FROM THE DIRECTOR

“Always bear in mind that your own resolution to succeed is more important than any one thing.” - Abraham Lincoln

Dear friends,

I am proud to present the Iowa Statewide Poison Control Center Annual Report for the 2012 fiscal year (July 1, 2011-June 30, 2012). Despite the significant financial challenges facing our poison center, the ISPCC continued to work efficiently and effectively for the citizens of Iowa, answering over 50,000 calls last year. This report presents a snapshot of activities that our dedicated staff accomplished during the year.

I continue to be heartened by the phone calls, letters and emails that I receive from callers who want to share their comments about our service that many describe as “indispensable.” Often, they express gratitude to our nurses who helped manage their situation, other times callers acknowledge our physician toxicologist for being available 24/7 for complex and often life-threatening cases. And, sometimes our callers let us know how we can do better, and we welcome those suggestions.

The role that the nation’s 57 poison centers quietly play in the U.S. health care system often goes unrecognized, but the savings to individuals, insurers and government is truly significant, and help keep total healthcare costs down. Studies show that consulting with a poison center improves patient outcomes and decreases a patient’s length of stay in a hospital. In the words of former CMS director Don Berwick, “We need to rally around the triple aim of better care and better health at lower cost.” Poison centers have been cited as a model for cost-effective health care delivery. Iowa’s poison center saves at least $11 per every $1 spent on providing services. Last year we saved the state of Iowa conservatively over $8 million in health care costs. Nearly 90% of cases from the general public who call the ISPCC each year are safely treated at home, preventing unnecessary emergency department visits and ambulance transports.

Even though the ISPCC saves countless lives and millions of Iowa taxpayer dollars every year, its survival is at risk. Achieving long-term sustainable funding is the highest priority this year. State funding represents just 38% of ISPCC’s operating expenses in the 2013 fiscal year and federal funding slipped to 12% of operating costs. The ISPCC receives annual funding from its corporate sponsors Iowa Health System, University of Iowa Hospitals and Clinics, and Wellmark, Inc. The sponsors made an additional one-time contribution to fill ISPCC’s significant shortfall in FY 2012. In response to another serious budget shortfall expected to jeopardize essential services this year, we are working on a long-term solution which includes both increased public government funding along with private funding from hospitals and insurance companies. I ask for your continued support to help ensure that Iowa’s poison center continues to remain available to all residents and health care providers across the state.

I would like to acknowledge the strong support and financial commitment of the Iowa State Legislature, Iowa Department of Public Health, U.S. Health Resources and Services Administration, and our sponsoring organizations Iowa Health System, University of Iowa Hospitals and Clinics, and Wellmark. We value the support of our local community and wish to especially acknowledge St. Luke’s Regional Medical Center, area legislators, and the local business community. I extend my sincere thanks to our Board of Directors listed in this report. Their insights and contributions have been greatly appreciated and they have provided critical guidance during uncertain times.

We thank you for being a partner to Iowa’s poison center. I look forward to working with you in the coming year.

Linda B. Kalin
According to information released by the Centers for Disease Control (CDC) in early 2012, **poisoning has become the number one cause of accidental death in the United States**, exceeding for the first time the rate of motor vehicle accident deaths. Much of the increase in accidental drug deaths is due to increases in deaths related to opioid painkillers.

**54,154**
Calls answered by Iowa’s Poison Center

**50%**
Calls concerning a child under 6 years old

**90%**
Calls from the public managed at home

**5,158**
Follow-up calls made by Iowa’s poison center

**$8.3 million**
Cost savings to Iowa and its residents

**Calls made by a doctor, nurse or pharmacist seeking treatment advice related to poisoning exposures**

**25%**
Peak call volume 5 to 10 p.m.

**BOARD OF DIRECTORS**
FY 11-12

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Chief Pharmacy Officer
University of Iowa Hospitals & Clinics
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University of Iowa Hospitals & Clinics
Iowa City, IA
ISPCC INITIATES HOSPITAL SUBSCRIPTION PROGRAM

During the past twelve years, under the guidance and support from our sponsors Iowa Health System and University of Iowa Hospitals and Clinics, the ISPCC has provided life-saving and cost-effective services to the general public and health care providers in our state. Recent reductions in state and federal funding have driven the center to explore alternatives for continuing to provide poison center services to the state. We anticipated these reductions to some degree and over the years have worked hard to deliver both low operating costs and high service delivery. In fact, as we explored possible solutions to expected funding shortfalls, we took a close look at outsourcing to another state. No other state will pick up over 50,000 Iowa calls without funding and in each case costs would likely increase. That’s how efficient we are and why we have decided to continue to move forward on our own.

