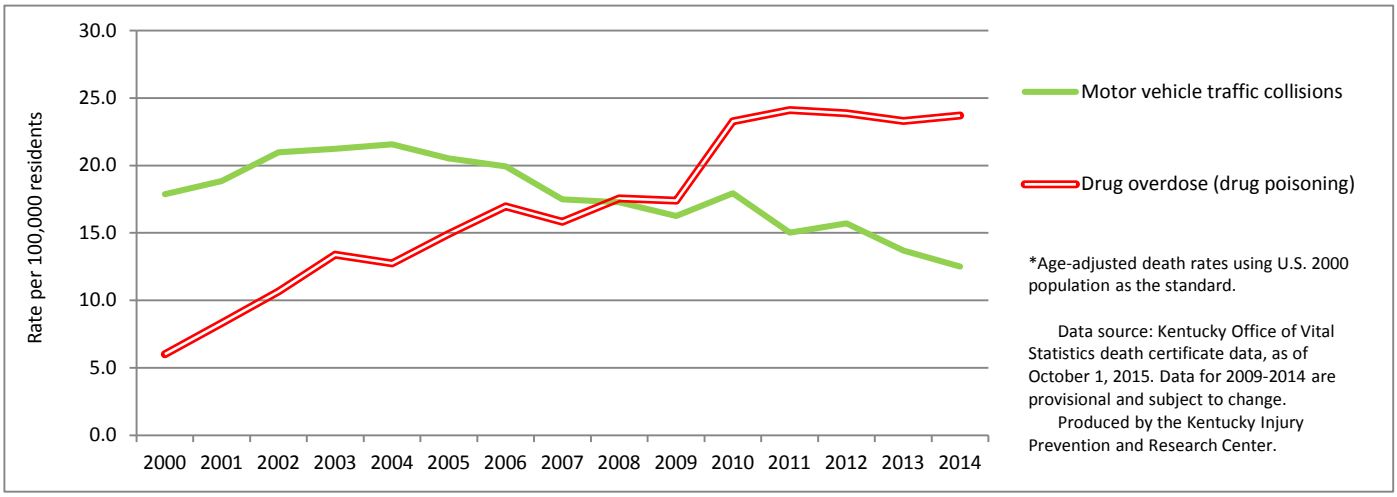
Kentucky

Special Emphasis Report: Drug Overdose Deaths, 2000-2014

A Public Health Crisis Continues

Drug overdose deaths are acute poisoning deaths due to prescription or illicit drugs. Drug poisoning deaths among Kentucky residents increased fourfold since 2000, surpassing motor vehicle traffic collision (MVTC)-related deaths in 2008 (Figure 1). According to data from the National Center for Health Statistics, Kentucky had the 2nd highest drug overdose death rate in the U.S. in 2013. The most recent (still provisional) Kentucky Office of Vital Statistics death certificate data indicates that the drug overdose death rate did not improve in 2014. There were 1,034 Kentucky resident drug overdose deaths in 2014 (23.7 drug overdose deaths per 100,000 Kentucky residents) compared to 556 deaths (12.5 MVTC deaths/100,000 Kentucky residents) due to MVTCs.

Figure 1. Kentucky resident drug overdose death rates* compared to MVTC-related death rates, 2000 - 2014



Males accounted for 61.4% of the drug overdose deaths in 2014. The age group with the highest drug overdose incidence rate was 45-54 years old (46.2/100,000). Ninety one percent of the 2014 overdose deaths were unintentional (Table 1; data are provisional and subject to change).

Table 1. Drug overdose deaths: Demographic characteristics and intent, Kentucky residents, 2014

		Number	Percent	Rate per 100,000 residents
Gender	Female	399	38.6%	17.8
	Male	635	61.4%	29.2
Age (in years)	0 - 14	<5*	<1%	
	15-24	61	6%	10.2
	25-34	219	21%	38.7
	35-44	257	25%	45.8
	45-54	282	27%	46.2
	55 -64	174	17%	30.3
	65 and older	<40*	<5%	5.7
Intent	Unintentional (also known as "accidental")	941	91%	21.3
	Intentional (suicide and homicide**)	47	4.5%	1.0
	Undetermined	46	4.5%	1.0

*The numbers were supressed to conform to the state data management policy in order to protect confidentiality.
**Less than 5 Kentucky resident homicide drug overdose deaths were reported in 2014.

