

2007

NJ POISON INFORMATION & EDUCATION SYSTEM ANNUAL REPORT

25 Years of Services to New Jersey's Residents Two million calls for help. That is what The New Jersey Poison Information and Education System (NJPIES), also called the Poison Center, has responded to over its 25 years of existence. The system was established in February 1983 as the result of a partnership between hospitals around the state and the State Department of Health and Senior Services (NJDHSS). The system stands as a shining example of how funding obtained from both public (NJDHSS and the US Department of Health and Human Services) and private agencies (NJ hospitals who join as members of the system) can combine to effectively save lives and health care costs.

Each year, NJPIES prevents over 50,000 unnecessary visits to emergency rooms and other health care facilities through its pre-hospital efforts. A report of NJPIES' activity published in January 2007, revealed that over the course of the study year 2002, calls to NJPIES from hospitals about hospitalized poisoned patients produced a significant decrease in the length of hospitalization. This streamlining in care not only produced improvement in outcomes but in financial savings of over \$15 million. If even 10% of cases seen in emergency departments around the state were not admitted or were discharged from the emergency room because of a call to the poison center, there was a further savings of over \$9 million. The cost to the system that year was \$4 million thus there was a return on investment of over 600%! A similar study recently performed in Kentucky duplicated the findings of this study.

In 2007, NJPIES responded to over 75,866 calls. Over 12,000 of these calls concerned hospitalized patients while the rest were treated out of hospital. In 25,339 incidents, the victim was under 3 years of age. Medications are involved in over 45% of calls, household products in over 18%.

Educational programs were of major importance in 2007. There were 411 community based public poison prevention educational programs involving nearly 30,000 people. Over 1.6 million pieces of printed literature were distributed. Additionally, as part of the partnership with community hospitals, there were 126 requests for educational material. Community hospitals then distributed this material as part of their public education programs. NJPIES is



committed to the improvement of medical care; 284 health care providers, nurses, pharmacists, medical students, emergency medicine, pediatric and family practice residents participated in educational programs and received on site training at NJPIES.

NJPIES has played an instrumental role in local, statewide and national epidemics. The Poison Center reported the outbreak of illness in drug abusers from the contamination and/or substitution of fentanyl and clenbuterol in the drug. It also responded to inquiries regarding lead contaminated food and glycol contamination of drugs, food, toothpaste, etc. NJPIES was vital in the finding of a paralytic toxin, saxitoxin in blow fish, rogue botulinum toxin use, a homicidal health care worker, and many more significant incidences.

The work of NJPIES is hardly complete. Illness and death from the use of prescription and illicit drugs is on the rise. The need for surveillance to enable early detection of natural or terrorist events is essential if citizens are to continue to be safe.

Through continuing the public-private partnership, NJ citizens should be able to look forward to at least another safe 25 years.

Steven M. Marcus, MD, Medical Director

Mission of NJPIES

The New Jersey Poison Information and Education System (NJPIES) was created by legislation (N.J.S.A. 26:2-119 et seq.) and began service on February 1, 1983, replacing 35 poison control centers located in New Jersey hospitals. Its mission is to provide treatment and the provision of information concerning poisons, drugs and targeted health issues through telephone management, consultation, education and research.

History & Organizational Background

New Jersey's first poison center was established in the late 1950s. By 1975 there were 32 "Poison Control Centers" located in acute care hospitals throughout the state. These centers were located in pharmacies and emergency rooms which were not always open 24 hours a day. No center had staff entirely dedicated to poison center services and little or no records were kept of calls handled by these centers. Though some centers allocated funds to subscribe to a form of a database, no center had a specific budget for its overall services.

In 1978, New Jersey developed a task force to look into how to provide poison center services in response to a federal initiative to develop regional emergency medical services.

The state legislature passed legislation calling upon the New Jersey Department of Health to develop a drug and poison information program for New Jersey. In February 1983, as the result of this legislation and a cooperative effort between the New Jersey Hospital Association and the New Jersey Department of Health, the regional poison control system; New Jersey Poison Information and Education System (NJPIES), was born. In 1982, a total of 5,000 calls to the 32 Poison Control Centers were reported. Over 1,000 of those calls were to one center, the future home of the regional program. In 1983, during the first 11 months of its existence, NJPIES responded to over 30,000 calls. The initial staff of 5 information specialists worked in a basement apartment furnished by the host hospital. Funding was provided by a small grant from the federal government and the state, voluntary contributions from the former 31 Poison Control Centers and a grant in aid from a pharmaceutical company. Administrative support and medical direction was provided by the host hospital.

In 1985, NJPIES became a "line item" in the New Jersey State Budget. In addition, the cost of membership in the state-wide drug and poison information system was determined to be an acceptable, reimbursable part of the member hospital's administrative costs.

In the early 1990's membership in NJPIES became mandatory for all acute care hospitals under New Jersey State Department of Health and Senior Services licensing regulations. The call volume grew, mandating an increase in the size of the staff. The program added a part-time director of drug information and a health educator. In mid 1990, the salary of the Medical Director became covered 100% by the program and the number of specialists increased to 22. In addition, the service of a full time information technology professional was added as well as a computer clerk. Funding continued to come from the state budget and from hospital memberships.

In the beginning, NJPIES published both a toll free telephone number and a local exchange telephone number. This was found to be confusing to the public and the media was reluctant to publish two different telephone numbers. Thus, by the end of 1983, it was decided to exclusively "market" a toll free telephone number. In 1984, the hotline suffered from a series of telephone failures. In an effort to prevent interruption in service, the statewide toll free number was moved from New Jersey Bell to AT&T. This enabled the Poison Control Center to reroute calls from one telephone central office to another if one failed. Since the statewide number was listed in the information directory, NJPIES began experiencing calls originating in other states. NJPIES staff presented this finding to the American Association of Poison Control Centers (AAPCC) at its annual meeting in 1985. The New Jersey Poison Control Center suggested that the AAPCC pursue the utilization of toll-free 800 technology in order to route calls to centers in the area of the caller. Poison Control Centers could then publish one toll free telephone number across the country. NJPIES argued that this would increase the visibility of poison center services thus bolstering the cost-effective nature of Poison Centers. Although the Board of Trustees of AAPCC voted not to pursue this at that time, the idea later developed into the current national number. In the early 1990s,

the staff of NJPIES helped the state of Texas organize its poison control system. It was decided that Texas and New Jersey would use the same toll free number. When Michigan developed its poison system, NJPIES and Texas asked the Michigan Centers to also adopt the same telephone number. Michigan agreed and 1-800-POISON-1 was adopted as the specific telephone number. This then became the model for the future direction for Poison Control Centers in the United States.

