

NJPIES ANNUAL REPORT

New Jersey

TOP 10

POISON
Help
1-800-222-1222



Medical Director's Message

NJPIES lived through a year of turmoil, including the possibility of closing, but survived, and continues to provide uninterrupted service to the citizens of New Jersey. Our superb staff "ratcheted up" their productivity responding to calls with fewer staff. Unfortunately the fiscal problems of both the state and NJPIES have not resolved. NJPIES is looking for alternate sources of funds to keep it solvent.

Our accomplishments during the year are legend. In the face of decreasing financial support, we increased our professional and public outreach education. The bulk of public information during the first quarter of the year concerned the potential discontinuation or severe cutback in services. The media and public were tremendously supportive of the life-saving work performed by the New Jersey poison experts.

Our educational programs reached into every corner of the state. NJPIES distributed nearly a million pieces of printed literature and provided poison prevention education to about 14,000 residents including school children and citizens of the state.

Interestingly the year started and ended with bad weather and NJPIES' involvement in warning about the dangers of hypothermia, carbon monoxide and other cold and snowstorm related health hazards.

NJPIES ventured into the area of social marketing becoming one of the most popular such sites dealing with accident and poison prevention.



Utilizing funding from the US Department of Health and Human Services' Health Resource Service Administration (USDHSS, HRSA), we launched a revised website (www.NJPIES.org). Using modern technology, the website allows for chatting, and we now offer the capability of text messaging using expanded email technology (text to 8002221222@njpies.org). In the last quarter of 2010 the site attracted over 2,000 individuals, 40% of the visitors reaching the site from a search engine such as Google, the largest referral engine. Of great interest is the international interest in poison information. We hosted visitors from 50 countries and territories, with Russia accounting for over 133 visitors.

NJPIES, utilizing funds from HRSA, contracted with a firm to help place public education material in the media, electronic and print. This has been a very successful partnership, placing well in excess of a million "impressions" throughout the state. The

partnership plans to look more carefully at the classically underserved population, Spanish speaking and other minority groups who classically are not reached through the usual media outlets.

NJPIES's involvement in attempting to prevent unintentional exposures and diversion of prescription medications to abuse, has led NJPIES to help in the organization of medication take back days co-sponsored by the US Drug Enforcement Agency and state drug abuse prevention and treatment programs. NJPIES's director is actively searching supporters for state regulations/legislation mandating lockable medicine storage cabinets in all new and remodeled home construction.

During 2010, we have noted a trend in which a greater proportion of calls are related to prescription medications rather than over-the-counter medications.

NJPIES also had a strong presence in response to the explosion in cases involving young individuals and alcoholic energy drinks, and designer marijuana products.

NJPIES presented several papers at national conferences. Of great importance was one that looked at suicide attempts in the state which we showed a growing concern in the middle aged population group.

The epidemiological services at NJPIES have been alerting national authorities to an apparent decrease in the utilization of hotline services. After several years of trying to show this trend, it became widely accepted. In fact, the trends seen in NJ, that is, decreased calls from

the public but increased calls from health care facilities concerning what appear to be more severely poisoned victims, is now accepted. Two members of the NJPIES team are appointed members of a national taskforce looking at this issue. The charge is to see what effect the call volume decrease will have on the population at risk, and if there is something that needs to be done to insure that the population, normally served and the usual underserved population is provided with appropriate poison and drug information services. NJPIES partnering with the University of Medicine and Dentistry of New Jersey's (UMDNJ) School of Public Health and Rutgers University's School of Environmental and Biological Sciences, received approval from the institution's committee on human research to organize focus groups of various minority and other groups looking at issues of "branding" of NJPIES and encouraging its use.

