FIRST READING

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Flame Retardants Have Risks, Benefits

Chemical compounds called polybrominated diphenyl ethers (PBDEs) are often added to electronics, furniture foam, and other products to slow the spread of flames, allowing people more time to escape a fire. Because PBDEs are merely added to those products rather than being chemically bound to them, small quantities leach out over time—eventually entering the environment and human bodies. Humans are exposed to PBDEs mostly through food consumption.

Studies have linked PBDE exposure to disrupted thyroid hormone levels, and to learning and motor deficits. Many of the observed health effects of PBDEs are from animal studies, so their effects in humans are uncertain. It is also unclear



whether the levels of PBDEs in humans are high enough to cause the same health damage as has been observed in animals.

The three PBDEs most widely used commercially are pentaBDE, octaBDE, and decaBDE. Studies indicate that the "penta" and "octa" forms may be toxic to the liver, thyroid, and developing nerve system. The level of toxicity, widespread distribution, and accumulating nature of

"penta" and "octa" cause concern about possible long-term harm to humans and wildlife if they continue to be used. Although "penta" and "octa" have the highest potential to accumulate in the environment, "deca" also brings some concern due to evidence that time and sunlight exposure may break it down into the other PBDEs.

An Illinois bill that has passed both houses will ban the making, distribution, or processing of products containing over 0.1% "penta" or "octa" BDE, with some exceptions, next January 1.

Scientific Studies

PBDEs have been found in the fat tissue, blood, and breast milk of persons exposed to them. PBDE levels in U.S. mothers' milk are 10 to 100 times those in Europe. Blood samples taken in the U.S. from 1985 through 2002 showed a steady increase of PBDEs in humans. Indoor and outdoor air samples indicate PBDEs are also transported by air. Air samples taken above Chicago revealed PBDE concentrations 4 to 5 times those in nearby rural areas. *(continued on p. 2)*



A breath alcohol ignition interlock device prevents a vehicle from being started until the driver gives a breath sample showing an acceptable blood alcohol level. It may also require the driver to give breath samples at random intervals while the vehicle is operating. Illinois judges or the Secretary of State can order persons convicted of DUI to have such devices in their vehicles. This article describes a study of the effectiveness of such devices in discouraging drunk driving, and summarizes laws on the devices of Illinois and other populous states.

Illinois Studies

The Secretary of State in 1993 began a pilot program to test Breath Alcohol Ignition Interlock Devices (BAIIDs).

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Flame Retardants Have Risks, Benefits

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In rats and mice, effects of "penta" include stunting nerve system development and changing thyroid hormone levels. "Octa" can cause fetal toxicity in rabbits and rats. Adverse effects of "deca" have been observed in the structures of thyroids, kidneys, and livers of adult animals; but much higher doses of "deca" than of "penta" are needed to bring about those effects. An animal study by the National Toxicology Program suggested that exposure to "deca" may cause cancer; but it has been criticized because it exposed test animals to extremely high doses. A separate study using much lower doses of "deca" found no significant increase in cancer incidence.

Developing fetuses, infants, and pregnant mothers are especially sensitive to disruption of thyroid hormone levels. Newborn mice exposed to PBDEs exhibited motor and learning deficits, which increased in severity as the animals aged. Thus, increased levels of PBDEs in the environment may pose significant risks to developing fetuses and nursing infants.

A 2002 European Union risk assessment emphasized the need for more information and testing on environmental impacts of "deca" and "octa." It said investigations should include monitoring of more animals to determine whether "deca" is found throughout the environment or only in some areas. Other investigations should determine whether "octa" and "deca" remain intact over long periods in the environment, or break down into even more toxic compounds.

Federal EPA Proposal

The U.S. EPA has proposed a rule that would require companies to notify it at least 90 days before manufacturing or importing some PBDEs. The EPA could stop or limit the manufacture or importation of such chemicals when deemed necessary. "Deca" would not be affected.

"Deca" is considered a toxic chemical under the Federal Emergency Planning Community Right to Know Act of 1986. The Act requires some facilities using it, and many other toxic chemicals, to report annually to the U.S. EPA on releases of such chemicals.

