

CARIBBEAN POISON INFORMATION NETWORK



TRAINING WORKSHOP ON POISON
PREVENTATION OCTOBER 16,2008



EPIDEMIOLOGY OF POISONING IN JAMAICA

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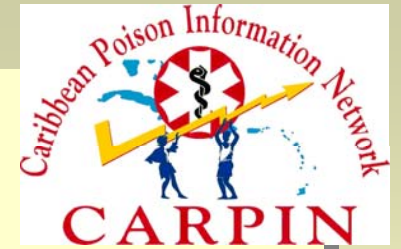
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Learning Objectives



At the end of the Presentation
participants should be able to :

- Define epidemiology
- List agents most commonly implicated in poisonings
- Be able to distinguish safe products from toxic products



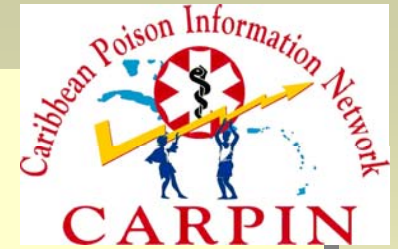
IMPORTANT DEFINITIONS

Poison



- Any substance taken into the body by ingestion, inhalation, injection or absorption that interferes with normal physiological function.

(Taber's Cyclopedic Medical Dictionary)



Epidemiology

- Is concerned with the Traditional Study of epidemic diseases caused by infectious agents and with health-related phenomena including accidents, suicide, climate, toxic agents such as lead, air pollution and catastrophes due to ionising radiation

Surveillance System



- Any system put in place for the monitoring or control of something.

Accidental Poisoning



- Any poisoning considered to have occurred by accident (i.e. unintentionally).
(Taber's Cyclopedic Medical Dictionary)

Accidental Poisoning



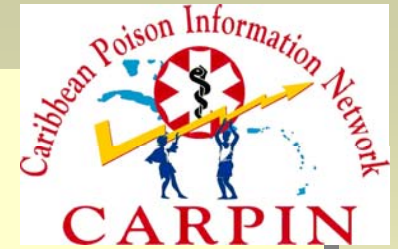
- Was added to the list of Class 1 notifiable diseases/health events in Jamaica. Therefore it is important to document its epidemiological description on a national level. (MOH)

Does not include:

- Intentional poisoning
- Foodborne illness or Hypersensitivity

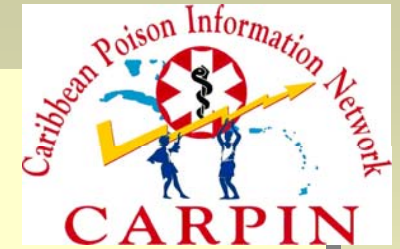
Or Foreign Body Ingestion e.g. swallowed a coin

Accidental Poisoning



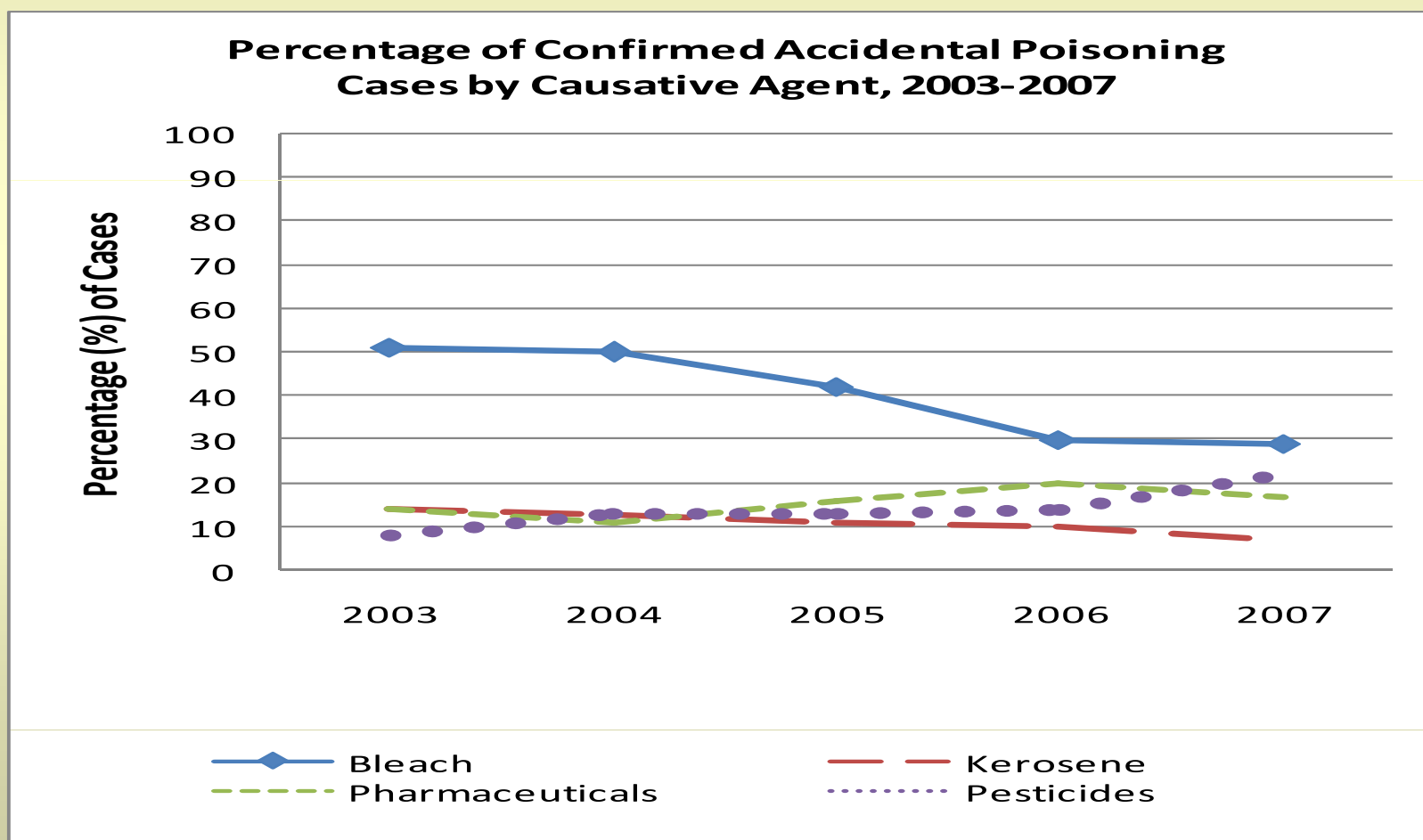
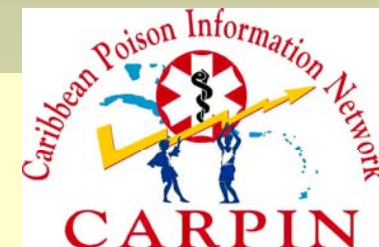
- In 2007 the parish with the greatest number of accidental poisoning cases reported was Kingston and St. Andrew (MOH)
- Portland had the highest overall rate of poisoning
- Only 50% of accidental poisonings seen in hospital are reported to the surveillance unit