We recently developed a sustainable funding plan based on an allocation to each of the public and private hospitals and insurance companies in Iowa to supplement funds from the state, University of Iowa Hospitals and Clinics, the Iowa Health System and more recently Wellmark. Hospitals across Iowa will receive unlimited poison center consultations through a subscription fee, and subscribers will avoid more costly professional consultation fees that will be incurred by nonsubscribers. Cost-sharing programs are a growing trend and over a dozen poison centers across the country have launched a hospital subscription program or are considering a similar plan, including neighboring states Illinois, Minnesota, Missouri, Nebraska and Wisconsin.

Currently, hospital patients represent over 25% of the poison center’s consults, amounting to more than 8,000 patients per year. Consultation with the poison center is increasingly becoming the standard of care for cases involving toxic substances. Studies show that consulting with a poison center improves patient outcomes and decreases a patient’s length of stay in a hospital.

Nearly 90% of cases from the general public who call the ISPCC each year are safely treated at home preventing unnecessary ER visits, saving the state of Iowa conservatively over $8 million in health care costs each year. Loss of poison center services in Iowa would result in higher health care spending. Health care cost savings are shared by hospitals, insurers, taxpayers, and government health care funding agencies such as Medicaid, Medicare, and the State Child Health Insurance Program (hawk-i).

Last year support from the legislature and the Iowa Hospital Association helped us to restore state funding to near our 2011 level. That was a big help, but still fell short of filling the financial shortfall caused by earlier declines in state funding, and more recent declines in federal funding and grants. The ISPCC is actively pursuing increased funding from state government and private insurance payers.

We gratefully acknowledge the Iowa hospitals who have joined the effort to sustain the poison center. Your support will help us continue to advance our mission to improve patient outcomes and reduce overall health care costs to our communities. Thank you for recognizing the value of the ISPCC now and into the future.

WE ARE ON FACEBOOK

The Iowa Statewide Poison Control Center uses Facebook to let Iowans know about current events and interesting facts and how to stay safe from poisons.

Like us – and tell your friends
FINANCIAL REVIEW

In FY 2012, the annual operating budget for the ISPCC was $1,179,560, an increase of 1.3% over FY 2011 spending. Personnel costs comprised 86% of the direct operating costs. State funding through the Iowa Department of Public Health provided 37% of the funding. A federal grant awarded by the Department of Health and Human Services, HRSA, funded 17% of total operating costs. Funding of $74,250 through the Hospital Preparedness Program (HPP) provided funds to maintain telephone and computer systems and conduct a table-top exercise to test ISPCC capabilities and surge capacity.

The ISPCC receives annual funding from its corporate sponsors Iowa Health System, University of Iowa Hospitals and Clinics, and Wellmark, Inc. The sponsors made an additional one-time contribution to fill ISPCC’s budget deficit of $248,000 in FY 2011-12.

As a 501(c)(3) nonprofit organization, our annual federal income tax return, IRS form 990, is available for review on our website, www.iowapoison.org.

Funding by Fiscal Years

- State of Iowa (IDPH)
- HPP Grant
- Federal (HRSA)
- Corporate Sponsors
- Annual Contribution
- Sponsors One-Time Contribution (to make up budget deficit)
Linda Kalin, Director of the Iowa Statewide Poison Control Center, was honored as one of the 100 Great Nurses in Iowa for 2012, a recognition program of the Iowa Nurses Association. Kalin has over 25 years of experience in clinical toxicology and poison center activities. She began her career as an emergency room nurse at St. Luke’s Sioux City. In 1989, she became Iowa’s first Certified Specialist in Poison Information and was instrumental in the development of the statewide poison control center in 2000. Kalin is currently an adjunct faculty member and preceptor for the University of Iowa College of Pharmacy and Drake College of Pharmacy. She has been honored as Preceptor of the Year at both universities.

WE GET CALLS

The ISPCC gets all kinds of questions. Here are some of the more unusual calls of recent months.