Steven M. Marcus, MD
Executive and Medical Director

Treating and Preventing Poisonings – The NJ Poison Experts/The NJ Poison Center

New Jersey Poison Information and Education System (NJPIES) is the state's ONLY poison center, serving residents for 27 years. We offer a free, 24/7 emergency and information hotline (1-800-222-1222) answered by healthcare professionals (doctors, registered nurses, and pharmacists). All calls are free and confidential. NJPIES provides the public with immediate help in poisoning emergencies, as well as in situations where the caller is just a little worried. NJ poison experts assist callers of all ages. A translation service is available for over 100 languages. No question is too small and most cases can be resolved over the phone, usually avoiding an expensive, unnecessary trip to the emergency room.

One of the biggest misconceptions the public has about NJPIES is that we are only needed by mothers with small children. Actually, poisoning is a matter of dose not age, too much of anything can be dangerous to anyone. Products such as medicines, chemicals, cleaning products, lamp oil can be poisonous. In addition, questions about medicine use and their safety, adverse effects, and interactions are also answered 24/7. Below are just a few examples of questions the NJ poison experts handle on a daily basis.

- My carbon monoxide detector keeps beeping. What do I do?
- I am spring cleaning and would like to know which cleaning chemicals are safe to mix together.
- Can I pick and eat the mushrooms that are growing by the side of the road/in my backyard?

- The power went out on my refrigerator/freezer and I'm not sure if the food is ok to keep.
- I took my wife's blood pressure pill thinking it was my heart pill.
- My grandson/toddler got into my pocketbook and took my iron pills.
- My dog/cat licked up some antifreeze from the driveway.
- I accidentally gave my infant a double dose of antibiotics.
- I forgot I had already taken my antidepressant pill and took another one.



Top 10 Features of NJPIES' Website

- Six main tabs that provide quick, easy access to information (Public Education, Medication, Household, Food, Animals, and Other).
- Live Chat.
- Real-time texting capabilities.
- Alerts and product recalls section.
- Link to NJPIES Facebook.
- Interactive learning tools (games, worksheets and videos).
- Directly submit requests for educational materials and/or educational programs.
- Visible search bars to help find topics quickly and efficiently.
- Engaging graphics.
- Dedicated health care professionals section which offers professional education resources, lectures, case studies and more.

10 Important Years in our History

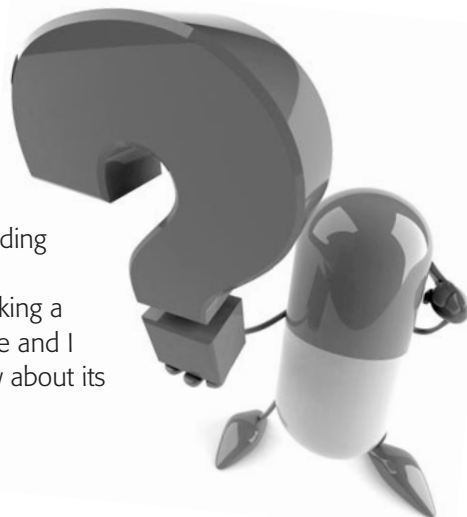
1950s	First NJ poison center was established.
1982	NJ state legislature passed legislation (N.J.S.A. 26:2-119 et seq.) to develop a drug and poison information program in NJ, establishing NJPIES in 1983.
1985	Became a "line item" in the NJ State Budget.
1988	Staff began handling calls for the state AIDS/HIV/STD Hepatitis hotline.
Late 1980's	Membership in NJPIES became mandatory for all acute care hospitals around the state.
2000	Staff began handling calls from the toll-free national number (800-222-1222) which automatically identifies the caller's location. Callers from New Jersey will be connected to NJPIES.
2002	Relocated to UMDNJ's Newark Campus and becomes part of the Department of Preventive Medicine & Community Health (DPMCH).
2003	Hired its first epidemiologist, with federal funding, to enhance toxico-surveillance.
2006	NJPIES opened its new state-of-the-art call center in UMDNJ's Ambulatory Care Center building on the Newark campus increasing its surge capacity in case of a bio/chemical terrorist event or after a natural disaster.
2009	Hospital funding to NJPIES decreases.

10 Common Drug Information Questions

- My doctor prescribed a new medicine. Will it interact with my current medicine?
- Can this medicine be used during my third trimester?
- My elderly mother would like to take an herbal

product to help with her memory. Will this interact with her diabetes medicine?