Although funds approved by the New Jersey State Department of Health and Senior Services (NJDHSS) sufficiently cover the day to day activities of the program; outreach education services and other public health activities fall outside of the budget. Since hospital memberships support the bulk of the current budget, and since public health activities are outside of this scope, additional funding was explored. The federal Poison Control Stabilization and Enhancement Act funded by the Health Resources and Service Agency (HRSA) of the U.S. Department of Health and Social Services, provided the needed funds and a second health educator was hired by NJPIES.

The long-standing relationship with the original host hospital ceased in 2001, requiring NJPIES to resettle in a new home. The University of Medicine and Dentistry of New Jersey (UMDNJ) agreed to provide space and administrative support and became the new host of NJPIES. Using funds from the HRSA grant, NJPIES was able to establish a parallel hotline site at UMDNJ and the move was accomplished without a single dropped or lost call. NJPIES became part of the Department of Preventive Medicine and Community Health (DPMCH) as of January 1, 2002. UMDNJ provided a temporary space, on an emergency basis, until January 2006, when NJPIES opened its new state-of-the art call center at the Ambulatory Care Center Building on the UMDNJ campus located in Newark, NJ.



UMDNJ's Ambulatory Care Center, Newark Campus

Who We Are & What We Do

NJPIES is a member of the American Association of Poison Control Centers (AAPCC) and is designated as a regional Poison Control Center under AAPCC guidelines. Additionally, NJPIES manages the Department of Health and Senior Services AIDS/HIV/STD/Hepatitis hotline. The Center provides a valuable public service in time of crisis by serving as an information source for the NJDHSS. This information may include cases of tampered or recalled products and incidents of food-borne illness. NJPIES provides a statewide emergency service for poison exposures, general poison and drug information 24 hours, 7 days a week. All calls are handled by specialists in Poison Information, who are physicians, nurses or pharmacists.

Although many of the specialists are fluent in Spanish and several are fluent in additional languages, NJPIES contracts with a telephone interpretation service, allowing immediate access to hundreds of languages and dialects. We also offer a TDD/TTY service for the hearing impaired. Specialists answer questions about adverse effects of medications, possible risks for drug interaction or the potential effects of medicines on pregnancy or breast feeding. Specialists also answer questions prior to exposure to or use of potentially poisonous or hazardous products, such as household

chemicals, plants, cosmetics or environmental contaminants like lead. They help callers assess the possibility for harm or damage and give recommendations for minimizing or eliminating risk. The Poison Control Center receives its funding from federal, state, and other grants, as well as, through private donations. To learn more about how you can



25 Years of Service

help NJPIES, please contact the Foundation of the University of Medicine and Dentistry (UMDNJ), a tax exempt non-profit organization under the federal 501(c)3 guidelines, at (973) 972-4831.

NJPIES' Services

- Poison emergency telephone service
- Drug information service
- · Occupational and environmental toxicology information service
- Professional education
- Public education
- Research and data collection

History in the Making: 25 Years of Service to New Jerseyans

The public health role of NJPIES has been astounding over the past 25 years. Below are just a few of the many highlights throughout its history.

1. NJPIES spearheaded the movement to a single nationwide 1-800 number: by developing the idea of using a uniform national toll free telephone number to allow routing of poison center calls to the responsible regional poison center based on the geographical location of a caller in 1985. The national 1-800-222-1222 number became operational on January 1, 2002.



2. The center's staff uncovered what appeared to be an excess number of poisonings in an intensive care unit in a New Jersey hospital. The situation was reported to officials in the state Department of Health and Senior Services and eventually culminated in the arrest and guilty plea by Charles Cullen for over 35 murders.

3. NJPIES staff alerted the US Centers for Disease Control and Prevention (CDC) and the Food and Drug Administration (FDA) of an outbreak of what appeared to be clinical botulism poisoning from the use of a cosmetic preparation. This led to the arrest

and conviction of the physician who performed the injections and the supplier of the rogue preparation.

3. The center's staff uncovered outbreaks related to contamination of heroin with scopolamine, clenbuterol, and fentanyl. The last outbreak resulted in the development of a national drug abuse study group with weekly teleconference calls.

- Outbreaks were recognized from saxitoxin contaminated blowfish related to illness in at least 4 states.
- 5. Two separate outbreaks of boiler-water contamination of drinking water resulting in methemoglobinemia (a condition in which individuals turn blue and cannot utilize oxygen) were uncovered by NJPIES's staff.
- 6. NJPIES took a leadership role in the AAPCC's efforts to attract federal funding for a nationwide poison center movement.
- 7. NJPIES organized and coordinated care of lead poisoned patients throughout the state via the NJ Lead Consortium and telephone consultation with practitioners and families.
- 8. The epidemiology division of NJPIES was responsible for the discovery that the pigment Sindoor was being used as a food coloring and causing lead poisoning in NJ. Subsequently, it was determined that this problem was far more widespread, reaching throughout the world. NJPIES was contacted by news media from around the world interested in spreading the message to the public to avoid this substance, especially in relation with food.

Media

- New Jersey Newspapers ran 208 features throughout 2007.
- 26 radio and television interviews were conducted in 2007.

Publications accepted or printed in 2007:

- Vassilev ZP. Marcus SM. "The impact of a poison control center on the length of hospital stay for patients with poisoning." J Toxicol Environ Health, Part A (2007)70:107-110.
- 2. Vassilev ZP, Kashani J, Ruck B; Hoffman RS, Marcus SM. "Poison Control Center Surge Capacity During an Unusual Increase in Call Volume-Results of a Natural Experiment." Prehospital and Disaster Medicine.