- Caller reported her chickens ate rat poison. Wondering if still able to eat the eggs and how soon the chickens might die from the exposure.
- Mother calls about child taking a bath and grabbing the wrong bottle. Child accidentally put Nair in his hair instead of shampoo.
- School nurse calls after a young elementary student ate an entire pencil.
- Caller relates she used an unclean scissors to cut the hair on her tongue. Caller worried she would get sick since she didn’t sterilize the scissors.
- Caller allergic to bee stings and interested in knowing if yellow jacket energy pills contain bee venom.
- Mom calls after child found brushing his teeth with hemorrhoid cream. Mom concerned if this will “shrink his throat”.
- Parent reports 2 year old child found chewing on the frozen dead mouse that is the pet snake’s food.
- Woman calls after she accidentally grabbed the wrong medicine bottle and mistakenly took one of her husband’s Viagra pills.
- Three year old boy painted his penis with his sister’s nail polish. Mom calling wondering what to use to get the polish off.
- Caller concerned about a red mark on her arm and thinks it may be a spider bite. Caller convinced this is a tarantula bite as the exterminator thought that was what the bite looked like was from.
- Caller needing a pill ID. Caller was unable to provide a description of the pill or the imprint code on the pill as caller was blind.
- Caller’s 3 year old son has been vomiting for the last couple hours. Dad reports they had a dead mouse in the oven and some of the fur burned when they turned the oven on. Wondering if the two events are related.
- Elderly male relates he had been fixing his shoes with super glue and must have had some on his hands as now caller stuck to the toilet seat.

ISPCC DIRECTOR LINDA KALIN, IOWA TOP 100 NURSES

Linda Kalin, Director of the Iowa Statewide Poison Control Center, was honored as one of the 100 Great Nurses in Iowa for 2012, a recognition program of the Iowa Nurses Association. Kalin has over 25 years of experience in clinical toxicology and poison center activities. She began her career as an emergency room nurse at St. Luke’s Sioux City. In 1989, she became Iowa’s first Certified Specialist in Poison Information and was instrumental in the development of the statewide poison control center in 2000. Kalin is currently an adjunct faculty member and preceptor for the University of Iowa College of Pharmacy and Drake College of Pharmacy. She has been honored as Preceptor of the Year at both universities.

MAKING THE GRADE! TWO STAFF MEMBERS PASS CERTIFICATION EXAM

Specialists in poison information (SPI) are the individuals who staff the emergency phone lines 24 hours daily. ISPCC SPIs are registered nurses with critical care experience who have received extensive training in the evaluation and treatment of toxic exposures. This year, two of our specialists passed the Certified Specialist in Poison Information (CSPI) examination. The CSPI Exam is administered by the American Association of Poison Control Centers (AAPCC), and it tests a specialist’s knowledge base and problem solving skills regarding management of poison exposures. The exam topics include medications, household products, biological (venomous bites, food poisoning and plants), pesticides, chemicals and metals. Candidates for the exam must be a registered nurse or pharmacist currently employed as a SPI and have at least one year (2,000 hours) of experience and handled at least 2,000 human poison exposure telephone consultations. The SPI must pass the exam every seven years. In order for a poison control center to be accredited by the American Association of Poison Control Centers, at least 50% of the SPI’s must be certified. Congratulations to these CSPIs!
ISPCC STAFF SHINE AT ANNUAL NACCT CONFERENCE

The annual meeting of the North American Congress of Clinical Toxicology (NACCT) held in Washington, DC, September 21-26, 2011, was the site for Linda Kalin, Director of the Iowa Statewide Poison Control Center (ISPCC), to present the ISPCC’s first platform presentation ever at an NACCT meeting. The presentation highlighted Kalin’s abstract Use of Cost Effectiveness Study to Establish a Partnership Between a Poison Control Center and a Private Insurance Company. Ed Bottei, MD, FCCP, FACMT, Medical Director of the ISPCC, also presented three posters at the conference. This annual meeting provides an opportunity for physicians, pharmacists, nurses and scientists from around the world to participate in the sharing of information on a wide variety of toxicological issues. The platform session and three posters presented include:

PLATFORM:
L. Kalin, E. Bottei. Use of Cost Effectiveness Study to Establish a Partnership Between a Poison Control Center and a Private Insurance Company

POSTERS:
E. Bottei, L. Kalin. Seven Year Follow Up of a State-Based Poison Control Center Cost Effectiveness Study

E. Bottei, G. LaFleur. Human Poisoning After Ingestion of Eggs from a Long-nosed Gar Fish (Lepisosteus osseus)

E. Bottei. Digoxin Toxicity and Renal Failure Treated with Digoxin Antibodies and Plasmapheresis
Twenty-eight percent of the ISPCC’s exposure calls involved cases that were handled in health care facilities, up from 24% the previous year. Every hospital in Iowa utilized ISPCC services during the year. Studies have shown that when hospitals consult a poison center for their exposure cases, the consultation results in a shorter hospital stay for the patient and a less expensive hospitalization.

