

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/HB 1285 Cadmium in Children's Products
SPONSOR(S): Agriculture and Natural Resources Policy Committee, Thompson, G.
TIED BILLS: **IDEN./SIM. BILLS:** SB 2120

	REFERENCE	ACTION	ANALYST	STAFF DIRECTOR
1)	<u>Agriculture & Natural Resources Policy Committee</u>	<u>11 Y, 0 N, As CS</u>	<u>Thompson</u>	<u>Reese</u>
2)	<u>Public Safety & Domestic Security Policy Committee</u>	<u></u>	<u></u>	<u></u>
3)	<u>Full Appropriations Council on Education & Economic Development</u>	<u></u>	<u></u>	<u></u>
4)	<u>General Government Policy Council</u>	<u></u>	<u></u>	<u></u>
5)	<u></u>	<u></u>	<u></u>	<u></u>

SUMMARY ANALYSIS

The bill mirrors federal law, providing specific limits on the use of cadmium on children's jewelry, toys, or child care articles, and provides for definitions. The bill exempts the sale of a collectible toy that is not marketed to or intended to be used for play by a minor younger than 14 years of age.

The bill creates a new third degree unranked felony for knowing and intentional violations of the bill's limits on the use of cadmium, punishable as provided for in ss. 775.082, 775.083, 775.084, F.S.

Although the bill creates a new third degree felony, it is impossible to forecast how many violations might occur, thus the actual fiscal impact on state and local governments is unknown. Associated medical and insurance costs to the private sector may be reduced. The Criminal Justice Impact Conference determined that the bill will have an insignificant impact on prison admissions and populations. (See Fiscal Comments section for additional details)

The bill has an effective date of July 1, 2010.

HOUSE PRINCIPLES

Members are encouraged to evaluate proposed legislation in light of the following guiding principles of the House of Representatives

- Balance the state budget.
- Create a legal and regulatory environment that fosters economic growth and job creation.
- Lower the tax burden on families and businesses.
- Reverse or restrain the growth of government.
- Promote public safety.
- Promote educational accountability, excellence, and choice.
- Foster respect for the family and for innocent human life.
- Protect Florida's natural beauty.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Background

Cadmium is a natural element that is found in the earth's crust and is classified as a heavy metal.¹ All soils and rocks, including coal and mineral fertilizers, contain some cadmium. Most cadmium is extracted during the production of other metals like zinc, lead, and copper.² The chemical properties of cadmium describe it as a soft, malleable, bluish-white metal with a low melting point. Cadmium does not corrode easily and is used in batteries, pigments, metal coatings, and plastics.

Exposure to heavy metals is a health hazard. In addition to lead and mercury, cadmium has been identified as one of the most probable causes of disease related to heavy metal exposure observed in primary care medicine.³ Both animal experiments and epidemiologic studies have confirmed that cadmium is toxic to kidney, liver, bone, and causes cancer.⁴ The Agency for Toxic Substances and Disease Registry (ATSDR) has listed cadmium among the top seven of the 275 most hazardous substances in the environment.

Both adults and children can suffer from the effects of cadmium poisoning. Cadmium exposure, however, can start at a very young age. Babies and young children are more susceptible to cadmium poisoning than adults because they often put their hands or other objects in their mouths.⁵ Once cadmium enters the body, it has a biological half-life of 10–30 years in the kidney and 5–10 years in the liver. Animal experiments have reported neurotoxic and behavioral effects of cadmium.⁶ Similar effects have also been observed in human children. Several studies have reported higher concentrations of cadmium in children with mental retardation, learning difficulties, and dyslexia.⁷

¹ Agency for Toxic Substances & Disease Registry, Case Studies in Environmental Medicine (CSEM) Cadmium Toxicity What is Cadmium; <http://atsdr.cdc.gov/csem/cadmium/cadmium.html>

² U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry, Division of Toxicology and Environmental Medicine ToxFAQs; Cadmium CAS #7440-43-9

³ Environmental Health Perspectives, volume 117, number 10, October 2009

⁴ Id.

⁵ Bureau Veritas Consumer Products Services; www.bureauveritas.com/cps

⁶ Gupta A, Gupta A, Chandra SV. 1991. Gestational cadmium exposure and brain development: a biochemical study. *Ind Health* 29(2):65–71.

