

Injuries to Illinois and Chicago Youth: Unintentional Poisoning



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Unintentional poisonings include accidentally overdosing on drugs and medications, ingesting poisonous solids or liquids (such as cleaning supplies or overdosing on alcohol) and breathing poisonous gas (such as car fumes). Accidental drug and medication overdoses are the most common cause of poisoning in children under age 5 and adolescents.

This issue of the SCRIPTS data brief explains unintentional poisoning hospitalizations (not ER visits) for children and youth ages 0 to 19 in Illinois and Chicago. Figure 1 illustrates that rates of hospitalizations have gone down about 25% from 2000 to 2007, from a high of 13.1 hospitalizations per 100,000 youth in 2001 to 10.1 in 2007. Death rates have remained relatively stable between 2000-2007.

Children ages 0 to 4 had the highest rates of hospitalization for poisonings among Illinois children and youth aged 0 to 19 (Figure 2). The youngest children had the highest rates for poisoning by solids/liquids and gas, but had a similar rate of hospitalization for poisoning by drugs compared to the 15- to 19-year-olds.

Higher Proportion of Males and 15- to 19-year-olds Die from Poisonings

Figure 3 illustrates the gender differences between hospitalizations and deaths for unintentional poisonings among Illinois children and youth ages 0 to 19, and Figure 4 illustrates the differences among age groups. With regard to hospitalizations, an almost equal amount of males and females are hospitalized; however, 72% of deaths are among males and only 28% among females. The disproportionate deaths of boys is explained by looking at adolescents. Those ages 15 to 19 represent 34% of the hospitalizations, but 87% of the deaths. Sixty-five percent of the deaths by unintentional poisonings are males ages 15 to 19.

Higher hospitalization rates in the 0 to 4 age group are likely due primarily to increased mobility of infants and toddlers, whereas the higher rates in 15- to 19-year-olds are due to unintentional drug and alcohol overdoses.

Figure 1. Hospitalizations from Unintentional Poisonings by Gender and Year, 2000-07, 0-19 Years