Quick Facts

<u>National</u>

- Poisonings continue to be the second leading cause of unintentional deaths.*
- On average, Poison Control Centers handle one possible poisoning every 13 seconds.*
- In any given year, between two and four million poison exposures occur. Approximately sixty percent (60%) of these exposures involve children 5 years and younger.**
- Exposure calls continue to increase, but not at the rate of information calls. Sixty-three percent (63%) of information calls were drug identification calls.
- The total direct costs for medical care and rehabilitation associated with poisoning exceed \$3 billion annually.**
- Pain relievers (analgesics) were the most common substance involved in all human exposures.•
- The most common exposures in children 5 years and younger were cosmetics/personal care products.•
- Each year, poisoning accounts for 285,000 hospitalizations, 1.2 million days of acute hospital care, and 13,000 fatalities.**
- Despite their success, poison centers struggle to exist. Most centers are funded by a fragile patchwork of state, local, and private monies. Since centers do not generate revenue, they become "easy targets" when sponsoring hospitals and state legislatures trim their budgets. **
- * American Association of Poison Control Centers

**Data from The Poison Line – March – April 2007

*Data from HRSA's Poison Control Program Update, Spring 2008 – PoisonHelp.hrsa.gov

Data Systems

Reporting directly to the NJPIES' Executive Director, the Data Systems Department manages all IT projects and systems within the Poison Control Center. This department is responsible for handling the research, design, evaluation, implementation, management and maintenance of all projects and systems. The Department designs, plans and directs daily and long term projects and operations. In addition to the design, implementation and management of all NJPIES computer domains and servers, the Data Systems Department acts as an in-house consultant for creating network and communication standards which assures compatibility and integrity between all systems. These responsibilities also include handling all telephone switches and other computer and telephone related hardware and systems.

25 Years of Service

Lead Poisoning

The state of New Jersey has had an active surveillance and treatment program for childhood lead poisoning for over 30 years. Dr. Steven Marcus, the Medical Director of NJPIES, has played a lead role in statewide efforts. He has served in a leadership role in the New Jersey Physicians Lead Poisoning Advisory Committee and has consulted widely. He was instrumental in developing the pilot program to increase awareness and screening for childhood lead poisoning which is now being implemented statewide. He was also involved in the training of individuals who are charged with the responsibility of educating pediatric health care providers in various aspects of lead poisoning from primary prevention to chelation therapy. This was a cooperative effort of NJPIES, New Jersey Department of Health and Senior Services, and the New Jersey Chapter of the American Academy of Pediatrics currently funded through a Robert Wood Johnson Foundation Grant. NJPIES educational staff collabrates with major Medicaid managed care insurance carriers, to develop and distribute educational material to their enrolled population and beyond. NJPIES has re-established the New Jersey Lead Consortium; a monthly meeting of concerned health care and environmental professionals who review problem childhood lead poisoning cases and new relevant literature.

Drug Information and Professional Education

Professional Education is something that we take great pride in at NJPIES and the demand for our programs are at an all time high. Several times each month, members of the poison center team give lectures to physicians, pharmacists, nurses and students of various health professions either at the poison center or at other venues throughout New Jersey (i.e. hospitals, universities, healthcare facilities, etc.)

Almost every day, pharmacy students from Rutgers College of Pharmacy, medical residents and nursing students participate in the daily activities at the poison center. Students spending time at NJPIES learn about poison prevention and the management of poisoned patients, participate in daily rounds as well as in formal lectures and informal case discussions. In addition, students and residents completing their 4-5 week rotation at NJPIES learn how to provide evidence-based responses to specific medical inquiries that arise. Through approval from UMDNJ's School of Nursing and Center for Continuing and Outreach Education, students and residents are often joined by licensed nurses and pharmacists participating in NJPIES' FREE Continuing Education (CE) Program.



Specialists responded to nearly 12,000 requests for drug information from both the healthcare community and the general public. Common questions involve the identification of medications (foreign and domestic), information about drug-drug and drug-food interactions, as well as, the adverse effects of medications. In addition, the specialists are frequently asked about medication use during pregnancy and while breast-feeding.

Epidemiology

A number of activities were conducted through the epidemiology core of NJPIES to assess the population we serve and the unmet needs for poison control and prevention services.

25 Years of Service

With recent concerns regarding early detection of bioterrorist activities and emerging infectious diseases, the development of real-time or near real-time syndromic surveillance systems continues to be an important, yet challenging, goal for many governmental agencies and health care authorities. Poison Control Centers (PCCs) in the U.S. have demonstrated that not only may Poison Control Centers reduce the number of unnecessary emergency room visits and decrease healthcare costs, but also will play an important role in outbreak detection, given the fact that PCCs' data is first hand exposure data as is reported directly by the patient or someone who cared for the patient at the time of the incident. Therefore the data may contain unique information that may not be available otherwise, and it permits detecting outbreaks at a relatively early stage. To demonstrate the utility of poison control data for detecting poisoning/disease outbreaks, NJPIES investigated what appeared to be an unusual increase of glow product-related calls during Halloween week 2007. Among a total of 131 human exposure glow product-related calls, 59 calls were received on Halloween Day and nearly 95% were children age 10 years or younger with an almost evenly distributed gender breakdown -males 65 (49.6%) and the females 66 (50.4%); Residence was the site of exposure in 110 (84.0%) of the calls; Approximately 85% of callers were either a mother, father, or grandparent to the patient; Retrospectively, on Halloween Day, there were 14 calls reported to NJPIES in 2002, however, in 2007, we received 59 calls during that day - a 321% increase when compared to 2002. As early as October 27, poison specialists at NJPIES already noticed the unusually high glow product breakage call volume and followed through to the end of outbreak at around November 2, 2007. The results of this study clearly demonstrated the ability of one PCC to detect an unusual pattern of poisoning exposures at an early stage of an "outbreak".