- I'm a health care professional for a local hospital. How should the antidote be prepared?
- I'm a detective/police officer who needs to identify 5 medicines found on a suspect involved in a crime.
- Can you identify this pill because I mixed up my medicines?
- I'm traveling and put a week's worth of my pills and vitamins all together in a zip lock bag and now I can't tell which is which. Can you help me?
- I forgot to take my medicine this morning. Am I able to still take it?
- My teenager is studying for exams and decided to take some caffeine pills to help him stay awake. Now he is complaining of a headache and rapid heartbeat. What can we do?
- I'm a new mom and would like to know if any of the medications (over-the-counter, prescription, dietary, or herbal) will interfere with me breastfeeding my baby.
- My child is taking a new medicine and I want to know about its side effects.



10 High Profile Cases Involving NJPIES in the Past 10 Years

10. Identified a group of party goers who came down with an illness thought to be related to food served at a catering hall. This resulted in the temporary closing and sanitizing of the catering hall. (1990s)
9. Discovery of saxitoxin (nerve poison) contaminated puffer fish along the eastern seaboard of the U.S.
8. Discovered that the pigment sindoor was being used as a food coloring. This resulted in lead poisoning of a family in NJ and the uncovering of similar cases as far away as India. (2004)
7. Reported a peculiar cluster of "heroin" overdoses in 3 counties of NJ. Drug was eventually identified not as heroin but as clenbuterol, a banned performance enhancing drug, and the outbreak tracked over multiple states. (2005). Identified a cluster of strange overdoses reportedly from heroin. The outbreak was traced to fentanyl sold as heroin. (2006)
6. Accidental ingestion of lamp oil. This turned out to be widespread across the country and efforts are being made to make the preparation more child-resistant. (2007)
5. Two outbreaks of methemoglobinemia, children (45 children) and adults turned blue, from exposure to water contamination with sodium nitrite booth because of defective backflow valves in heating systems. (1992 and 1996)
4. Helped report a new neurological illness associated with a more environmentally safe solvent to replace existing solvents in the dry

cleaning industry but while ecologically safer, it is more dangerous to the user. (2008)

3. Accidental methadone overdose death of a child who gained access to his grandparents "take home" methadone and suffered a cardiac arrest on arrival at emergency room of a local NJ hospital. This led to 2 national publications drawing attention to the problem (2009)
2. Alerted Centers for Disease Control and Prevention (CDC) and Federal 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 administering the injections and the indictment of those involved in the manufacturing and shipment of the product involved. (2005)



1. Identified a "cluster" of deaths in a single intensive care unit in a NJ hospital. The situation was reported and eventually led to the arrest and conviction of a nurse, Charles Cullen, who pleaded guilty to over 35 counts of murder. (2003)

10 Substances Involved in 2010 Deaths

Sedative Hypnotics/Anxiolytics
Psychiatric Meds
Opioids
Cardiac Meds
Non-Narcotic Analgesics
Alcohol
Drugs of Abuse
Anti-Seizure Meds
Antihistamines
GI (Gastrointestinal)



Top 10 Substances (pharmaceutical and non-pharmaceutical) Involved in Exposures for Ages 0 - 5

1. Cleaning Substances (Household)
2. Foreign Bodies/Toys
3. Analgesics (acetaminophen, aspirin, narcotics)
4. Topical Preparations (steroid creams, acne medicines)
5. Vitamins
6. Antihistamines
7. Arts/Crafts/Office Supplies
8. Antibiotics
9. Pesticides
10. Cold and Cough Preparations

Top 10 Substances (pharmaceutical and non-pharmaceutical) Involved in Exposures for Ages 6 - 12

1. Foreign Bodies/Toys
2. Cleaning Substances (Household)
3. Antihistamines
4. Arts/Crafts/Office Supplies
5. Analgesics (acetaminophen, aspirin, narcotics)
6. Cold and Cough Preparations