⁷ Environmental Health Perspectives, volume 117, number 10, October 2009

Present Situation

A recent Associated Press (AP) investigation has discovered high levels of cadmium present in certain charm bracelets and pendants. In response, the U.S. Consumer Product Safety Commission (CPSC), which regulates children's products, has opened a formal investigation into children's metal jewelry to determine the action CPSC needs to take. The AP investigation tested 103 pieces of children's jewelry in New York, Ohio, Texas, and California. The following table lists the results of the AP investigation:

Seller	Item	Level of Cadmium
Wal-Mart	Three Bracelet Charms	84% to 86%
Dollar N More Store, Rochester, NY	Four Rudolph the Red-Nosed Reindeer Bracelets	82% to 91%
Claire's	Two Charms on Best Friends Bracelets	89% to 91%
Wal-Mart	Pendants from four The Princes and The Frog Necklaces	25% to 35%

The American Society for Testing and Materials International (ASTM) is an international standards organization that develops voluntary standards to serve as a guide for design, trade and manufacturing. ASTM F963⁸, is the toy safety standard. ASTM does not require or enforce compliance with its standards. Such standards, however, may become mandatory when referenced by an external contract, corporation, or government. Under the Federal 2008 Consumer Product Safety Improvement Act⁹, ASTM F963 became mandatory, therefore regulating cadmium in coatings on children's toys.

Under ASTM F963, the coatings are tested for soluble or extractable cadmium and not total content.¹⁰ Total cadmium provides for the total amount of cadmium present in a sample. Soluble cadmium provides for the amount of cadmium that can be extracted out of a sample typically using an acid solution similar to stomach acid. Depending on the type of material, soluble cadmium can be much lower than the total amount of cadmium actually present. Consequently, federal law may be unintentionally allowing for children's toys containing cadmium to enter onto the market.

Cadmium limits have been passed in California (CA Toy Safety Act) and Washington (WA Children's Safe Products Act). In addition, a New York law¹¹ requires the Health Commissioner to establish a cadmium limit for glazed ceramic tableware, crystal, china and other consumer products. States also have regulated cadmium in packaging, drinking water, batteries, electronics and e-waste. Several states have proposed legislation regulating cadmium in children's jewelry. Most of this legislation will limit the total content of cadmium in a product. The following is a table of current pending state legislation relating to cadmium:

State	Bill Number	Proposed Changes
California	SB 929	Prohibits the manufacturing, shipping, selling or offering for sale or offering for promotional purposes children's jewelry containing cadmium.
California	SB 1365	Amends an existing law that provides no person shall manufacture, sell, or exchange any toy that is contaminated with any toxic substance. Covers items coated with soluble compounds of cadmium.
Connecticut	HB 5314	Concerns child safe products and banning cadmium in children's products; phases out the use of certain chemicals in children's products and to ban cadmium in children's products.
Florida	HB 1285	Prohibits using or applying cadmium in excess of specified amount on any item of children's jewelry, toy, or child care article sold in this state

⁸ American Society for Testing and Materials International; Standard Consumer Safety Specification for Toy Safety.

⁹ PUBLIC LAW 110-314—AUG. 14, 2008

¹⁰ Federal law limits the amount of soluble cadmium in product coatings to 75 parts per million.

¹¹ McKinney's Public Health Law § 1376-a

Illinois	HB 5040	Regulates the sale and distribution of children's products or product components containing cadmium and priority chemicals of high concern. Designates cadmium as a priority chemical.
Indiana	SB 540	Sets allowable content limits for lead, cadmium and phthalates in children's products.
Minnesota	SB 2385	Bans cadmium jewelry.
Mississippi	HB 938	Relates to children's products; sets limits for phthalates, lead and cadmium in certain products.
New Jersey	A 2259	Prohibits the sale of certain children's products containing lead, mercury, or cadmium.
New York	SB 6446	Directs the commissioner of health to establish standards for the cadmium that children's jewelry may contain.
New York	A 9755	Relates to the regulation of cadmium-added novelty consumer products.
New York	A 9771	Prohibits the use of cadmium in children's products.

Currently, the Florida Department of Environmental Protection (DEP) regulates through its air, wastewater, and solid and hazardous waste programs how and when metals in toxic concentrations enter the environment. Through agency rules¹², DEP oversees the cleanup of illegally released metals in toxic concentrations through its waste cleanup program. These metals include but are not limited to: arsenic, mercury, lead, aluminum, barium, nickel, cadmium, uranium, copper, chromium, zinc and beryllium. Currently there is no Florida law that regulates cadmium in children's products.