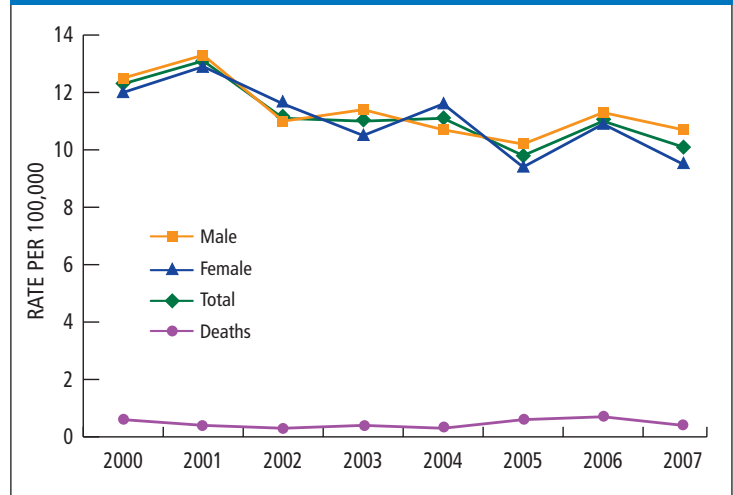


Figure 2. Hospitalizations for Unintentional Poisonings by Age Group, 2000-07

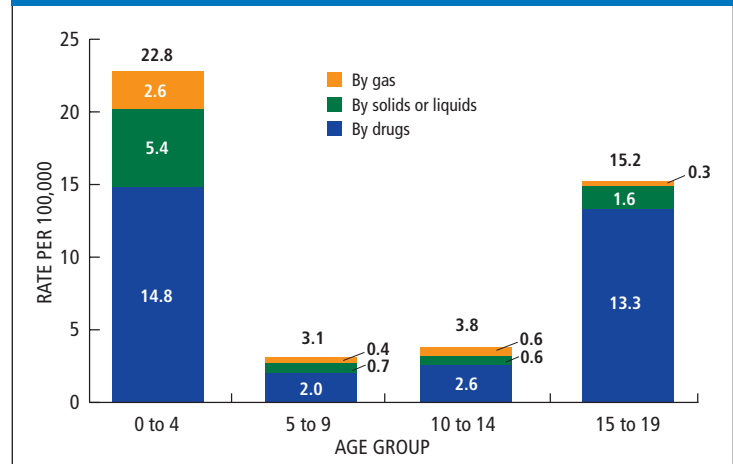


Figure 3. Unintentional Poisoning Hospitalizations and Deaths by Gender, 2000-07

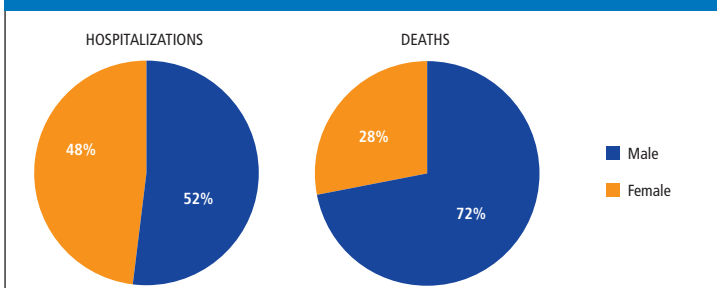
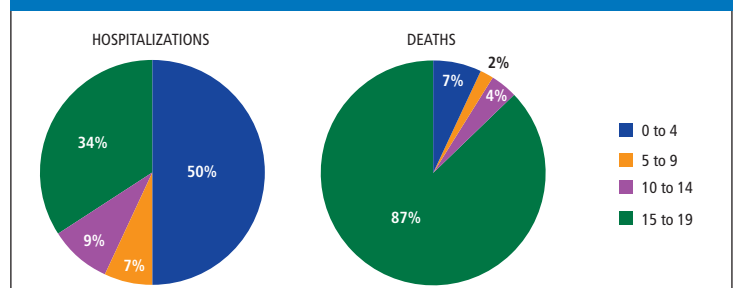


Figure 4. Unintentional Poisoning Hospitalizations and Deaths by Age Group, 2000-07



Unintentional Poisonings Among Illinois Children

- For all ages, hospitalization rates for unintentional poisonings are three to four times as high in Peoria and Marion regions as in the Champaign region (Figure 5 and Table 1).
- For ages 0 to 4, the Peoria and Marion regions have hospitalization rates that are four times as high as in all West Chicago and Champaign (Table 1).
- The Champaign region has the lowest rate in all age groups except 5- to 9-year-olds (Table 1).
- Death rates for unintentional poisoning are relatively low in all Illinois regions (Table 1).
- The rate of hospitalizations by gas poisoning is markedly higher in the Edwardsville, Marion and Peoria regions compared to the rest of the regions in Illinois (Figure 6).

Figure 5. Hospitalization Rates for Unintentional Poisonings by Illinois Department of Public Health Region, 2005-07