7. Plants
8. Topical Preparations (steroid creams, acne medicines)
9. Vitamins
10. Cardiovascular Drugs

Top 10 Substances (pharmaceutical and non-pharmaceutical) Involved in Exposures for Ages 13 to 19

1. Analgesics (acetaminophen, aspirin, narcotics)
2. Cleaning Substances (Household)
3. Sedative/Hypnotics/Antipsychotics
4. Cold and Cough Preparations
5. Antidepressants
6. Antihistamines
7. Stimulants and Street Drugs (illegal substances used to get high)
8. Alcohols
9. Foreign Bodies/Toys
10. Chemicals

Top 10 Substances (pharmaceutical and non-pharmaceutical) Involved in Exposures for Ages 20 and older

1. Analgesics (acetaminophen, aspirin, narcotics)
2. Sedative/Hypnotics/Antipsychotics
3. Cleaning Substances (Household)
4. Alcohols
5. Antidepressants
6. Cardiovascular Drugs (antihypertensive medicines, diabetes medicines)
7. Anticonvulsants
8. Pesticides
9. Antihistamines
10. Stimulants and Street Drugs (illegal substances used to get high)

Human Exposure Cases Ranked by County per 100,000 Population

1. Cape May(1093.9)
2. Camden (1036.9)
3. Atlantic (1007.1)
4. Ocean (907.4)
5. Gloucester (903.3)
6. Salem (848.9)
7. Sussex (783.2)
8. Monmouth (775.6)
9. Mercer (752.0)
10. Warren (749.8)



Top 10 Pharmaceutical Categories Involved in Calls to NJPIES

1. Analgesics
2. Sedative/Hypnotics/Antipsychotics
3. Cardiovascular Drugs
4. Topical Preparations
5. Antidepressants
6. Antihistamines
7. Antibiotics
8. Vitamins
9. Cold and Cough Preparations
10. Hormones and Hormone Antagonists



Top 10 Non-Pharmaceutical Categories Involved in Calls to NJPIES

1. Cleaning Substances (Household)
2. Information Calls
3. Foreign Bodies/Toys
4. Alcohols
5. Pesticides
6. Arts/Crafts/Office Supplies
7. Plants
8. Chemicals
9. Hydrocarbons
10. Fumes/Gases/Vapors

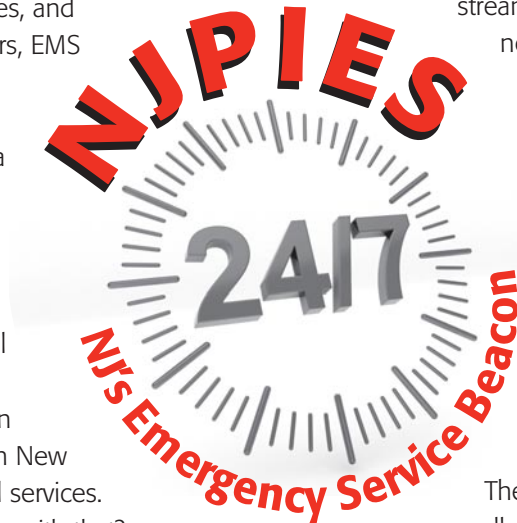


10 Ways NJPIES Benefits New Jersey

- **24/7 Beacon in the Emergency Service System.**

The role of the NJ Poison Center in detecting disease outbreaks is legendary. Literally, as New Jersey's Medical "On-Star" service, it provides 24/7 first response services to both the public and medical and emergency service professionals throughout the state. Our trained poison specialists (physicians, registered nurses, and pharmacists) help ER doctors, EMS first responders as well as concerned at-home parents and residents determine if a poisoning has occurred and the correct immediate protocol. Timely intervention is frequently provided for children as well as teens, adults and senior citizens. NJPIES is a jewel in the continuum of services in New Jersey's emergency medical services. Can we really afford to tinker with that?