The EPA also has a Voluntary Children's Chemical Evaluation Program which asks manufacturers of chemical substances found in human tissues and the environment to evaluate them and develop risk assessments for them. The EPA will release a report on the Program's findings within a few months.

Manufacture

The only U.S. company making "penta" or "octa" BDE is Great Lakes Chemical Corporation, headquartered in Indiana. It has manufacturing plants in Arkansas, Mexico, and the United Kingdom. In November 2003, after finding a substitute for "penta," the company decided to phase out production of "penta" and "octa" by the end of 2004. The U.S. EPA gave the substitute a favorable report, saying it is not toxic. The company maintains that "deca" poses no threat to the environment or human health. That claim is supported by several organizations, including the World Health Organization and U.S. Consumer Product Safety Commission.

Illinois Bill

The General Assembly this year passed H.B. 2572 (Nekritz-Froehlich-Coulson-Fritchey-Kelly et al.—Ronen-Harmon et al.). If the Governor signs it, on January 1, 2006

it will ban the manufacture, distribution in commerce, or processing of products containing over 0.1% "penta" or "octa" BDE—with exceptions for actions such as selling used products that contain them; processing recycled materials containing them; and distributing replacement parts made by original-equipment manufacturers before 2006. Violation would be a business offense punishable by a \$10,000 to \$25,000 fine.

The bill adds that by January 2006, the Illinois EPA must report to the Governor and General Assembly on the latest scientific research addressing environmental and health effects of decaBDE. By February 28, 2006 the Illinois Department of Public Health must send the Governor and General Assembly a review of the EPA's report.

Other States' Laws and Bills

At least six other states restrict use of PBDEs; 5 states have bills proposing to do so. A Washington state executive order requires its Department of Ecology to develop a plan to reduce the threat of PBDEs. The tables on the next page describe these laws and bills.

The six states' laws all will ban making, distributing, or selling products or parts that have PBDE content above stated percentages (most often 0.1%), beginning in future years. Most have exceptions for processing of metallic recyclables in compliance with all laws, and in some states for other purposes such as research into PBDEs' health effects. (Metallic recyclable processing is exempted to allow recycling of steel from junked cars, because their seat paddings and plastic trim often contain "penta" and "octa" BDEs.)

Jennifer Moyer Science Research Assistant

Table 1: Laws on PBDEs

State	Effective	<i>Limit on PBDE</i> <i>type and content</i>	Exceptions	Other provisions
California	2008	0.1% penta or octa	Recycling, research	-
Hawaii	2006	0.1% penta or octa	Recycling	-
Maine	2006	1% penta or octa	-	State health agency must report annually on PBDE regulation.
Maryland	2007	-	-	PBDE content not yet limited, but products must display state-drafted label on hazards and safe disposal.
	2008*	0.1% all PBDEs	Recycling	
Michigan	2006†	0.1% penta or octa	Recycling; some spare parts	
New York	2006	0.1% penta or octa		State environmental agency may waive requirements if no public health threat is found.

* Maryland's 0.1% limit takes effect Oct. 1, 2008.

[†] Michigan's 0.1% limit takes effect June 1, 2006.

Table 2: Bills on PBDEs

Bills of the five other states mostly propose restrictions on PBDE content like those in the laws described above. But some would ban *any* PBDE content in newly made products, unless their makers demonstrate that no alternative that is less harmful could be found. These bills are summarized below.

State	Major features	Exceptions	Last action
Connecticut	Ban penta or octa content over 1%	-	Tabled
Minnesota	Ban over 0.1% penta or octa in 2006, or deca in 2008	-	Sent to committee
	Ban all brominated fire retardants (BFRs) in 2007	If no less harmful alternative is available	Sent to committee
Texas	Ban selling electronic equipment containing BFRs	-	Sent to committee
Vermont	Ban making electronics containing BFRs	If no less harmful alternative is available	Sent to committee
Washington	Ban products containing PBDEs	Vehicle parts; equipment for military or space programs	Sent to committee

Ignition Interlock Devices Gain in Use

(continued from p. 1)

The devices chosen not only require a successful initial test to start the vehicle, but also require retests at random intervals while driving. If the driver fails a retest, the vehicle's horn will honk until its ignition is turned off.