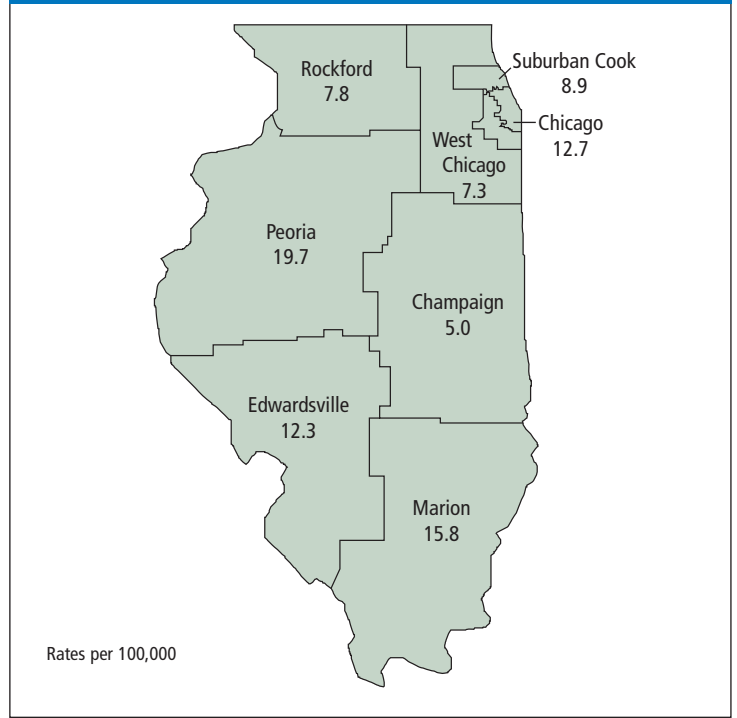
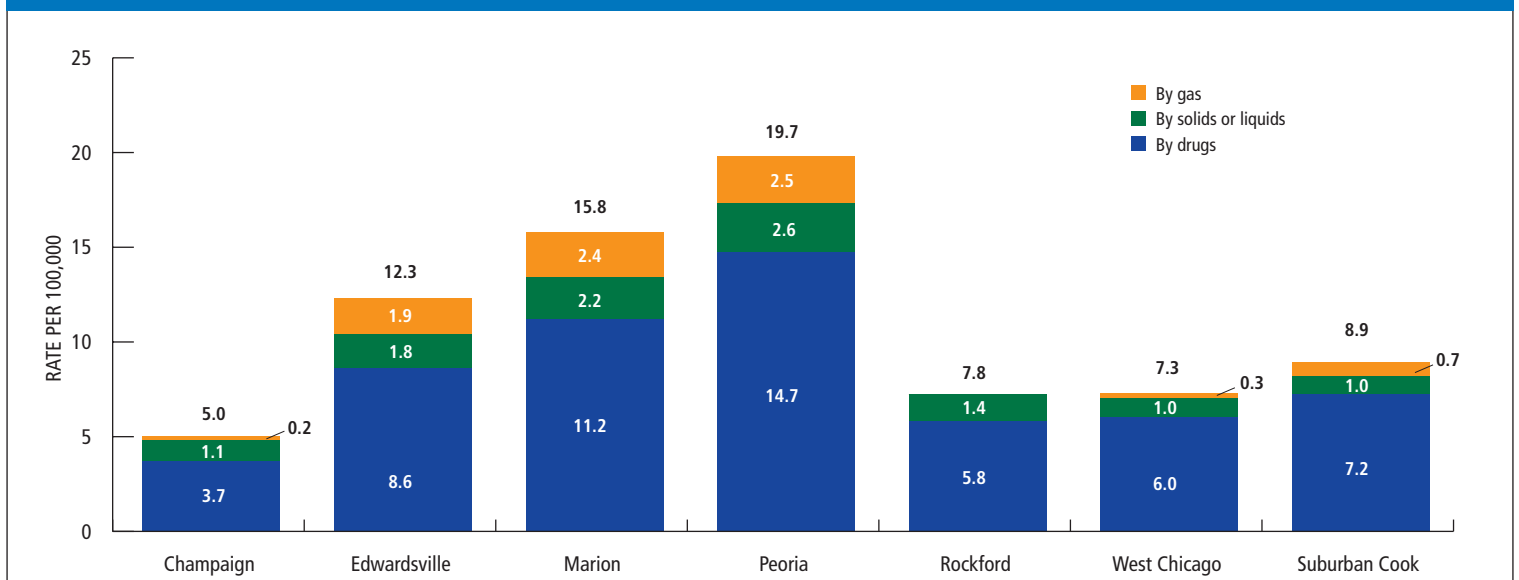


Table 1. Hospitalizations for Unintentional Poisonings by Illinois Region and Age Group, 2005-07

	Illinois	Champaign	Edwardsville	Marion	Peoria	Rockford	West Chicago	Suburban Cook
0 to 4	20.9	11.8	25.8	44.3	45.6	14.0	9.9	16.1
5 to 9	2.6	1.4	2.5	4.2	7.8	0.8	1.3	1.3
10 to 14	3.4	2.4	4.2	3.0	3.0	2.9	3.5	2.9
15 to 19	14.2	4.6	16.5	12.7	22.8	13.1	15.0	15.7
All ages	10.3	5.0	12.3	15.8	19.7	7.8	7.3	8.9
Deaths (2000-07)	0.8	0.4	0.7	1.0	1.1	1.0	1.0	0.8

Figure 6. Hospitalizations for Unintentional Poisonings by Illinois Region and Type, 2005-07



Unintentional Poisonings Among Chicago Children

The number of unintentional poisoning hospitalizations in Chicago is too small to compute rates for each age group in each region of the city. However:

- The Central region has the highest rate of hospitalization for unintentional poisonings. However, because the Central region has a very small population of children, rates for this region are routinely unstable (Figure 7).
- The West region has an elevated rate of hospitalization for unintentional poisoning, followed closely by the South and Far South regions (Figure 7).
- The lowest rates of hospitalization for unintentional poisoning are the North region, the Northwest region and the Southwest region (Figure 7).
- Among Chicago children ages 0 to 4, those from the West, South and Southwest have the highest hospitalization rates (Table 2).
- Death rates among Chicago children for unintentional poisonings are relatively low and many regions did not have enough cases to calculate rates (Table 2).
- The South and Far South regions have markedly higher rates of hospitalizations for poisonings by gas compared to the other regions in Chicago (Figure 8).

