

## Deportation Linked to Higher Risk of HIV Infection in Male Injection Drug Users

July 30, 2008 |

### **B** *inational Study in Tijuana Points to Need for Cross-border Prevention and Treatment Programs*

Male injection drug users deported from the United States to Tijuana have four-fold higher odds of HIV infection compared to those living in Tijuana who were not deported there, according to a study to be presented at the International AIDS Conference on August 5, 2008 in Mexico City. The study, funded by the National Institute on Drug Abuse (NIDA), part of the National Institutes of Health (NIH), will be published in the July 30 issue of the Public Library of Science (*PLoS One*).

Although the study led by researchers at the University of California, San Diego School of Medicine in cooperation with Mexican health officials does not necessarily propose a causal role between the two, the findings suggest a need for further studies to examine the risk factors of displacement, as well as the need for supportive programs targeted at displaced persons on both sides of the U.S./Mexican border.

Tijuana, with an estimated population of 1.4 million, is the largest city on the U.S./Mexican border. In addition to being a major transportation route for migrants headed to the United States, Tijuana is also situated on a major drug trafficking route. It is home to Mexico's largest number of drug users per capita and to a thriving *zona roja* (red light zone), work district of the city's estimated 5,000 female sex workers.

These factors have contributed to Tijuana's growing epidemic of HIV and other sexually transmitted infections. The study compared HIV infection among male and female injection drug users (IDUs) in Tijuana, assessing a range of potential risk factors – individual, social and environmental – that might contribute to higher risk of HIV and could lead to new avenues for intervention.

The researchers interviewed 1,056 IDUs, 86 percent of whom were male. Approximately two-thirds of both female and male IDUs were born outside of Baja California, and both genders had

lived in Tijuana for similar durations. However, a higher percentage of females reported their move to Tijuana was planned (68 percent) compared to males (43 percent). Deportation was the most commonly cited reason for moving to Tijuana among males (57 percent, compared to 30 percent among females), with a higher proportion of men also reporting being homeless (15 percent versus 5 percent) and injecting drugs outside the home (43 percent versus 13 percent).

Controlling for sociodemographic variables such as arrests, and patterns of sexual and drug behaviors, the researchers found an unexpected relationship between the duration of time lived in Tijuana and HIV infection among male versus female IDUs. Among males, those who lived in Tijuana for shorter periods were more likely to be HIV-infected, whereas among females, those who lived in Tijuana for longer periods were more likely to be HIV-infected. Among males, this relationship was explained by the fact that a high percentage of male migrants were deported from the U.S.

“Deportation was significantly associated with HIV infection in males,” said Steffanie A. Strathdee, Ph.D., Professor and Harold Simon Chair and chief of the Division of International Health and Cross Cultural Medicine at UC San Diego’s School of Medicine. “In addition, the prevalence of HIV infection and potential risk factors differed by gender. But a finding we didn’t anticipate is that living in Tijuana for longer periods was associated with *lower* HIV prevalence in men – which is the opposite of what we found in women. Among women, longer-term residents in Tijuana actually had a higher risk of HIV infection.”

The researchers admit that the causal implications of their findings are unclear, but the paper suggested two possible explanations: first, that deportation might be indicative of higher risk-taking in Mexican male migrants. According to Strathdee, this could suggest that mobility – rather than deportation itself – creates unstable social conditions that could predispose an individual to risky behaviors that lead to HIV acquisition.

“With disintegrating family support networks, sudden changes in a person’s cultural environment, homelessness and poverty, we’re more apt to see risk behaviors such as unprotected sex with sex workers, other men or sharing injection needles among male migrants,” said Remedios Lozada, M.D., the HIV/STD coordinator of Baja California, who directs the project’s field activities in Tijuana. “However, an alternate explanation could be that deportation from the United States leads to social upheaval, loss of social ties and income – factors which lead to engaging in high-risk behaviors.”

The researchers conclude that further studies are needed to determine whether specific interventions by U.S. border enforcement, or Mexican repatriation policies and procedures could reduce the risk of HIV transmission. They offer as an example a Mexican government program being implemented in Tijuana by the Ministry of Health of Baja California that promotes HIV prevention and drug rehabilitation for injection drug users, providing temporary shelter, food,

clothing and medical attention to Mexican nationals who have been recently deported from the United States.

Additional contributors to the study included Remedios Lozada, Patronato Pro-COMUSIDA A.C., Tijuana; Victoria D. Ojeda, Robin A. Pollini, Kimberly C. Brouwer, Alicia Vera and Lucie Nguyen, UC San Diego School of Medicine; Wayne Cornelius, UC San Diego Department of Political Science; Carlos Magis-Rodriguez, Centro Nacional para la Prevención y el Control del VIH/SIDA (CENSIDA), Mexico City; and Thomas L. Patterson, UC San Diego School of Medicine and Department of Veterans Affairs Medical Center, San Diego, for Proyecto El Cuete. Funding for this study was provided by the National Institute on Drug Abuse.

# # #

Media Contact: Debra Kain, 619-543-6163, [ddkain@ucsd.edu](mailto:ddkain@ucsd.edu)

en Espanol: Alma Lucy Fisher, 619-543-6163, [alfisher@usd.edu](mailto:alfisher@usd.edu)

---

[AIDS/HIV](#)

### Share This Article

---



### Related News

---

[UC San Diego Health Begins Treating Multiple Myeloma with CAR T-cell Therapy](#)  
6/3/2021

[Social Justice as Part of the Remedy for What Ails Us](#)  
6/3/2021

[Diet Plays Critical Role in NASH Progressing to Liver Cancer in Mouse Model](#)  
6/1/2021

[Noted Researcher and Scientific Leader Jack E. Dixon Retires](#)  
5/27/2021

[View All News >](#)

**Follow Us**

---

 Follow @ucsdhealth