In an effort to respond to the increased unintentional deaths from prescription, non-prescription and illicit drug exposures as well as the recent case of Heath Ledger's accidental death resulting from the abuse of prescription drugs; we analyzed over 450,000 cases of human exposure calls to NJPIES from 2000 to 2007. Prescription and over-the-counter medications as an exposure substance accounted for more than 40% of the total exposure calls. Multiple-drug use was significantly more likely to be reported among prescription medications (21.3%) as compared to over-thecounter medications (8.5%). The percent of prescription multipledrug use increased from 19.4% in 2000 to nearly 24% in 2007, a 22% increase over a period of 8 years. Approximately two-thirds of reported prescription multiple-drug exposures occurred to individuals 20 to 64 years. As compared to the over-the-counter drug exposures, cases with prescription multiple-drug exposures were more likely to result in a more serious medical outcome including death. As a result of this increase in unintentional deaths, NJPIES initiated a special interest working/study group including a number of governmental agencies and academic communities in the state of New Jersey to address these issues.

A 10-year trend report between 1997 and 2006 was prepared based on the HIV/AIDS and STD statewide toll free hotline, housed and co-existing at the New Jersey Poison Information and Education System. This is an outreach system that uses both telephone and mail to provide responsive information services such as referrals for testing, support services or medical treatment to the general public, as well as, high-risk populations.

During the 10-year period, NJPIES received a total of 105,414 HIV/AIDS and STD related calls with an average of 10,541 calls per year. Gender distribution was evenly distributed with 48.3% as male callers and 48.5% as female callers; approximately 3% had no gender recorded; English was used by 98.6% of the callers and Spanish-speaking callers accounted for only 1.4% of all calls received by the hotline. Fifty percent of callers were between the ages of 24 to 44 years, 18% between 15 to 23 years old; and 10.6% between 45 to 65 years old. Age was not given for about 20% of the callers. An interesting weekday/weekend calling pattern revealed that the call volume has consistently been the highest on Mondays and Tuesdays at approximately 19% each; by Friday, the call volume decreased to less than 15 %. For both Saturdays and Sundays, the call volume declined to single digits at 7.9% and 6.7%, respectively. The reasons for the calls were unchanged with 65% for information-related and 32% testing-related prior to 2004. However, between the years 2004 to 2006, the call volume for information and testing were "reversed" to 35% information-related and 60% testing related.

In November 2003, dramatic increases of call volume were linked to the initiation of the OraQuick rapid HIV testing which was made available at publicly funded HIV counseling/testing sites in New Jersey. It appears that this initiative by the New Jersey Department of Health and Senior Services was successful in increasing the call volume. As a result, the rate of testing related calls jumped to more than 90% between the months of July, August, and September in 2004, as compared to an average of 65% for the rest of the months in the same year. Similarly, between the months of March, April, and May in 2005, the HIV/AIDS and STD Hotline received an unusually high volume of testing related calls more than 90% of the total call volume, in each of the three months, as compared to the average rate of 65% for the remaining months in that year. In 2006, an average of 86% of call volume per month between the months of February and July was received at the hotline, as compared to the average of 51% for the rest of months in the same year.



Public Education and Awareness in 2007

Poison Prevention Education can help save lives!

In 1999, NJPIES hired a health educator to foster public awareness of the poison center's 24 hour hotline and services. Since then, the education initiative at NJPIES has evolved into a department consisting of a Director of Public Education and two Health Educators. The educators coordinate all aspects of health promotion for the poison center. Programs are developed and implemented for a variety of audiences including; children, parents, seniors, healthcare professionals, and child care providers. Through education, we can empower NJ residents with the information necessary to carry out poison safe practices in their workplace, homes, and communities.

Public Education Goals

The Education Department is committed to providing poison prevention education to all health care professionals and residents of New Jersey. Its goals include:

- Foster greater public awareness of the services of NJPIES and the 24-hour hotline.
- Develop strategies to reduce the risk for poisoning injury and mortality.
- Identify low-use regions and audiences and develop targeted outreach initiatives to increase hotline use.
- Promote the importance of calling the hotline in the event of a suspected poisoning.
- Promote the importance of calling the hotline for poison/drug information.
- Identify and partner with NJ based organizations that can assist NJPIES in promoting poison safety awareness.

Spotlight: Website Redesign Project

The Education Department partnered with the Pacific Institute of Research and Evaluations, Poison Center Technical Assistance Resource Center to develop a new, user-friendly website. Our new site is to be used as a resource for both healthcare professionals and the general public. Please visit us today at <u>www.njpies.org</u> !

Milestones in 2007

• 28,877 individuals across the state attended a poison prevention program conducted by NJPIES' health educators.

25 Years of Service

- 1,618,138 pieces of printed educational material were distributed statewide to residents and providers in schools, community-based organizations, hospitals, and other healthcare facilities.
- Residents received educational materials provided at 34 state-wide health fairs.
- Expanded monthly press release contact list to include statewide distribution to: pediatricians, pharmacies, day-care centers, school nurses, and community-based organizations.
- Partnered with *The Gold Cross* (The Magazine of the New Jersey State First Aid Council, Inc.) to contribute articles for its quarterly publication.
- Designed/Redesigned educational material
 - Poisons in the Home Brochure
 - National Poison Center 1-800 Hotline Magnet
 - Carbon Monoxide Pamphlet
- Developed interactive learning tools to be incorporated into our current poison prevention lesson plans.
- Extended outreach efforts to include private/non-public schools within New Jersey.
- Established internship site for local college students seeking a degree in the field of Public Health.



