ACETAMINOPHEN POISONINGS
MIAMI-DADE COUNTY, FL 2008

- Acetaminophen is an analgesic used to relieve mild to moderate pain from headaches, body aches, colds, sore throats, back pain, and to reduce fever. It is found in many common brand name over the counter and prescription products.

- According to the Food and Drug Administration (FDA), acetaminophen is generally safe when taken as directed, however, overdoses can result in serious liver damage. Acetaminophen poisonings are an increasing problem since it is affordable, widely available, and can be obtained without a prescription.

- In Miami-Dade during 2008, there were 407 individuals who either visited an emergency department (ED) or were admitted to a hospital with an acetaminophen overdose.

- Of these poisonings, nearly two-thirds were intentional.

Acetaminophen Poisoning-Related Emergency Department Visits and Hospital Admissions, By Intent, Miami-Dade County, 2008

- Intentional
- Unintentional

36%
64%
Who is at Risk?

Age Groups

- Individuals who intentionally poisoned themselves with acetaminophen were on average 8.5 years older than those who overdosed accidentally.
- 98% of all acetaminophen poisonings among children aged 0—10 years were accidental.
- 76% of all acetaminophen poisonings among 11—29 year olds were intentional. This age group was nearly 3 times more likely to intentionally poison themselves versus all other ages combined.
- Only 2% of acetaminophen poisoning were among elderly individuals.

Females

- In 2008, females comprised 64% of all acetaminophen overdoses and 69% of intentional overdoses.
- Females were more than 1.5 times more likely to intentionally poison themselves with acetaminophen as compared to males.

Race/Ethnicity

- 70% of acetaminophen poisonings among White Non-Hispanics were intentional. In contrast, only 58% of poisonings among African Americans were intentional.
Risk Factors

Alcohol/Drugs

- 11% of individuals with acetaminophen poisonings were found to have an alcohol-related diagnosis, however 78% were associated with intentional ingestions.

- 5% of individuals with acetaminophen poisonings were also diagnosed with benzodiazepine overdoses, all of which were associated with an intentional ingestion.

Prevention

- According to the FDA, the maximum single dosage should not exceed 1g for children aged greater than 12 years and for adults. Single dosages for children 12 years and younger should not exceed 10—15 mg per kg of body weight.

- Maximum daily dosages should not exceed 4 g for children aged greater than 12 years and for adults. Daily dosages for children 12 years and younger should not exceed 50—75 mg per kg of body weight.

- The FDA states that taking just a small amount more than the recommended total daily dose of acetaminophen may lead to liver injury. Acetaminophen has a narrow safety margin. This means that there is little difference between the maximum recommended daily dose and a potentially harmful dose.
Prevention

- Individuals must be aware that many products contain acetaminophen, especially when treating different conditions or symptoms at the same time with more than one product. If one takes multiple acetaminophen-containing medications, they are at risk of overdose.

- Parents must be aware of acetaminophen dosages given to children. Liquid products for children are available in different concentrations. Liquid acetaminophen formulations for infants are generally more concentrated (i.e., stronger) than for older children. It is possible to mistakenly overdose an older child by giving them a product intended for an infant.

Prevention Resources

Websites

National Institute of Health

U.S. Food and Drug Administration
http://www.fda.gov/Drugs/DrugSafety/InformationbyDrugClass/ucm165107.htm

American Association of Poison Control Centers
http://www.aapcc.org/dnn/Home.aspx