Last year, the ISPCC made over 50,000 follow-up calls on human exposure cases. These calls allow the poison specialists to provide ongoing recommendations in the treatment of the exposures and also determine the outcome of the case. Almost 30,000 of these follow-up calls were made to healthcare facilities.
CONSULTANTS

The ISPCC maintains a relationship with a number of expert consultants in many areas related to toxicology should a question be found that our usual and customary resources cannot handle. We would like to acknowledge their contributions to the program.

Iowa Department of Public Health
Michele Catallier, MD
Rebecca Curtiss
Randal Dahlin
Ann Garvey, DVM, MPH, MA
Rita Gergely
Julia Goodin, MD
Dennis Klein, MD
John Kraemer
Patty Quinlisk, MD, MPH
Stuart Schmitz, MS, PE
Ken Sharp, REHS

Iowa Department of Natural Resources
Kathy Lee

Iowa State University
Steve Ensley, DVM
Gary Osweiler, DVM, PhD
Leonor Leandro, PhD

Siouxland District Health
Department
Michelle Clausen-Rosendahl, MPH, REHS
Kevin Grieme
Chuck Cipperly

State Hygienic Laboratory
Chris Atchison, MPA
Lee Friell, MS
Mike Pentella, PhD
Don Simmons, PhD
Mike Wichman, PhD
John Vargo, PhD

University of Iowa Hospitals & Clinics
Kenneth Goins, MD
William Haynes, MD
Jessica Moreland, MD
Marcus Nashelsky, MD
Shawn Simmons, MD

Iowa Hazardous Materials Team Leaders
Asst. Chief Jim Clark, Sioux City

Woodbury County Emergency Management
Gary Brown

REAC/TS, Oak Ridge, TN
Ronald Goans, MD, PhD

St Luke’s Regional Medical Center (Sioux City) Pathologists
Mike Kafka, MD
Julie Breiner, MD
Thomas Carroll, MD
James Quesenberry, MD

POISON CENTER UTILIZATION BY COUNTY*

Poison center utilization and awareness of its services directly results in decreased injury or deaths and reduces unnecessary emergency department visits and inappropriate use of medical resources.

*Human exposures cases and information calls
EDUCATING AND EMPOWERING

An important part of the ISPCC’s mission is public and professional education. In 2011-12, the ISPCC distributed nearly 100,000 educational materials across the state.

Public education efforts are intended to help increase awareness of the services of the poison control center and to help prevent poisonings from occurring. Educational materials, presentations, and health/safety fairs are targeted towards parents with children under age six, health care professionals, multi-cultural populations and seniors.

With the growing abuse of prescription drugs and emergence of new synthetic drugs, educational trainings were provided to clinicians from a variety of work and educational backgrounds including medical staff, law enforcement, prosecutors, social workers, substance abuse/mental health clinicians, educators, and parents. Linda Kalin, a frequent lecturer and speaker on drugs of abuse, presented over 40 programs last year in the following locations: Ames, Cedar Rapids, Cherokee, Creston, Council Bluffs, Des Moines, Dubuque, Elgin, Ida Grove, Iowa Falls, Le Mars, Marshalltown, Red Oak, Sheldon, Sioux City, Spencer, Storm Lake, Vinton, and West Des Moines. Topics included:

- Beyond K2 & Bath Salts: The Latest Drugs du Jour
- Pick Your Poison: A Smorgasbord of Abusable Drugs
- K2, JWH, AM-2201, MDPV: The Alphabet Soup of Synthetic Drugs
- Pharmageddon: The Rx Drug Crisis

If you are interested in scheduling an educational program for your organization, call the ISPCC at 1-800-222-1222.

The ISPCC also serves as a five-week clinical rotation site for Doctor of Pharmacy students from Drake University and University of Iowa. ISPCC staff assists in the training of nursing students, resident physicians, and visiting physicians in various subspecialties of medicine.

A monthly electronic newsletter “Hotline,” distributed to over 700 health care providers statewide, provides timely information on clinical toxicology topics. If you would like to be added to the distribution list, email ISPCC Education Coordinator Tammy Noble at NobleTF@ihs.org.