Proposed Changes

The bill mirrors federal law, prohibiting a person from using or applying cadmium in excess of 75 parts per million on any surface coating or substrate material on any item of children's jewelry, toy, or child care article, as determined through solubility testing for heavy metals defined in the ASTM standard F963, if the product is sold in Florida. The bill exempts the sale of a collectible toy that is not marketed to or intended to be used for play by a minor younger than 14 years of age.

The bill creates a new third degree unranked felony for knowing and intentional violations of the limits on the use of cadmium on children's jewelry, toys, or child care articles provided for by the bill. Such violations are punishable as provided for in ss. 775.082, 775.083, 775.084, F.S.

The bill provides the following definitions:

- "Child" means an individual who is 7 years of age or younger.
- "Child care article" means a product designed or intended by the manufacturer to facilitate the sleep, relaxation, or feeding of a child or to help a child with sucking or teething.
- "Children's jewelry" means jewelry that is made for, marketed for use by, or sold to a child.
- "Consumer" means an individual; a child, by and through its parent or legal guardian; or a business, firm, association, joint venture, partnership, estate, trust, business trust, syndicate, fiduciary, corporation, any commercial entity, however denominated, or any other group or combination thereof.
- "Person" has the same meaning as provided in s. 1.01, Florida Statutes, which includes individuals, children, firms, associations, joint adventures, partnerships, estates, trusts, business trusts, syndicates, fiduciaries, corporations, and all other groups or combinations.
- "Toy" means an article designed and made for the amusement of a child and for the child's use during play.

¹² Rule Chapter limits for surface water 62-302; Drinking water in 62-550; Target levels for water and soil can be found in 62-777

B. SECTION DIRECTORY:

Section 1. Creates an act relating to cadmium in children's products; defining terms; prohibiting a person from using or applying cadmium in excess of a specified amount on any item of children's jewelry, toy, or child care article sold in this state; providing an exception; providing that a knowing and intentional violation of the act is a felony of the third degree; providing criminal penalties.

Section 2. Providing an effective date of July 1, 2010.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

See FISCAL COMMENTS section.

2. Expenditures:

See FISCAL COMMENTS section.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

See FISCAL COMMENTS section.

2. Expenditures:

See FISCAL COMMENTS section.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

To the extent that the bill may improve the health of children in Florida by reducing cadmium poisoning, associated medical and insurance costs to the private sector may be decreased.

D. FISCAL COMMENTS:

The bill creates a new third degree felony. According to the Department of Corrections, it costs the state approximately \$20,000 per year for an incarcerated adult male. It is impossible to predict how many violations will occur relating to this new offense. The related fiscal impact is indeterminate.

Unless the bill expressly ranks the new felony offense on the state's offense severity ranking chart, s. 921.0022, F.S., the new felony will be "unranked." According to the Criminal Justice Impact Conference, this is not uncommon. An unranked, 3rd degree felony, defaults to Level 1 on the ranking chart, which is the least severe, thus imposing a lower percentage of related prison sentences.

Pursuant to s. 216.136(5), F.S., a function of the Criminal Justice Impact Conference (CJIC) is the development of official forecasts of prison admissions and population as they relate to new felonies. Typically, a new felony is not created until a consensus has been reached within the CJIC process. On March 17, 2010, the CJIC met and concluded that the effects of HB 1285 will have an insignificant impact on prison admissions and populations.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable. This bill does not appear to: require counties or municipalities to spend funds or take an action requiring the expenditure of funds; reduce the authority that counties or municipalities have to raise revenues in the aggregate; or reduce the percentage of a state tax shared with counties or municipalities.

2. Other:

None

B. RULE-MAKING AUTHORITY:

None

C. DRAFTING ISSUES OR OTHER COMMENTS:

According to the DACS, the bill's provisions do not impact the Division of Consumer Services as matters addressed by this bill are currently covered by federal law; therefore, calls addressing product safety issues of this type are referred to the federal Consumer Product Safety Commission.

IV. AMENDMENTS/COUNCIL OR COMMITTEE SUBSTITUTE CHANGES

On March 25, 2010, the Agriculture and Natural Resources Policy Committee adopted (1) amendment to HB 1285. The amendment removes the provisions related to specific civil fines for violations of the bill's cadmium limits.