Figure 7. Hospitalization Rates for Unintentional Poisonings by Chicago Department of Public Health Planning Region, 2005-07

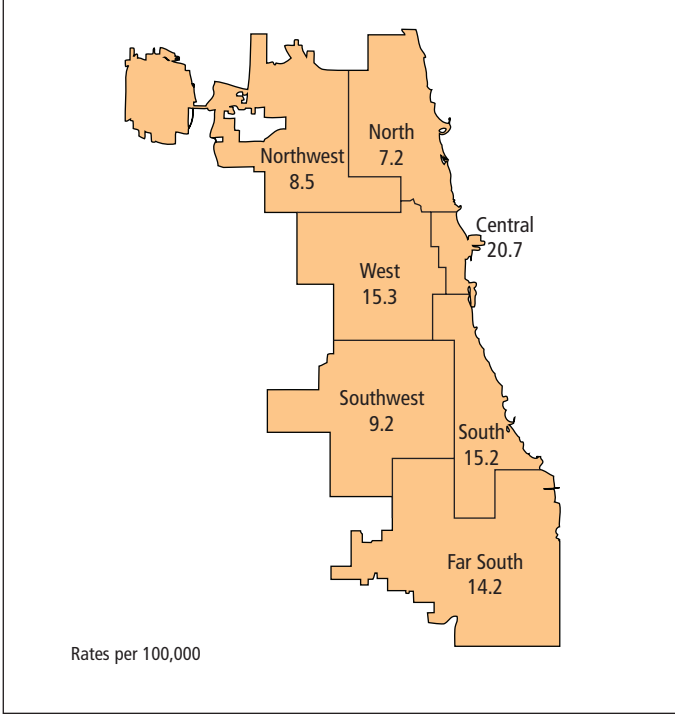
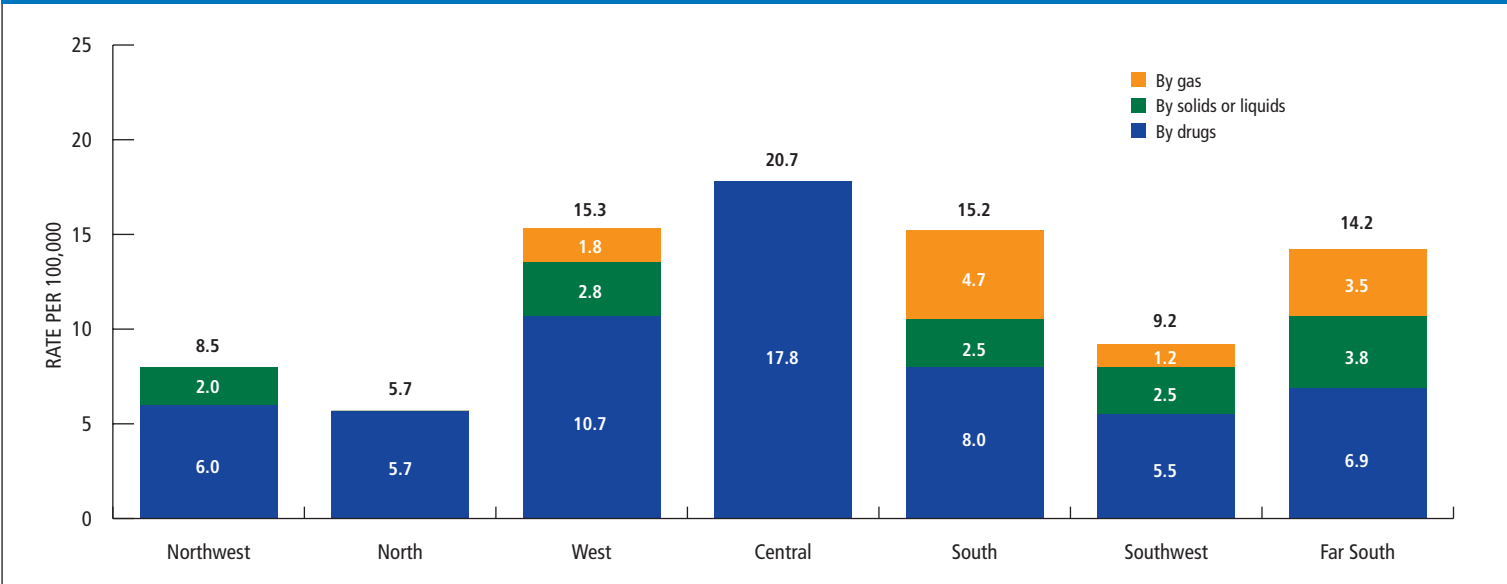


