta and harm a developing child.
According to the New England Journal of Medicine, “The persistence toxicity of lead has been seen to result in significant and serious impairment of academic success...failure to graduate from high school, impairment of reading skills, and deficits in vocabulary, fine motor skills, reaction time and hand-eye coordination.” Rates of lead poisoning are also higher in large cities and among people with low incomes.

There have been several incidents of lead poisoning in children due to the ingestion of lead jewelry, most recently in February 2006, when a four-year-old boy died after swallowing a heart-shaped metallic charm containing lead.

On March 15, 2007, the Federal Consumer Product Safety Commission (CPSC) issued a voluntary recall of children’s necklaces containing high levels of lead being sold at Claire’s retail stores nationwide. The necklaces have metal pendants shaped as animals holding colored marbles, a fleur de lis, fairies, “BFF” with rhinestones, and tiny handcuffs painted in various colors. The pendants were sold from December 2005 to December 2006 for between five and eleven dollars. The CPSC is currently considering the issue of lead in children’s jewelry and whether or not to allow manufacturers to continue marketing leaden jewelry and toys to children. The CPSC is responsible for ensuring the toys children play with and the products we use everyday are safe.

According to Dr. Stone, “Rapid action is needed to remove lead from exposure to young children, which could result in a loss of cognitive ability (or worse) for the rest of a child’s life.”

Scientists have now contacted all State Agencies including the Department of Health, Governor’s office and the State Attorney General’s office in hopes of making children’s health a highest priority. Fast action would prevent lead poisonings, deaths and certainly conserve cognitive ability in our children, who are innocent victims not yet old enough to make experienced decisions.

California to Restrict Lead in All Jewelry
Beginning September 1, 2007 under a settlement and effective into law, California will set standards for levels of lead in children’s and adult jewelry, body piercing jewelry, and both metal and non-metallic jewelry components. These standards measure the total lead content, and are stricter than standards used by the CPSC. The settlement prohibits stores from selling high levels of lead-containing jewelry in California and institutes civil penalties up to $2,500 per day for each violation. Alexa Engelman, public interest litigation coordinator for CA’s Center for Environmental Health, states, “For the first time, this settlement will begin to regulate an industry that has never been regulated before. Lead in jewelry is widespread, at high levels, and is dangerous for kids.” Under the settlement terms, metal components in the coatings on children’s jewelry must contain less than 600 parts per million (ppm) of lead, while plastic (PVC) components can contain no more than 200 ppm.

Sources and Related Links on Lead in Children’s Jewelry:

Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Reports-
Death of a Child After Ingestion of a Metallic Charm—Minnesota, 2006:
http://www.cdc.gov/mmwr/preview/mmwrhtml/mm55d323a1.htm
Lead Poisoning from Ingestion of a Toy Necklace—Oregon, 2003:
http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5323a5.htm

The Center for Environmental Health (California), Lead in Children’s Jewelry:
http://www.cehca.org/jewelry.htm


U.S. Consumer Product Safety Commission:
http://www.cpsc.gov