Spotlight: Poison Prevention Education

The Education Department is proud to report that the number of individuals receiving poison prevention education programs in 2007 has doubled due to effective outreach efforts. (See figure on page 17)

Education Materials and Resources

The following materials can be ordered through visiting NJPIES' web site at www.njpies.org

- Babysitter's Do's and Don'ts *
- Carbon Monoxide Pamphlet *
- Children's activity sheets *
- Your Poison Center Brochure *
- National Poison Center 1-800 Hotline Poster
- Poisons in the Home Brochure *
- Look-A-Like Posters
- National Pet Poster
- · Medicine spoons
- National Poison Center 1-800 Hotline Magnet*
- Telephone stickers for healthcare facilities
- Telephone stickers for in-home use *

*Materials are available in both English and Spanish



1st Place

National Poison Prevention Week

In order to prevent unintentional poisonings, it is important to promote awareness of poison prevention through various activities and outreach initiatives. Each year, during the third week of March, NJPIES observes National Poison Prevention Week (March 18-24, 2007). This year's theme "Children Act Fast...So Do Poisons" highlights the dangers of unintentional poisonings in children. Parents, grandparents, and other caregivers as well as children should be alerted to the dangers of poisons.

In 2007, NJPIES promoted National Poison Prevention Week statewide. Hospitals, pharmacies, schools, public libraries, health departments, emergency medical service agencies, county offices on aging, community-based organizations, members of the state legislature, pediatricians, childcare directors, and Federally Qualified Healthcare Centers (FQHC) were invited to participate in National Poison Prevention Week. Postcards offering free educational materials were distributed to these facilities and approximately 830,917 pieces of educational materials were disseminated to NJ residents through our campaign.

As part of our National Poison Prevention Week campaign, NJPIES hosts an annual poster contest for fourth grade students. The Poster Contest is a fantastic, creative way for students to learn about poison awareness and partake in a statewide competition. In observance of National Poison Prevention Week, NJPIES hosts an awards ceremony to recognize the winners of this contest.

Congratulations to the 2007 Winners...

1st Place: Jared DeLibero, Haworth Public School 2nd Place: David Londino, Bowne-Munro School 3rd Place: Tomas Carson, Margaret L. Vetter School



Community Outreach

Wipe Out Lead NJ

Wipe Out Lead NJ is a program funded by the NJ Department of Health and Senior Services—Maternal and Child Health and administered by Family Health Initiative, Southern NJ Perinatal Consortium. This project distributes free at home lead dust kits to NJ residents who are pregnant, have young children living in home and/or live in their a home built before 1978. Through this partnership WOL and NJPIES will be distributing each others materials during their separate outreach initiatives.

It's Your Life 411: A Program of Decision-Making, Character Education, and Prevention

It's Your Life 411 is a unique education and prevention program that has been developed for 7th and 8th grade students. During this program, students role-play scenarios that model the real life situations that teens may face in order to understand the lifealtering consequences of poor decision-making as well as educate students about the valuable services provided by community agencies. In 2006, NJPIES was invited to participate as a community agency representative in several IYL programs in middle schools throughout NJ. During these programs, educators were able to discuss prevention tips, poison center services, and situations during which students can utilize the center for emergency assistance or poison information. Through this partnership, NJPIES has reached approximately 1000 middle school students!

Babies "R" Us, Baby Safety Expo

Babies 'R' Us hosts several in-store, Baby Safety Expo Workshops throughout its NJ stores. These events provide new and expecting parents with valuable information about safety and health issues regarding children. NJPIES' educators facilitated poison prevention lessons at varies Babies 'R' Us locations in support of this program.

Celebrating Healthy Pregnancies: Baby Shower Initiative

NJPIES' educators facilitated workshops on poison safety at community baby showers throughout the state honoring mothers-to-be. During these events, expectant mothers learn about the harmful effects of alcohol consumption during pregnancy. In addition to NJPIES, other participating organizations include, AmeriGroup, Healthy Mothers/Healthy Babies, AmeriChoice, and Babies 'R' Us.

Website – www.njpies.org



In 1998, NJPIES introduced a comprehensive Internet Website, which since its launch, has received visitors from all over the world. In 2008, the center launched its new and improved site with the help of the Pacific Institute of Research and Evaluation (PIRE).

The site enhances NJPIES'

statewide presence and increases the public's awareness of the Poison Control Center's services. Visitors are encouraged to log onto and explore all the site has to offer - from alerts for potentially dangerous substances to interactive learning activities. In addition, the site acts as a resource for healthcare professionals.

All requests (education program or materials) can be submitted by logging onto <u>www.njpies.org</u> and clicking on the links on the homepage.

Resource Development and Marketing

The Poison Control Center is funded through a contract with the state of New Jersey, Federal and other grants, and private donations. With the support of the Foundation of University of Medicine and Dentistry of New Jersey (UMDNJ), NJPIES has been actively seeking funding from individuals, private foundation and corporate sponsors to help promote its 1-800-222-1222 Hotline and poison prevention and education efforts. To learn more about how you can help NJPIES, please contact the Foundation of the University of Medicine and Dentistry (UMDNJ), a tax exempt non-profit organization under the federal 501(c)3 guidelines.

For further information on how to support NJPIES or become a key partner in promoting our programs, please contact Martha L. Bahamon, Director of Development at the Foundation of UMDNJ at 973-972-4831. For online donations please visit <u>www.umdnj.edu/foundation</u>.

NJPIES gives thanks to the following sponsors and key partners who support our efforts to ensure the safety and well being of New Jersey residents.

Wakefern ShopRite

PSE&G

Medco Health Solutions, Inc.

Infineum

Newark Bears, Minor League Baseball Team

Somerset Patriots, Minor League Baseball Team

Pathmark

Toys 'R' Us

Carvel

Toll Free Hotline

New Jersey Poison Control Center Hotline is also the National Hotline

1-800-222-1222

In February 2000, President Clinton signed the Poison Control Center Enhancement and Awareness Act (PL 106-174) to ensure every U.S. resident has access to a certified regional poison center. Funding was provided to create a single toll-free number to be shared by poison centers across the country. The Center for



25 Years of Service

Injury Control and Prevention of the U.S. Centers for Disease Control (CDC) and Prevention and the Maternal Child Health Bureau of the Health Resources and Services Administration (HRSA) are providing funding for the 1-800-222-1222 toll-free national number. By calling the number, callers reach specially trained health care specialists – nurses, pharmacists, and doctors - who can provide help with poison emergencies or answers to questions from drug information to breast feeding and medication use. The national number automatically and immediately identifies the caller's location, and then connects the caller to the closest Poison Control Center. All services are free and confidential, are available for the hearing impaired and for those who speak languages other than English.