Table 2. Hospitalizations for Unintentional Poisonings by Chicago Region and Age Group

	Chicago	Northwest	North	West	Central	South	Southwest	Far South
0 to 4	28.8	16.0	12.8	36.9	*	44.8	23.7	42.1
5 to 9	4.4	*	*	5.6	*	*	*	*
10 to 14	4.1	*	*	*	*	*	*	*
15 to 19	11.3	13.0	10.9	15.9	*	*	6.8	*
All ages	12.7	8.5	7.2	15.3	20.7	15.2	9.2	14.2
Deaths	0.5	0.6	*	*	*	*	0.7	0.7

* Denotes rates not calculated; fewer than six events

Figure 8. Hospitalizations for Unintentional Poisonings by Chicago Region and Type



Poison Prevention in Children

- Keep the Illinois Poison Center number by each phone: 800.222.1222.
- Teach children to always ask first before eating or drinking anything.
- Store all medicines, including over-the-counter medications, out of sight and reach of children. Make sure they are in child-resistant bottles and in locked cabinets.
- Never refer to medications or vitamins as “candy.”
- Keep purses and other bags with medications out of reach of children. Remind visitors to do the same.
- Store all household products and chemicals out of reach of children. Be sure to return them to a safe place immediately after use.
- Store all household products in the containers they came in with the labels on them. Do not put them in other containers such as soda cans, milk cartons or water jugs.
- Throw away old medicine and household products that are not used anymore.
- Use cabinet latches to stop children from getting to household products and medications.
- Put smoke detectors and carbon monoxide detectors near sleeping areas.
- Please note that it is no longer recommended to stock syrup of Ipecac in your home.

If a poisoning occurs stay calm, follow the directions below and then call the poison control center at 800.222.1222.

- **If the poison is swallowed** — Do not give the child anything to eat or drink and make them vomit.
- **If the poison is inhaled** — Move the child to fresh air.
- **If the poison is on the skin** — Remove clothing that contains poison. Rinse the skin with water for 10 minutes.
- **If the poison is in the eye** — Flush the eye with water for 15 minutes.

Overdose Prevention in Adolescents

The best way to prevent an overdose is to abstain from drugs and alcohol. Parents play a crucial part in prevention by setting boundaries and expectations, staying involved and engaging in their children’s lives and setting a positive example.

TALK TO YOUR KIDS ABOUT DRUGS AND ALCOHOL

- Start talking to your child before age 10 about the dangers of drug and alcohol use.
- Talk to your child about the dangers of one-time drug and alcohol use, which often seem risk-free to young people. Binge drinking, one-time drug use and mixing drugs and alcohol are extremely dangerous activities.
- Kids do not usually get drugs and alcohol from strangers; they get them from their friends. Teach kids that it is ok to say “no” to their friends.

HAVE A SAFETY PLAN IF YOUR TEENAGER USES POOR JUDGMENT

- Make sure your teenager feels safe calling you for help if he or she finds him or herself in a dangerous situation.
- Instruct your teenager never to drive if he or she has had alcohol or drugs, and never to get into a car with a friend who has been drinking or taking drugs.

Adapted from the NOPE Task Force

FOR MORE CHILD SAFETY TIPS AND RESOURCES VISIT
childrensmemorial.org/parents/safetynews

METHODS

Hospitalization data in this report were obtained from the Illinois hospital discharge database, CompData, which is maintained by the Illinois Hospital Association. Death data were obtained from the Illinois Department of Public Health.

Hospitalization cases include children ages 0 to 19 who were admitted to the hospital and subsequently discharged between January 1, 2000 and December 31, 2007. Excluded cases were those who had expired and those not living in Illinois. Only cases that had an external cause of injury code (E-Code) were included in this report. Death cases were excluded if the decedent was not an Illinois resident or cause of death was not due to an unintentional poisoning.

Rates were calculated for all of Illinois and regions of Illinois using 2000 census data for the year 2000 and census estimates for 2001 through 2007. For multi-year rates, cases and populations were summed and the average rate was calculated with the results. Census estimates were not available for Chicago regions and all Chicago rates were calculated using 2000 census data. There is some evidence that the Chicago population is decreasing in some communities, hence some rates may be underestimates.

CONTACT INFORMATION

Jenifer Cartland, PhD
Director, Child Health Data Lab
Children’s Memorial Research Center
2300 Children’s Plaza, Box 157
Chicago, IL 60614

312.573.7772

jcartland@childrensmemorial.org

chdl.org

