Unintentional poisoning deaths have been increasing in both Florida and nationwide since 1990 (1). States in previous studies have reported different mortality profiles for different substances, suggesting that local surveillance data will be necessary to guide prevention efforts (1). In some states, the misuse of prescription pain-management opioids such as oxycodone and methadone has contributed to the increase in unintentional poisoning while other states report a substantial number of deaths from illicit drugs such as cocaine and heroin (1). Furthermore, unintentional drug overdose deaths often are caused by the misuse of multiple drugs, leaving ambiguity about the contribution of each drug to the death. This report presents the unintentional poisoning death rates for Miami-Dade County residents, contrasting them with rates for Florida and the U.S. during the years 1998-2007.

- Between 1998-2007, the unintentional poisoning (UP) death rate for Miami-Dade Co. residents has demonstrated little change.
- Conversely, the UP death rate has increased 202% statewide for this same 10-year period.
- Nationally, the UP death rate increased 102% between 1998-2005, the most recent year that data is available.

- White males aged 35-54 were the subgroup of the population most affected by UP deaths. Both Florida and the US saw increased death rates for this population that were similar to the increases for overall trends.
- Furthermore, the UP trends for both Florida and the US have shown no signs of leveling off.
Agents Present in Unintentional Poisoning Deaths, Miami-Dade Residents

The graph to the right shows the trend for four of the most common poisoning agents identified in UP victims. The percentages only represent whether the agent was present or not and don’t necessarily reflect the cause of death. Data on these agents wasn’t available for the years 1998-1999.

- Cocaine was the most common agent found in victims of UP deaths, present in 41% of deaths in 2007. The presence of cocaine has increased 41% since 2000.
- Heroin presence has declined 67% since 2000 (2000: 46%; 2007: 15%).
- Benzodiazepine use increased 263% since 2000, from a percentage of 8% in 2000 to 31% in 2007.
- Although it had the lowest absolute percentage among these 4 agents, methadone use demonstrated the greatest increase over this 8-year period, with a percentage more than 5-times greater in 2007 (12%) than 2000 (2%).

Zip Codes of Residence for Victims of Unintentional Poisoning Deaths, 2005-2007

- Between 2005-2007, 11 zip codes had rates for UP deaths that were greater than the average rate for the county. Only zip codes that experienced a minimum of 9 UP deaths over this 3-year period were selected for analysis.
- Residents of 33139 (South Beach) had the highest UP rate (14.6/100,000), more than 3-times higher than the county rate of 4.6/100,000.
- Four other zip codes had UP rates that were more than twice the county rate: 33147 (W. Little River and Gladeview area); 33179 (Ives Estates and the eastern section of Miami Gardens); 33127 (Little Haiti, Model City and the Wynwood sections of the City of Miami); and 33133 (Coconut Grove).
Preventing Unintentional Poisoning in Adults

Unintentional poisoning is third behind motor vehicle crashes and falls as a leading cause of unintentional injury death in Miami-Dade County. Children, adolescents, and adults are all affected by unintentional poisoning. Unintentional poison prevention education in adults involves increasing general awareness and limiting risky behaviors.

Tips From the American Association of Poison Control Centers (2).
- Be aware of potential drug interactions. Some medicines are dangerous when mixed with alcohol. Some interact dangerously with food or with other medicines. Your doctor should be made aware of all medicines, prescription or over-the-counter, you are currently taking.
- Talk to your doctor before taking any natural or herbal supplements.
- Some medications can become dangerous or ineffective over time.
- Old and outdated medicines should be flushed down the toilet.
- Never share prescription medicines. Medicines should be taken by the person prescribed and for the reason prescribed.

OTC and Prescription Drugs (3).
- Over the counter medications, while still a problem, are not associated with the increase in drug-related unintentional poisonings.
- There is a very strong correlation in national data between prescription drug sales per capita and the unintentional poisoning death rate, indicating that mortality rates are associated with prescription drug use.
- There is a very strong relationship between unintentional drug poisoning death rates and total sales of opioid analgesics. Oxycodone and hydrocodone account for most of the increase in sales of opioid analgesics.
- The most rapid growth in new nonmedical users of drugs has been users of pain relievers.
- Many people that die of prescription drug overdoses have a history of drug abuse.

References.