Accidental Poisoning



Year	2003	2004	2005	2006	2007
No. of Cases	520	696	536	484	495

Accidental Poisoning Cases by Causative Agents, 2003-2007



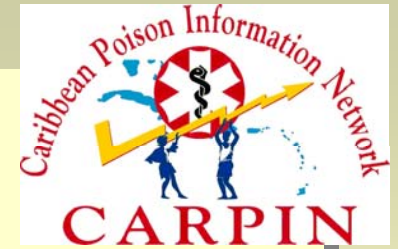
Causes of Accidental Poisoning



Four agents responsible for over 80%

- Bleach
- Kerosene
- Pharmaceuticals
- Pesticides

Other causes of Accidental Poisoning



- Household Chemicals
- Beauty Products
- Recreational Drugs
- Carbon Monoxide
- Lead

Accidental Poisoning



- Occurs mostly by ingestion
- Most agents were consumed when left in inappropriate containers
- 11,000 persons were treated for accidental poisoning in 2006

Estimated cost of care for Accidental Poisoning



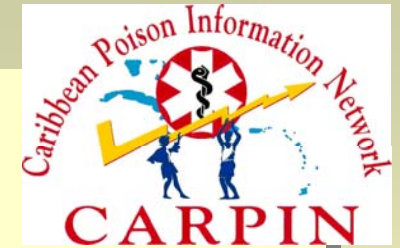
- More than J\$27 million was spent in 2006 to treat these 11,000 cases (Dr.E.Ward)
- The average length of stay in hospital for accidental poisoning is 3 days.

Accident & Emergency Units



- Over 1,300 visits per year due to poisoning
- 64% - Children < 5 years
- 72% were admitted to the hospital
- Approximately 2 in every 1000 children under 5 years are reported as cases of accidental poisoning

Average length of stay



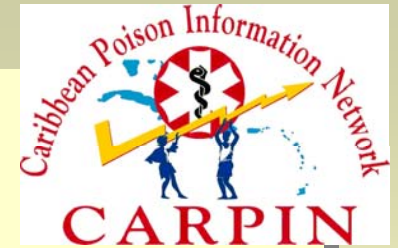
- Overall 3days
- Metals 6-8 days
- Drugs
 - Non Opioid Analgesic 2-4 days
 - Psychotics 3 days
 - Pesticides 2 ½ days
 - Corrosives 2-4 days
 - Organic Solvents 2-3 days

Drugs ingested by hospitalized patients



- Non Opioid Analgesics
- Topical Agents
- Anti Epileptics
- Anti Psychotics
- Systemic antibiotics
- Narcotics

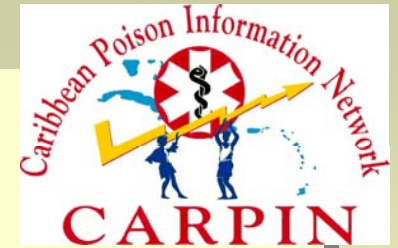
Pesticides ingested by hospitalized patients