New Jersey AIDS/HIV/STD/Hepatitis Hotline

1-800-624-2377

In 1988 NJPIES was asked to provide administrative responsibility and personnel to run the state AIDS Hotline. Over the past 18 years NJPIES has provided telephone consultation for people seeking information about the disease. Callers receive general information, referrals, counseling and testing locations, and information on treatment and adverse reactions to medications. Based on a request from the New Jersey Department of Health and Senior Services (NJDHSS), services have expanded to include other sexually transmitted diseases and hepatitis. Poison Specialists are "cross-trained" to handle calls for both hotlines

TDD/TTY Line (For the Hearing Impaired)

1-973-926-8008

For use by the hearing and speech impaired. We are developing the capability to handle these calls through the 1-800 hotline number. We hope to have this operational by mid 2007. Additionally, we are exploring text messaging technology to enable the hearing impaired to text their questions to an information specialist.

Please check with us for updates.

Special Services

Bioterrorism

NJPIES became intimately involved with the state's efforts at homeland defense and counter-terrorism. The Medical Director was appointed by the governor to the MedPrep Terrorism Preparedness Council and subsequently also to its executive council. This program has morphed into the Health Emergency Preparedness Advisory Council (HEPAC) and NJPIES has a "seat at the table." NJPIES became part of the Newark Metropolitan Medical Response System (MMRS). NJPIES' Medical Director serves on the MMRS' steering and surveillance committees. As part of his responsibility, he has been spending an increasing amount of his time in this process.

Computerized Case Records

Trends and patterns can be identified on cases through computerized medical records that are maintained by NJPIES. All calls are confidential. The American Association of Poison Control Centers (AAPCC) National Poison Data System receives data throughout the day from New Jersey Poison Control. Through the efforts of NJPIES, computerized formatted data on poison exposure in New Jersey has been available for over 15 years. An NJPIES epidemiologist reviews all data for trends and patterns in poisoning within the state.

Interpreters

Available 24 hours a day, 7 days a week with a myriad of languages and dialects through a contract with a language translation service.

Pesticide Surveillance

NJPIES assists and provides information to citizens regarding spraying and health issues related to pesticide use in New Jersey.

25 Years of Service

Public Health Surveillance

The New Jersey Poison Control Center is committed to reducing the impact of poisoning by collecting, analyzing and dispensing data for the development and implementation of poison prevention and awareness strategies. NJPIES stores information regarding poisoning-related calls in an electronic database. This information is used to educate residents, health care professionals and media on poisoning trends in the state of New Jersey. This information is also used in the development of poison prevention strategies.

As a safeguard in instances of food poisonings, adverse drug or product reactions, and drug tampering, NJPIES notifies local and state agencies, the media and the public of potential health threats.

Member Hospital Program

The Member Hospital Program provides a large portion of funds that support NJPIES. In addition, the cooperation of every member hospital in the exchange of information facilitates the appropriate, timely and cost-efficient care of exposed individuals requiring hospital care. This cooperation, in the form of financial support, insures appropriate management in a cost efficient fashion. A phone call to the Poison Control Center early in the treatment process saves both time and money.



Expenses 2007

Salaries	2,401,770.00	
Fringe	815,569.00	
Total Payroll	3,217,339.00	
Rent	120,000.00	
Subscriptions/Membership	56,972.10	*Includes \$42,338 Micromedex*
Postage	41,158.00	
Telephone	47,297.00	
Staff Training	3,488.00	
Staff Recruiting	6,292.00	
Tuition Reimbursement	3,315.00	
Travel	24,017.00	
Printing	203,763.00	
Services	12,295.00	
Computer Supplies	0.00	
Other Supplies	26,858.00	
Maintenance	25,514.00	
Equipment: Educational, Office, Computer	6,536.00	
Capital	0.00	
Consultant Services	0.00	
Miscellaneous	1,056.00	
Overhead	374,532.00	
Total Expense	4,170,432.10	

Income 2007

Cash receipt		Expenses to Report for CY 07
Hospitals	2,425,503.00	Includes receipts for 2006 received in 2007
State Grants	932,991.00	
Fed Grants	598,813.00	Includes holdovers, etc.
Private Donations, Contracts	54,697.00	
Total	4,012,004.00	4,170,432.10

Balance Sheet 2007

Holdover Funds from 2006	(779,111.00)
Revenue Received	4,012,004.00
Expenses	4,170,432.10
Balance	(937,539.10)*

Deficit due to unforeseen delay in hospital billings for 2007

25 Years of Service NJPIES Grants Inception to Date

Year	State EMS	State AIDS/ STD	Federal	Donations	Hospital Memberships Other	Total Year
1983	0	0	50,000	0	200,000	250,000
1984	350,000	0	50,000	0	130,000	530,000
1985	457,093	0	0	750	153,700	611,543
1986	437,126	0	0	9,610	177,621	624,357
1987	472,165	0	0	2,505	305,156	779,826
1988	678,058	24,490	0	0	409,954	1,112,502
1989	555,277	22,256	0	25,350	339,388	942,271
1990	562,513	312,661	0	0	446,564	1,321,738
1991	562,513	312,661	0	500	550,000	1,425,674
1992	575,000	330,000	0	1,300	734,675	1,640,975
1993	486,186	350,874	0	500	775,000	1,612,560
1994	486,186	350,874	0	0	1,062,942	1,900,002
1995	456,306	352,874	0	0	1,259,095	2,068,275
1996	456,306	375,221	0	18,337	1,448,604	2,298,468
1997	611,072	565,497	0	8,930	1,476,367	2,661,866
1998	649,441	398,219	0	2,110	1,248,811	2,298,581
1999	423,306	391,400	0	10,000	1,400,000	2,224,706
2000	423,306	397,400	0	164,993	1,656,835	2,642,534
2001	690,520	417,100	0	500	3,110,821	4,218,941
2002	490,000	439,700	442,507	2,455	2,045,913	3,420,575
2003	490,000	439,700	489,956	10,000	2,419,371	3,849,027
2004	490,000	439,700	530,500	10,000	2,575,866	4,046,066
2005	490,000	439,700	530,500	83,117	3,674,459	5,217,776
2006	538,000	439,700	530,500	63,501	2,498,975	4,070,676
2007	551,000	439,700	530,500	54,697	2,683,906	4,259,803
TOTAL	12,381,374	7,239,727	3,154,463	469,155	32,784,023	56,028,742

The following statistics reflect only those poisonings reported to the New Jersey Poison Control Center during 2007. The data does not reflect the overall incidence of poisoning in New Jersey because poisoning victims may not call the New Jersey Poison Control Center for assistance. If you have any questions concerning the statistics or would like additional statistics, please feel free to call 1-800-222-1222 for more information.