A 2001 study by three researchers at Northwestern University's Center for Public Safety found that BAIIDs reduced drunk driving while they were installed, but DUI rates began rising after the devices were removed from vehicles. The study examined two groups of Illinois drivers who sought restricted driving permits after their licenses were revoked or suspended. Because the study was retrospective, and due to legal requirements, the researchers could not randomly select an experimental group and a control group. But they believed that the two groups were similar enough to support some broad conclusions.

The "control" group consisted of persons who applied for restricted driving permits from mid-1991 to mid-1994, when such applicants were not required to use BAIIDs. The "treatment" group consisted of persons who applied for such permits from mid-1994 to mid-1997, when BAIIDs were required for all such persons. Drivers required to use BAIIDs had to do so for one year each. The researchers found that overall, during the first three years for each group, there were alcohol-related arrests among about 20% of the control group but only about 8% of the treatment group. The difference between the two groups' arrest rates was greatest in the first year (while the treatment group was required to use BAIIDs). The difference nearly vanished by three years after each person got a restricted driving permit. But a significant point is that most of the change in arrest rates occurred among the *control* group, whose arrest rate fell from 6.8% in the first year to 2.0% in the last six months of the three years studied. The treatment group's arrest rate rose-but only from 1.3% in the first year to 1.9% at around two years; it then declined to 1.7% during the last six months. (The experimental group had 1,560 members, so that decline represented only 3 persons and may well have been a random change.)

The researchers concluded that if BAIIDs are to change the long-term behavior of drivers, they may need to be required for long times for some drivers, or other "remedial interventions" may be needed. The researchers also pointed out a troubling fact: Among drivers whose licenses were revoked, and who applied for but did *not* receive restricted driving permits, over the next three years 60% were arrested for

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driving offenses or were involved in crashes—showing that they continued driving despite the revocations.

Illinois Laws and Regulations

An Illinois driver either may or must be required to use a BAIID in any of four situations:

(1) Use can be required as a term of a restricted driving permit. The driving privileges of anyone convicted of DUI in Illinois are automatically revoked. But the Secretary of State can issue a restricted driving permit that allows the person to drive for one or more of the following purposes as determined by the Secretary of State's

office: school, work, work-related duties, medical treatment, and education or rehabilitation for alcohol or other drug problems. The Secretary of State *may* require installation of a BAIID after a first DUI conviction, and *must*



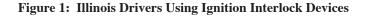
require installation after a second DUI conviction as a condition of issuing a restricted driving permit.

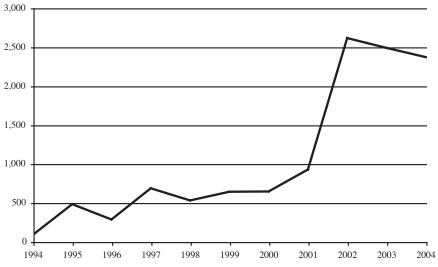
- (2) A judge may order the Secretary of State to issue a judicial driving permit (JDP), offering limited driving privileges. As a condition of issuing a JDP, the judge may require installation of an ignition interlock device.
- (3) A judge may require installation of a BAIID as a condition of release on bail of a person convicted of DUI.
- (4) A judge may require installation of an ignition interlock device as part of court supervision.

All costs to install and maintain an ignition interlock device are paid by the driver. There may be a monthly maintenance charge up to \$20.

Figure 1 on the next page shows the number of Illinois drivers participating in the ignition interlock program for the last 11 years. The declines since 2002 may be due to a 2001 law (P.A. 92-418) barring any driver with a repeat DUI conviction from getting a restricted driving permit for at least 1 year after a license revocation.







Source: Telephone conversation with Ellen Schmidt, Legislative Liaison for Secretary of State's office.