- **NJPIES saves lives.** NJ Poison Center experts are ready to provide emergency and information services whether there is a Nor'easter ready to dump 20+ inches of snow on the ground, a Category Five hurricane threatening the coast, pandemic flu crisis, or when other health care services and resources are closed for the day or holidays. Around the clock, NJPIES provides answers to everyone and anyone who calls our hotline, chats in via our website, or texts in via their cell phones.



- **NJPIES is a bargain to NJ taxpayers.** As of now, NJPIES services remain free to the public. It is a great investment for NJ taxpayers. The National Public Services Institute found that poison centers provide a 1:7 ROI (Return On Investment) and save millions of dollars each year in avoiding unnecessary hospital and emergency care services and streamlining those services when they are needed. A subsequent study by the Pacific Institute of Research and Evaluation found that for each \$3 spent on poison center services, \$290 is saved in medical spending. In New Jersey, conservative estimates are that NJPIES saves NJ \$9.5 million annually both in avoided hospital visits and ambulance calls, and shortened hospital stays. Calls to NJPIES reduce costs to individuals, hospitals and insurance companies. The state only provides 20% of the center's overall operating budget, yet 100% of our services are focused on NJ. Can any other state supported program say the same?

- **The need is greater during a Recession not less.** During these difficult economic times, this free service is available to every resident, and is needed more than ever. The center handles 200 calls a day, many from the state's uninsured, out-of-work, and most in-need. NJPIES' availability (24 hrs a day/ 7 days a week) and highly trained healthcare professionals efficiently keep thousands of patients

out of doctors' offices and emergency rooms across the state. NJ poison experts aren't just there to help with emergencies. Their job also includes answering questions and educating the public about how to prevent poisonings.

- **The Internet is not a substitute for real medical care.** The Internet is replete with misinformation. Correct poison intervention requires the skills of trained toxicologists. During the last 5 years, the time of greatest Internet growth, NJPIES has seen a dramatic increase in call volume from hospitals. Some make claims that doctors and citizens might be better served by searching the Internet for emergency medical advice rather than picking up the phone for a free call and consult with a medical expert. WebMD is not the standard of care we are willing to use when lives are in immediate danger? Would you want your cardiac surgeon looking for surgical instructions on the Internet?



- **NJPIES supplements hospital care.** According to the United States Centers for Disease Control, poisoning deaths are second only to motor vehicle crashes as the leading cause of injury deaths in the U.S, and will soon surpass that landmark. NJPIES aides emergency room doctors with medical diagnosis and treatment plans, while handling less acute cases at home, thereby, keeping a substantial number of cases from ever reaching over-capacity emergency rooms around the state. NJ poison experts also assist 911 emergency medical service (EMS/paramedics) crews on what to do immediately once they have reached the patient.
- **NJPIES is a leader in children's health.** Medical and Executive Director Steven Marcus is the state's preeminent expert in lead poisoning and children's public health issues. Trained first as a pediatrician, he is an adamant proponent for sensible legislation that protects the rights of children including the need for better regulations against lead poisoning in

homes and schools and locked medicine cabinets to avoid unnecessary home poisonings. Children age 5 and under make up more than half (over 50 percent) of all poison exposures nationally and in New Jersey.

- **Early Warning System for Public Health/Statewide Public Health and Toxico-Surveillance.** The NJ Poison Center is a primary defense against injury and death from poisonings. We have the ability to detect public health threats in real-time as they emerge. NJPIES is equipped with a unique and uniform data collection system that contributes to the national poisoning data system, National Poison Data System (NPDS). NPDS provides an important data source in the development of a

comprehensive surveillance system for early outbreak detection. Recently, the NJ poison experts were involved in tracking, trending and consulting on cases related to bath salts and synthetic marijuana like K2.

- **Component in Terrorism.** The NJ Poison Center is a key component in NJ's terrorism response network. As shown by previous anthrax scares, bio-terrorism from toxic, poisonous sources is a serious potential threat.
- **Medical Detective Experts.** Responding to poisoning emergencies takes expert medical detective work since exposures frequently have short turnaround times in order to save lives.

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