Most common

- Organophosphates eg. Malathion, Parathion
- Carbamates eg. Baygon
- Rodenticides

CARPIN Statistics



July 2007 – June 2008

- 30 Cases of poisoning in humans
- 3 Cases of poisoning in animals
- Two incidents; one involved 13 children (castor bean) and the other 40-50 children (hydrogen sulphide gas)

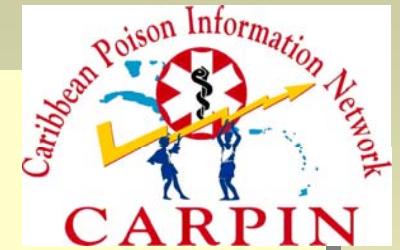
CARPIN Statistics

cont'd July 07 – June 08



No. of Cases	Agent	Victim
12	Pesticide	8 children (<7 y o) 1 animal (goat)
4	Herbal/Plant	Incident 13 children 1 Animal (puppy)
3	Bleach	1 child
2	Pharmaceutical	1 child
14	Other: Toxic Venom, Lead, Detergent, hydrogen sulphide, undetermined	4 children, 1 animal Incident 40-50 children

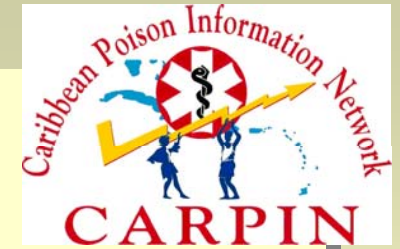
If you were a child could
you tell the difference?



- Kerosene Oil vs Cooking Oil



If you were a child would
you know the difference?



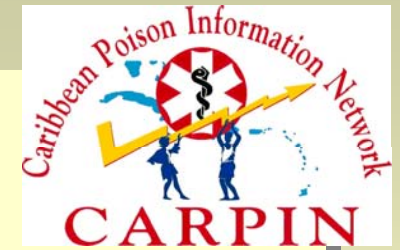
Disinfectant



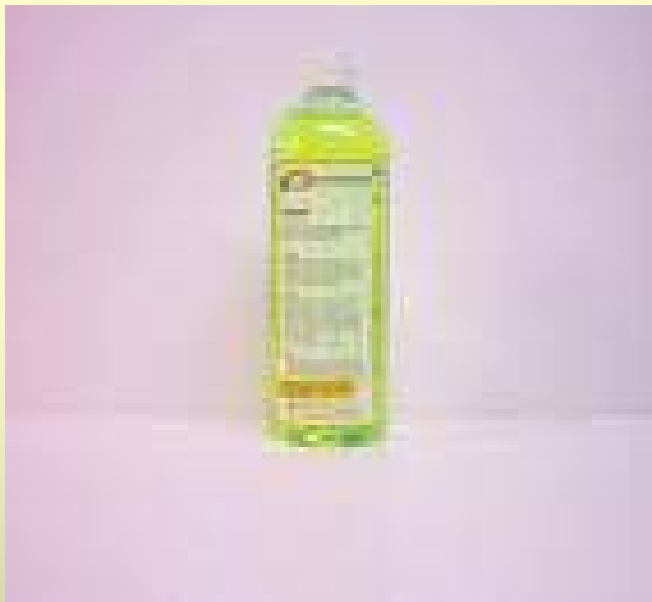
Grape Juice



If you were a child would you know the difference?



Coolant



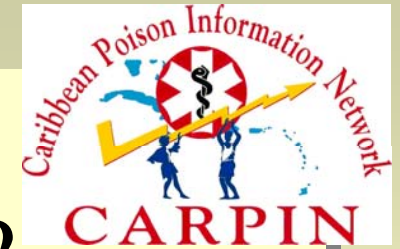
Dishwashing
Liquid



Sports Drink



If you were a child would
you be able to tell the difference?



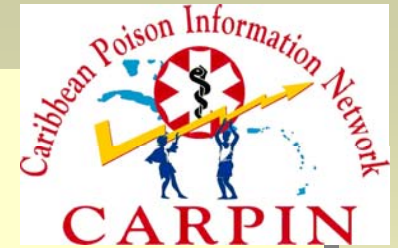
Dishwashing
Liquid



Bottled Drink

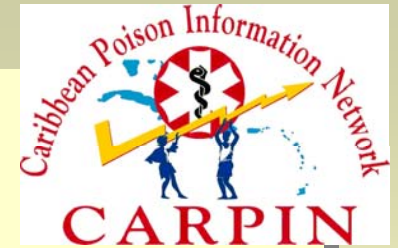


Summary



- Most agents were consumed when left in inappropriate container
- On average most cases occur among children 2-4 years old
- Most deaths occur from Kerosene and Pesticides

Summary



CARPIN's Intervention:

- Heighten awareness of poisoning & promote poison prevention
- Education and training for professionals involved/interested in poison management
- Education for persons handling poisons e.g. caregivers, farmers & the public

Poisoning is Preventable ; we all have a role to play