Other States' Laws

All of the 10 other most populous states have either discretionary or mandatory ignition interlock device programs. Table 1 below lists the number of DUI convictions after which an ignition interlock device either *may* or *must* be installed. (The table does not necessarily list all situations in which an interlock device can be required.)

Jamie L. Mitchell Research Assistant

Table 1: Ignition Interlock Laws of 11 Most Populous States						
State	May be required after this many convictions	Must be required after this many convictions				
California	1	2				
Florida	1	2 (1 if BAC at least 0.20%)				
Illinois	1	2				
Texas	1	2				
Ohio	1 or 2	3 within 6 years				
Georgia	-	2 within 5 years				
Michigan	-	1				
New Jersey	-	2				
New York	-	2				
North Carolina	-	2 within 7 years (1 if BAC at least 0.16%)				
Pennsylvania	-	2				

Abstracts of Reports Required to be Filed With General Assembly

The Legislative Research Unit staff is required to prepare abstracts of reports required to be filed with the General Assembly. Legislators may receive copies of entire reports by sending the enclosed form to the State Government Report Distribution Center at the Illinois State Library. Abstracts are published quarterly. Legislators who wish to receive them more often may contact the executive director.

Aging, Human Services, Public Health, and Public Aid Depts.

Annual report on services for minority senior citizens, FY 2003 Profiles Illinois' minority elderly and describes state programs for them in FY 2003. Department on Aging provided services under the Older Americans Act to 508,420 persons aged 55 or older. Of those, 68.8% were non-Hispanic white, 26.2% black, 2.7% Hispanic, and 2.2% Asian. Department of Human Services provided mental health services to 38,668 people aged 55 and older, of whom 68.6% were non-Hispanic white, 17.4% black, 4.9% Hispanic, and 1.5% Asian. Department of Public Aid provided \$2.7 billion worth of services to seniors under Medicaid; 34.4% went to minorities. In 2000 Illinois had 1,500,025 persons 65 or older, of whom 83.8% were non-Hispanic white, 10.4% black, 3.3% Hispanic, and 1.7% Asian. (20 ILCS 105/4.06; Oct. 2003, 66 pp.)

Agriculture Dept.

Agricultural areas annual report, 2004 One area was established and two areas were expanded in LaSalle County for an increase of 1,064 acres protected by the Agricultural Conservation and Protection Act. There are now 56 such areas, totaling 121,437 acres in 23 counties. (505 ILCS 5/20.1; Dec. 2004, 3 pp. + 3 maps)

Attorney General

State collection statistics, 2004 State agencies referred 24,682 cases to the Attorney General, with \$202.5 million owed to the state. Agency collected \$285.7 million on referred cases, including cases referred in past years. The Department of Public Aid referred nearly 90% of those cases. (30 ILCS 205/2(j), Feb. 2005, 2 pp.)

Auditor General

Annual report, 2004 Auditor General conducts financial

and/or compliance audits for each state agency, completing 165 in 2004. Major findings: Toll Highway Authority did not deposit money within set time frame; Department of Human Services Central Office did not update billing rates in timely manner; Illinois Center for Rehabilitation and Education had inadequate controls over unauthorized phone use; Department of Revenue lacked efficient electronic system to track taxpayer correspondence; Illinois Student Assistance Commission did not effectively monitor lender claims; State Board of Elections failed to properly report all receipts and disbursements for raffles benefiting political campaigns; Illinois Court of Claims did not have adequate controls over personal services; Department of Public Health did not comply with Innovations in Long-Term Care Quality Grants Act; Human Rights Commission had insufficient property and equipment procedures; and Department of Professional Regulation had board member compensation in excess of statutory maximum.

Performance audits, which are done at legislative direction, looked at CMS's administration of the State's space utilization program; Village of Robbins' use of Municipal Economic Development Funds; Department of Agriculture's Aquaculture Development Fund; Rend Lake Conservancy District; Department of Human Services' Office of the Inspector General; and use of funds paid to regional offices of education. Information system audits were done on the security and accuracy of 18 agencies' computer systems. Computer security problems were found at several agencies including Department of Children and Family Services; Department of Transportation; Illinois Supreme Court; and Southern Illinois University. (30 ILCS 5/3-15; March 2005, 32 pp.)