* 8,171 calls from either out-of-state or unknown locations.

2007

25 Years of Service

Call Volume: Age of those exposed



Location: Where the calls come from



Types of products involved



Call Reason: Unintentional Exposures



Call Reason: Intentional Exposures



SUBSTANCES MOST FREQUENTLY INVOLVED IN HUMAN EXPOSURE 2007

Substance	No.	%
Analgesics	6,659	12.4
Cosmetics/personal care products	5,583	10.4
Cleaning substances (household)	4,691	8.7
Foreign bodies/toys/miscellaneous	3,724	6.9
Sedative/hypnotics/antipsychotics	3,721	6.9
Topical preparations	2,653	4.9
Cold and cough preparations	2,496	4.7
Alcohols	2,210	4.1
Antidepressants	1,915	3.6
Food products/food poisoning	1,758	3.3
Antihistamines	1,758	3.3
Cardiovascular drugs	1,663	3.1
Pesticides	1,643	3.1
Vitamins	1,608	3.0
Arts/crafts/office supplies	1,515	2.8
Antimicrobials	1,448	2.7
Gastrointestinal preparations	1,081	2.0
Hormones and hormone antagonists	1,071	2.0
Plants	1,023	1.9
Chemicals	982	1.8
Stimulants and street drugs	977	1.8
Anticonvulsants	875	1.6
Hydrocarbons	777	1.4
Electrolytes and minerals	757	1.4
Asthma therapies	628	1.2
Bites and envenomations	617	1.2
Other/unknown nondrug substances	610	1.1
Miscellaneous drugs	607	1.1
Fumes/gases/vapors	592	1.1
Eye/ear/nose/throat preparations	525	1.0
Dietary supplements/herbals/		
homeopathic medicines	470	0.9
Deodorizers	410	0.8
Muscle relaxants	369	0.7
Paints and stripping agents	364	0.7
Adhesives/glues	341	0.6
	(continued on ne	ext page)

SUBSTANCES MOST FREQUENTLY INVOLVED IN HUMAN EXPOSURE

Substance	No.	%
Unknown drug	316	0.6
Swimming pool/aquarium	305	0.6
Heavy metals	303	0.6
Automotive/aircraft/boat products	242	0.5
Batteries	236	0.4
Anticholinergic drugs	235	0.4
Industrial cleaners	219	0.4
Building and construction products	198	0.4
Anesthetics	185	0.3
Essential oils	183	0.3
Diuretics	171	0.3
Mushrooms	171	0.3
Fertilizers	165	0.3
Anticoagulants	128	0.2
Fire extinguishers	126	0.2
Polishes and waxes	119	0.2
Tobacco products	115	0.2
Dyes	81	0.2
Lacrimators	79	0.1
Veterinary drugs	59	0.1
Antineoplastics	49	0.1
Matches/fireworks/explosives	44	0.1
Serums, toxoids, vaccines	32	0.1
Photographic products	18	0.0
Narcotic antagonists	11	0.0
Diagnostic agents	9	0.0
Radioisotopes	7	0.0
Sporting equipment	2	0.0
Waterproofer/sealants	2	0.0
Radiopharmaceuticals	1	0.0
Weapons of mass destruction	1	0.0
Total	61,933	100.0

25 Years of Service

FATALITIES IN 2007

Patient Age	Patient Species	Substance Description/Verbatim *	Selecte Cases
38	Human	FENTANYL	
40	Human	ETOH	
25	Human	OXYCODONE & AMP	
53	Human	METHANOL (windshield washer fluid)	
49	Human	OXYCONTIN	
48	Human	SEROQUEL ORAL (also Depakote)	
40	Human	ETHYLENE GLYCOL (automotive anitfreeze)	
43	Human	PERFUME/COLOGN (postmortem evidence of	
		Promethazine)	
25	Human	VODKA (also Methadone and Cocaine)	-
18	Human	EIUH	
40	Human	EIVISAIVI (also Weildutini, Lamiciai, Cionazepani,	
74	Human	ASPIRING (also, ethanol)	
34	Human	KIONOPINI 1 (also Pavil othanol Acotaminophor	
82	Human	VICODIN (also Trazadone Levano)	1)
76	Human	RUSPAR 5 ML (also Effevor)	
56	Human	ATENOLOI	
57	Human	LINKNOWN DRUG	
18	Human	ETHYLENE GLYCOL (automotive antifreeze)	
44	Human	LAMICTAL 25 (also Wellbutrin, Seroquel)	
48	Human	SEROOUEL 50 (also Cocaine and ethanol)	
47	Human	WELLBUTRIN 75 (also Effexor, Geodon, ethanol)	
60	Human	CALCIUM (Calcium Chloride)	
88	Human	CARDIZEM CD 240	
57	Human	DILANTIN 100 MG	
92	Human	DIGOXIN (also Lopressor, Lasix, Coumadin,	
		Diovan, Aricept)	
35	Human	HEROIN	2
23	Human	HEROIN	
42	Human	OXYCODONE	
40	Human	IYLENOL PM (also ethanol)	
31	Human	EFFEXOR XR ORAL (also Depakote, Vicodin,	
40	Llumon	Cymbaita, Irazodone, Pseudoepnedrine)	
42	Human	SEROOUEL ORAL (also Cossino)	
51		TECRETOL 27.27 (also Tulopol DM)	
30	Human	OXYCODONE (also Cocaine Benzodiazenine)	
76	Human		3
61	Human	SEROOLIEL 50 (also Lithium Valium Methadone	3
01	naman	Duragesic patch)	
45	Human	FTOH	
63	Human	ASPIRIN (also Tylenol PM)	4
2	Human	UNKNOWN DRUG (under police investigation no	5
		substance identified to us)	
68	Human	ETHANOL	
65	Human	TYLENOL (also Imipramine, Zantac)	
38	Human	UNKNOWN DRUG (possibly Methadone, Prozac,	
		Valium, Symbax or Seroquel)	
42	Human	CLOZARIL 25	
52	Human	GLUCOVANCE (also Cardizem, Altace)	6
45	Human	SEROQUEL 25 (also Lexapro, Buspirone, Bupropio	on,
		Conazepam, Rozerem, Levothyroxine,	
C1		Methylprednisolone, Erythromycin, Avelox)	
61	Human	UNKNOWN TYPE (probable alconol withdrawal)	
60	Human	WELLBUIKIN IUU	
42			7
25	Human		1
78	Human	TVLENOL EXTRA (also Dilaudid Eontapul)	
39	Human	TVI ENOL (also Naproven othanol)	
38	Human		
50	Animal	OTHER FLIME GAS (hamster construction adhesi	ve)
10	Animal	OLITDOOR (cat ingested fertilizer))
.0	Animal	UNKNOWN (perhaps Roundup)	
7	Animal	UNKNOWN (dog. assumed anticoagulante)	
2	Animal	OTHER FOREIGN (dog, Moon Sand)	

