

Deaths from prescription opioids have quadrupled in the past 20 years in Iowa. These death rates are lower compared to other states; however, Iowa is only one of four states with such a dramatic increase.

The University of Iowa Injury Prevention Research Center (UI IPRC) partners with law enforcement, health practitioners, state agencies, researchers and other stakeholders to develop and implement effective strategies to reduce the devastating effects of the growing opioid crisis in Iowa.

Here is how the UI IPRC is part of the solution:

The UI IPRC helps identify policy priorities.

Last April, we convened 38 stakeholders across lowa to identify priorities for addressing the prescription opioid crisis in Iowa. The resulting report was presented to a state legislative committee tasked to make recommendations about opioids to Governor Reynolds (committee report pending). Soon after, Governor Reynolds released her opioid initiatives which mirrored some priorities in UI IPRC's report around prescriber education, the prescription monitoring program and barriers to treatment.

The UI IPRC examines trends in Iowa.

Our researchers study opioid overdose deaths, prescribing practices and opioid dependence.

- Iowa has experienced similar trends in deaths due to prescription opioids and heroin as those observed nationally. Prescription opioids account for the most overdose deaths among all opioid involved deaths in Iowa. Heroin overdose death rates in Iowa have increased more than nine-fold in the past 15 years. The rapid growth of heroin death rates in Iowa is two to three times higher than the national average. In recent years, as prescription opioid overdose deaths have decreased, heroin deaths have increased.
- The opioid crisis affects all ages in Iowa. More than half of all prescription opioid deaths in the state occur among adults 35—54 years of age. Heroin deaths are most prevalent among 25—34 years of age (making up 30% of all heroin-involved deaths) and those 45—54 years of age (making up 26% of all heroin-involved deaths).

See the report at www.uiiprc.org



Stakeholders identified the need to:

- Provide physician training in pain management and opioid prescribing in medical school.
- Educate practitioners on recognizing high risk patients.
- Reduce barriers to using Iowa's Prescription Monitoring Program (PMP).
- Strengthen surveillance of nonfatal opioid drug overdoses and prescription opioid misuse among multiple organizations and agencies.
- Ensure that Medicaid and other health plans adequately cover all Medication Assisted Treatments (MAT) and evidenced-based behavioral therapies.

Iowa's Prescription Monitoring Program (PMP)

We evaluated the effectiveness of Iowa's PMP in modifying opioid pain reliever (OPR) prescribing practices. We found that rates of OPR prescribing were increasing prior to implementation of Iowa's PMP; following PMP implementation, rates of OPR prescribing decreased. Similarly, there was a large decline in the average daily OPR dosage and dosage per prescription following implementation of Iowa's PMP.

The UI IPRC is helping identify high risk adult and child patients.

- We examined how medical conditions and corresponding prescribing patterns are related to future opioid abuse and overdose among those who receive opioid prescriptions. Among adults, overdose risk was increased in those with anxiety, abdominal pain, headaches, depression, increased exposure to opioids, and use of benzodiazepines. Opioid dependence risk was increased in those with anxiety, obsessive compulsive disorder, headaches, joint repair, increased opioid exposure, benzodiazepine use, and muscle relaxant use. This work helps us identify which patients need additional monitoring and informs interventions to improve opioid prescribing patterns.
- We also evaluated how medical conditions diagnosed among adolescents and children (≤ 18 years of age) affect rates of opioid abuse and overdose as they age into early adulthood. Overdose risk was increased in those with diagnoses of anxiety, acute pain, fractures, and obstetrical pain diagnoses (e.g. lacerations). Opioid dependence risk was increased in those with anxiety, fractures, increased exposure to opioids, and use of benzodiazepines.



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The UI IPRC is part of a network of experts and ideas.

- The UI Colleges of Public Health and Pharmacy have assembled a team to develop a proposal to the CDC to examine the impact of opioid tapering among independently-living seniors who have been prescribed opioids, and the impact of tapering on falls. This project will be conducted throughout Iowa and some neighboring states, partnering with Iowa hospitals.
- The Office of the Vice President for Research and Economic Development, the College of Public Health, Organizational Effectiveness in UI Human Resources, and the Institute for Clinical and Translational Science established an "Opioids Ideas Lab." This initiative brought together around 30 faculty and staff members from eight UI colleges to discuss the challenges and brainstorm possible solutions in order to slow, stop or reverse opioid abuse among lowans.

Ideas included projects around genes/family history & opioid addiction; how providers make prescribing decisions when patients have pain; identifying patients at high risk for opioid addiction after surgery, and; creating a comprehensive data warehouse and real-time monitoring to provide early warnings to communities.

The UI IPRC focuses on rural populations.

The opioid crisis afflicts all lowans, whether they live in urban or rural areas. We found that high doses of prescription opioids are dispensed in both urban and rural counties. Between 2002 and 2014, death rates due to prescription opioids were highest in Montgomery, Webster and Harrison Counties. Polk county made up

The UI IPRC is training the next generation.

The UI College of Public Health has one of the most comprehensive injury curricula found in any College of Public Health and provides the state-of-the-art training for injury professionals in the state.

For example, PHD candidate Kayla Faust's research is helping us understand what contributes to crash risks among farm equipment operators using simulation (left photo). Among things, she is looking at how medications, such as prescription opioids, are affecting such crashes.