Central Management Services Dept.

Bilingual needs and pay survey, 2004 Of 45 responding agencies, 27 reported needing bilingual employees and had a total of 1,553 employees in bilingual positions. Most agencies reported having close to the number of bilingual employees needed, but some reported having significantly fewer. The Department of Children and Family Services reported needing 250 bilingual employees, but had 186, only one of whom received bilingual pay. The Department of Corrections reported needing 71 bilingual employees, but had only 48 (all of whom received bilingual pay), and Employment Security reported needing 179 such employees, but had only 132 (all of whom received bilingual pay). (20 ILCS 415/9(6); undated, rec'd Jan. 2005, 9 pp.)

Children & Family Services Dept. Inspector General

Annual report, 2004

The Office of Inspector General (OIG) investigates child deaths and serious injuries, investigates child welfare system complaints, investigates and prosecutes licensure complaints, helps with criminal history checks, operates a complaint hotline, acts as the ethics officer for DCFS, reviews and comments on proposed rule changes, and develops best-practice training models for caseworkers and supervisors. In FY 2004 it received 140 reports of child deaths; 25 were ruled homicides. The hotline received 1,891 calls resulting in 369 investigations. Includes death and serious injury investigation summaries and recommendations; general investigation summaries and recommendations; and DCFS' responses. Lists recommendations to DCFS for improvements and previous year's recommendations and status. Discusses OIG initiatives for FY 2005. Summarizes cases of disciplined employees. (20 ILCS 505/35.5(h); Jan. 2005, 244 pp. + 2 appendices)

Commerce and Economic Opportunity Dept.

Build Illinois Revenue Funds, FY 2004 Build Illinois Capital Revolving Loan Fund decreased from \$17,009,481 to \$13,085,317; Illinois Equity Fund decreased from \$1,923,590 to \$1,594,734; Large Business Attraction Fund decreased from \$4,087,061 to \$2,130,447. Build Illinois Capital Revolving Loan Fund provided \$2,713,974 in loans; Illinois Equity Fund \$387,500; Large Business Attraction Fund \$1,750,000. (30 ILCS 750/9-9 and 750/10-9; Dec. 2004, 4 pp.)

Dog and Cat Population Control Advisory Committee

Report to the General Assembly Committee held three hearings with 48 persons presenting oral or written testimony. Possible remedies to pet overpopulation include a statewide spay/neuter program; a two-part public education program to educate pet owners on the importance of responsible pet ownership and encourage contributions to pet overpopulation funds; and strict enforcement of current laws. Other states with spay/neuter programs report a reduced number of animals brought to shelters and euthanized. The Committee recommends that the Illinois Department of Public Health administer programs to combat pet overpopulation. (S. Res. 500 [2004]; Oct. 2004, rec'd Jan. 2005; 102 pp.)

Education, State Board of

Annual report, 2004 Illinois school districts declined from 913 in 1995 to 886 in 2004, although the number of public schools which issue report cards increased from 3,825 in 1995 to 3,907 in 2004. Enrollment also increased from 1.88 million to 2.06 million, or 9.5%. Low-income students rose from 34% in 1995 to 39% in 2004. Statewide operating expenditure per pupil in 2003 was \$8,482. Total funding for Illinois schools for 2003-04 was \$20.09 billion (\$7.21 billion state funds, \$10.81 billion local funds, and \$2.07 billion federal funds). (105 ILCS 5/1A-4(e); Jan. 2005, 57 pp.)

Complaints against private business and vocational schools, 2004 Gives name, address, and date of visit by State Board of Education for each institution; summary of complaints; and status of investigations. The Board resolved 27 complaints and had 26 cases still open. A large number of complaints involved a computer science academy that closed. All cases against the academy remained open at the end of 2004. (105 ILCS 425/14.2; Jan. 2005, 37 pp.)