*Selected Cases: See page 34 for description.

Selected Cases

- 1 18 year old unknown: presented at ED alter 24 hrs of therapy for sore throat, was hyperventilating and had bizarre affect. Was severely acidotic and hypotensive, wide anion gap, osmolar gap, elevated ammonia
- 2 35 year old unknown: fireman doing drills when developed chest pain and collapsed, arrived in ED hypotensive, tachycardic and unresponsive, was severely acidotic with a wide anion and osmolar gap, with ammonia of 300, lactate markedly elevated. Developed a marked rise in CPK (>200,000!).
- 3 Acetaminophen 76 yo: patient had a history of dementia but lived alone with intermittent home health aid, was found unresponsive by the aid. With stimulation the victim awoke and was oriented to place and person. Her vital signs were "normal," the initial acetaminophen level was 757 mcg/ml. She was found to have a mild metabolic acidosis and hyper-glycemia with an anion gap of 25. Her INR was normal. She was treated with antidotal therapy and bicarbonate. Her level of consciousness improved after correction of the acidosis and fluid challenge. After the bicarbonate, she persisted in running a very low serum bicarbonate level and a workup was undertaken for toxic alcohol ingestion. Her electrolyte pattern. She developed diarrhea, abdominal CAT Scan revealed what was thought to be acute pancreatitis, her INR rose to 3. She developed a cardiac arrest and was not resuscitated.
- 4 Aspirin 63 yo: arrived in ED with chest pain and shortness of breath, had been self-medicating with aspirin; patient had a past history of deep vein thromboses. Initial lab tests revealed possible cardiac damage. Patient developed what was felt to be clinical heart failure, became agitated and was treated with haloperidol and nitroglycerine. He developed respiratory difficulty and was intubated and placed on a ventilator. He became progressively "unstable," developed a fever of 106 and was felt to be in septic shock and expired.
- 5 2 year old male: child found in bathroom at 4 am with pills scattered on floor, when EMS arrived child was in full code, transported to ED and unable to resuscitate. Home had Tylenol with codeine, Percocet and metformin. Post mortem pending.
- 6 52 year old male: Came to the ED claiming he overdosed on metformin and he was taking Glucovance, Cardizem and Altace. In the ED he became progressively lethargic and was electively intubated and given activated charcoal by tube. He became bradycardic with a heart rate into the low 30s, had a blood sugar of 201 mg/dl and was given glucagon for the bradycardia. The poison center expressed its concern for the metformin rather than the possible calcium channel antagonist and in fact the pH was found to be 6.8. the poison center suggested hemodialysis but he became hypotensive with each attempt, his serum lactate level was found to be 18-20 mmols/liter. He was given atropine, glucagon, calcium, insulin but continued downhill and expired within 12 hours of the initial call to the poison center.
- 7 25 year old male: The patient took an unknown amount of Tylenol at some time prior to coming to the ED. Upon arrival he was lethargic, had an acetaminophen level of 600 mcg/ml and evidence of hepatic damage with elevated transaminases and metabolic acidosis with a pH of 7.25. He also had a prolonged QTc of 560 msec and his potassium was found to be somewhat low at 3.2 mequiv/liter..he showed some initial improvement being described as awake and alert, but then developed progressive lethargy, obtundation, and further evidence of hepatic dysfunction. He eventually met the criteria for a liver transplant but was refused because of the prior history of drug abuse and suicide attempts. Despite IV n-acetyl cysteine he continued to go down hill and expired on the fifth hospital day.

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About NJPIES

NJPIES, often referred to as the Poison Control Center, is a poison emergency and drug information service. The center operates 24 hours a day, seven days a week. You can call NJPIES to get help in a poison emergency, for poison prevention information, for drug information or to get treatment advice following an animal bite. Specialists in Poison Information, who are physicians, nurses or pharmacists, handle all calls. They will tell you what to do if you, your child or your pet is poisoned. The New Jersey Poison Control Center staff is ready to answer questions about poisons in your home and provides a wealth of information regarding general poison prevention.



New Jersey Poison Information and Education System (NJPIES) Located at UMDNJ 140 Bergen Street, Suite G 1600 P.O. Box 1709 Newark, NJ 07101-1709 Administrative Office: (973) 972-9280 Fax: (973) 643-2679 Poison Hotline: 800-222-1222 TDD/TTY Line (For the Hearing Impaired) 1-973-926-8008 Website: www.njpies.org