Kentucky Public Health
Prevent. Promote. Protect.

This document was produced in conjunction with CDC's Core Violence and Injury Prevention Program Under Cooperative Agreement 11-1101.
Released October 2015

KIPRC
KENTUCKY INJURY PREVENTION AND RESEARCH CENTER

Kentucky

Special Emphasis Report: Drug Overdose Deaths, 2000-2014

Improved Death Certificate Data Quality and Improved Recognition of Specific Drugs Contributing to Kentucky Resident Drug Overdose Deaths, 2011-2014

A complete and accurate description of the specific drugs involved in drug overdose deaths is needed to identify emerging trends in drug abuse and diversion, evaluate effectiveness of prescription drug overdose prevention laws enacted in the state, and inform new interventions and policy changes. As a result of the collective effort of multiple stakeholders in the state (e.g., Office of the Chief Medical Examiner, Kentucky Coroner's Association, Office of Vital Statistics, Office of Drug Control Policy, Kentucky Injury Prevention and Research Center, legislators, and others) and the recently enacted state law requiring toxicology testing of a decedent when no other cause of death has been established (KRS 72.026), the percentage of Kentucky drug overdose death certificates listing specific drug(s) contributing to overdose deaths significantly increased over the last 4 years, from 69.5% in 2011 to 77% in 2014. In the presence of improved drug identification and reporting, the involvement of historically abused prescription drugs (e.g., oxycodone, oxymorphone, hydrocodone, and alprazolam) still exhibits a decreasing trend suggesting that Kentucky's prescription drug abuse prevention laws passed in House Bill 1 from the 2012 Special Session (KRS §218A.172; KRS §218A.175; KRS §72.026) and the subsequent licensing board regulations (201 KAR §8-540, §9-260, §20-057) contributed to better prescribing practices and decreased diversion of prescribed opioids (Table 2). Other drugs (e.g., heroin and fentanyl), however, are emerging as choices of abuse, requiring investigation into sources of diversion, best intervention practices, and further targeted substance abuse treatment.

Table 2. Drugs most commonly listed as contributing to Kentucky resident drug overdose deaths, 2011-2014

	2011	2012	2013	2014		2011	2012	2013	2014
ALPRAZOLAM	269	201	180	164	HEROIN	43	132	204	224
AMPHETAMINE	9	8	11	15	HYDROCODONE	195	159	167	155
BUPRENORPHINE	<5	12	13	37	HYDROMORPHONE	24	17	12	9
CLONAZEPAM	55	48	55	62	METHADONE	91	78	65	54
COCAINE	24	55	75	70	METHAMPHETAMINE	16	18	29	41
CODEINE	16	21	21	15	MORPHINE	46	71	58	72
DIAZEPAM	77	62	53	60	OXYCODONE	256	188	140	133
FENTANYL	55	36	37	121	OXYMORPHONE	93	68	35	33
GABAPENTIN	6	9	10	53	TRAMADOL	15	22	19	18

Data source: Kentucky Office of Vital Statistics death certificate data; 2011-2014 data are provisional and subject to change.

Existing Work in Kentucky to Address Prescription Drug Overdoses

Kentucky uses multiple approaches to reduce prescription drug overdoses. A collaboration of state partners, including the Kentucky Injury Prevention and Research Center's Kentucky Safety and Prevention Alignment Network (KSPAN), helped result in mandated enrollment of all eligible controlled substance prescribers in the Kentucky All Schedule Prescription Electronic Reporting (KASPER) system (Kentucky's Prescription Drug Monitoring Program) and mandatory querying of KASPER before controlled substance prescribing. KASPER is now interoperable with 11 other states. Kentucky requires 100% ownership/operation of pain management clinics by licensed healthcare providers and requires a 1 business-day pharmacist filled prescription reporting window to KASPER. In addition, 2,164 controlled substance prescribers completed formal training on KASPER use from October 1, 2014 to September 30, 2015. There are now 173 locations in 110 Kentucky counties with prescription drug disposal boxes, including 44 locations in 32 Operation UNITE–served counties.

KENTUCKY INJURY PREVENTION AND RESEARCH CENTER http://www.mc.uky.edu/kiprc/
KENTUCKY DEPARTMENT FOR PUBLIC HEALTH http://chfs.ky.gov/dph/
Released October 2015