Educator supply and demand preliminary annual report, 2004 In 2004, Illinois had 122,040 full-time teachers; 3,688 principals; and 872 superintendents. For the first time in 10 years, the total full-time teacher workforce declined, down 6.7% from 130,773 in 2003. New teaching certificates issued rose 6% in the last year. Students enrolled in education

programs rose from 44,295 in 2001 to 48,543 in 2002. Total Illinois public school enrollment for school year 2004 was 2,020,939, an increase of 1.3% over school year 2003. High school enrollment is projected to rise 5% through 2008 and elementary enrollment to fall 2%. As of October 1, 2003, Illinois school districts had 1,409 unfilled positions (70%) in Chicago, 299 (21%) in suburban Cook and the collar counties, and 119 (8%) in the rest of the state. Districts ranked special education, Spanish, and mathematics as the most needed kinds of staffers. (105 ILCS 5/2-3.11c; Dec. 2004, 21 pp.)

Environmental Protection Agency

Reducing and recycling mercury switch thermostats and vehicle components

Contains recommendations for reducing and recycling vehicle components containing mercury and mercury switch thermostats. Includes alternatives and programs for recycling mercury components as well as environmental issues associated with mercury. (415 ILCS 5/22.23b(d); Feb. 2005, 8 pp.)

Financial and Professional Regulation Dept.

Merger summary of Department of Insurance, Office of Banks and Real Estate, Department of Professional Regulation, and Department of Financial Institutions to Department of Financial and Professional Regulation. Department is to report to the General Assembly no later than 6 months after reorganization and annually thereafter for three years. Executive Order No. 04-6 consolidated the Department of Insurance, Office of Banks and Real Estate, Department of Professional Regulation, and Department of Financial Institutions into a new agency, the Department of Financial and Professional Regulation, as of July 2004. Staff has been reduced from

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Abstracts of Reports Required to be Filed With

General Assembly (continued from p. 7)

963 to 842 (12.5%). The consolidation is expected to save \$9.5 million in FY 2005. (15 ILCS 15/11; Jan. 2005; 4 pp.)

Human Services Dept.

Inspector General's combined reports on abuse and neglect in state facilities and community agencies and domestic abuse of adults with disabilities, FY 2004

This is the first year the Inspector General has combined these two reports. Inspector General received 1,182 allegations of abuse and neglect at facilities and agencies: 716 physical, 206 neglect, 164 mental, and 96

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LEGISLATIVE RESEARCH UNIT 222 South College, Suite 301 Springfield, Illinois 62704 sexual. Examples of 16 substantiated cases are included. In FY 2004, facilities filed 228 (23%) of self-reports late. Fifty-four employees were reported to the Nurse Aid Registry: 49 for physical abuse, 4 for sexual abuse, and 1 for egregious neglect. Average time to complete an investigation was 77 working days. For the fourth quarter of FY 2004, the number was 61 working days.

Inspector General received 457 complaints of neglect (56%), abuse (35%), or exploitation (8%) of an adult with disabilities in a domestic setting. Inspector General closed 452 cases; 232 unsubstantiated, 109 where victim refused to proceed, and 51 referred to other entities. There were 60 substantiated cases: 33 abuse, 26 neglect, and 1 exploitation. Lists entities receiving allegations, and case disposition and staffing levels by facility. (20 ILCS 2435/60 and 210 ILCS 30/6.7; Sept. 2004; 39 pp. + 12 tables)

Joint Committee on Administrative Rules

Annual report, FY 2004 In 2004, Committee considered 478 rulemakings, including 371 general rulemakings, 86 emergency rulemakings, 15 peremptory rulemakings, and 10 Pollution Control Board exempt rulemakings. JCAR actions on general rulemakings included 28 recommendations, 13 objections, and 2 prohibitions; actions on emergency rulemakings included 8 objections, 7 recommendations, and 1 suspension. Report summarizes some rulemakings. lists rulemakings and JCAR action by agency, judicial and legislative activity related to Administrative Procedure Act, and historical data on rulemakings. (5 ILCS 100/5-140; Jan. 2005; 94 pp.)