FY 11-12 FATALITIES

The deaths listed below (<1% of all human exposures) are those cases, reported by health care facilities to the ISPCC for management of a suspected poisoning, where the ISPCC received confirmation of a fatal outcome. In those cases where several substances were ingested, the cause of death is ascribed to the substances that were deemed to have had the most toxic effect. The relatively small number of deaths reported to the ISPCC does not accurately represent the true extent of poisoning as a cause of acute injury and death in the state. Poisoning-related deaths continue to rise at the national level. There are several reasons that the majority of death cases may go unreported to the ISPCC. Patients that are found dead on arrival or whose history indicates treatment with a specific EMS protocol may not be reported to the ISPCC by first responders, law enforcement, medical examiners or other health care providers. Overdoses of abused substances may also go unrecognized as a poisoning case.

- Female child, tiki torch fuel
- 64 y/o male, phenobarbital
- 23 y/o male, methamphetamine
- 54 y/o male, methadone
- 74 y/o male, anhydrous ammonia
- 47 y/o female, ethanol
- 63 y/o female, antifreeze
- 84 y/o male, hydrochlorothiazide
- 14 y/o male, methadone
- 59 y/o male, hydrofluoric acid
- 36 y/o male, OTC cough/cold medicine
- 48 y/o female, acetaminophen, ethanol, ibuprofen
- 70 y/o female, dabigatran
- 60 y/o male, diltiazem
- Male child, sertraline
- 41 y/o female, diltiazem
- 51 y/o female, amitriptyline, doxepin
- Male child, morphine
- 34 y/o female, synthetic cathinone (aka “bath salts”)
- 57 y/o female, methocarbimol, diphenhydramine, clonidine, atenolol, nifedipine
- 30 y/o male, methamphetamine
WHO USES THE ISPCC?

The ISPCC helps people of all ages in all types of situations. We answer calls involving exposures to prescription and over-the-counter medications, drugs of abuse, household cleaners, chemicals in the home and workplace, plants and mushrooms, bites and stings, industrial and farm chemicals, toxic fumes and vapors, pesticides, food poisoning and many other things. The poison center is also utilized by researchers and organizations seeking information and analysis of emerging drug trends and potentially emerging outbreaks to hazardous substances.

MEDICAL OUTCOME

We attempt if at all possible to follow all human exposures to a known outcome. **No effect:** The patient developed no signs or symptoms as a result of the exposure. **Minor:** The patient developed some signs of symptoms as a result of the exposure, but they were minimally bothersome and generally resolved rapidly with no residual disability or disfigurement. **Moderate:** The patient exhibited signs or symptoms as a result of the exposure that were more pronounced, more prolonged, or more systemic in nature than minor symptoms. Usually, some form of treatment is indicated. **Major:** The patient exhibited signs or symptoms as a result of the exposure that were life-threatening. **Death:** The patient died as a result of the exposure or as a direct complication of the exposure. Only those deaths that were probably or undoubted related to the exposure are coded here. *A small percentage of cases were judged potentially toxic, but lost to follow-up.*

ISPCC: VALUE ADDED PUBLIC SERVICE

The Iowa Statewide Poison Control Center (ISPCC) saves lives and millions of health-care dollars every year. Fielding over 50,000 calls annually, the ISPCC provides a 24/7 emergency hotline, toxicology consultation, prevention and professional education and public health surveillance.

Nearly 90% of all cases from the general public are safely managed at home eliminating the unnecessary use of emergency departments, physician offices, and ambulance transports resulting in an annual net savings to Iowa and its taxpayers of more than $8 million! 42% of ISPCC callers are covered by Medicaid, Medicare or HAWK-I. Their seeking alternative care would result in additional charges of $3.5 million to Iowa’s state health insurance programs. PCCs are as cost-effective as childhood immunization programs in their ability to provide cost avoidance in public health delivery.

To help put these number into perspective, the ISPCC is an investment worth making:
- The return on investment is $11 for every dollar invested in Iowa’s poison center.
- The cost per poisoning call to the ISPCC is $41, far below the national average.
- Studies show that consulting with a poison center improves patient outcomes.

Poison centers save lives. Poison centers save millions of dollars in unnecessary healthcare spending. Poison centers are needed in the nation’s public health system. Poison centers are a good deal for taxpayers, for the government, for healthcare facilities, for insurance companies and for the public.
The Iowa Statewide Poison Control Center is available to every Iowa resident through a toll-free telephone number, 1-800-222-1222. Access is available for the hearing impaired through TDD/TTY, and non-English speaking callers are supported by interpreters who are conferenced in by phone on a moment’s notice.