

Indicator #11: Acute Work-Related Pesticide Poisonings Reported to Poison Control Centers

Background and Public Health Significance

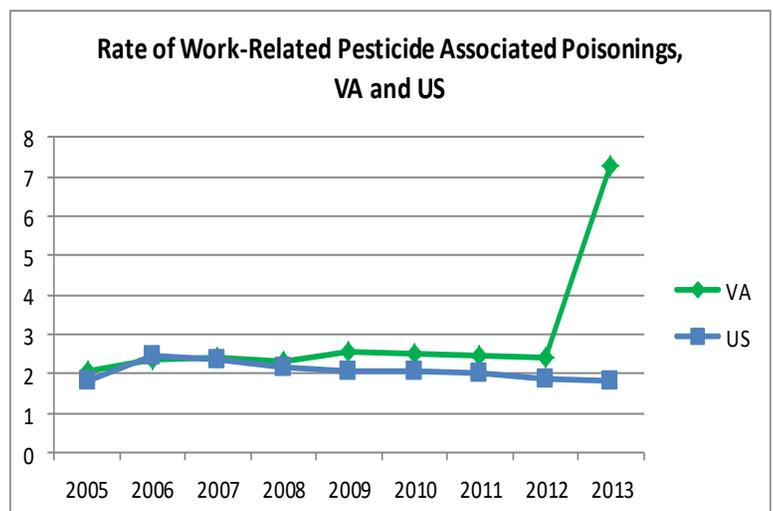
Pesticides are among the few chemicals produced that are specifically designed to kill and cause harm. They're a substance or mixture of substances used to prevent or control undesired insects, plants, animals, or fungi. In the US, approximately one billion pounds of pesticide active ingredients are used annually, and over 20,000 pesticide products are being marketed (Grube et al., 2011). Pesticides do contain value in protecting food supply and controlling disease vectors but they also are responsible for adverse health effects and harm to people and the environment. The EPA estimates 20,000 to 40,000 work-related pesticide poisonings per year (Blondell, 1997) with agricultural workers and pesticide applicators at the greatest risk for adverse health effects.

Data source: VA Poison Control Center Data, Bureau of Labor Statistics Current Population Survey Data, NIOSH (Patricia Schleiff)

Rationale:

Workers who handle pesticides are at increased risk for exposure. Poison Control Centers (PCCs) are important sources of reports of acute poisonings and chemical exposures. These data can be useful to target prevention. The type of data collected is comparable across states due to the uniformity in case handling by PCCs.

	11.1 Annual Number of Reported Work-Related Pesticide Poisoning Cases	11.2 Annual Incidence Rate of Reported Work-Related Pesticide Poisoning Cases
2005	79	2.09*
2006	91	2.36*
2007	94	2.40*
2008	92	2.31*
2009	98	2.54*
2010	96	2.53*
2011	97	2.45*
2012	95	2.41*
2013	291	7.29*
2014	N/A	N/A*



* Rate per 100,000 full time employees

Limitations

Not all states have poison control centers (PCC). State health agencies may have to enter into an agreement with their state-based PCC to obtain local data, or may obtain less timely PCC data from the Toxic Exposure Surveillance System, which is administered by the American Association of Poison Control Centers. Additionally, pesticide exposures may occur in workers under the age of 16, but corresponding denominator data are not readily available.

Poison Control Centers capture only a small proportion (an estimated 10%) of acute occupational pesticide-related illness cases. PCCs do not systematically collect information on industry and occupation; however, cases associated with occupational exposures can be identified.