

**For Seattle City Council
Briefing and Discussion on Public Health and Gun Violence**

Research Study by University of Washington's Harborview Medical Center:

**Substance Abuse, Mental Health, Gun Violence, & Associated Injury & Death:
A Population-Based Study in Washington State**

A. Overview: The proposed project aims to evaluate the interrelationships between substance abuse, mental health diagnoses, gun ownership and injury admissions and deaths. Data for the index year of 2006-2007 and both the previous and subsequent 5 years will be requested for all Washington State residents. Data would be obtained from the Washington State Comprehensive Hospital Abstract Reporting System (CHARS), death, criminal justice and gun registries specified below. The overarching goal of the project is to identify associations between substance abuse, mental health diagnoses, gun ownership, criminal records, and injury related hospitalizations and death. These analyses will inform a specific understanding of comparative risks and rates of gun violence related injury hospitalizations and deaths for individuals living in the City of Seattle and King County.

B. Possible findings:

1. It is hypothesized that individuals who have substance abuse issues, mental health diagnoses, criminal convictions, and are gun owners will have among the highest risk of firearm related injury and death.
2. It is hypothesized that individuals who have substance abuse issues and/or mental health diagnoses and are gun owners will have higher rates of assault perpetration and firearm related felonies than people who are neither mentally ill nor gun owners
3. It is hypothesized that individuals who have substance abuse issues, mental health diagnoses, criminal convictions, and are gun owners will have higher rates of other problems such as drunk driving.

C. Possible actionable items:

1. The study may indicate better ways of identifying individuals whose substance abuse and mental health diagnoses, and involvement with the criminal justice system put them at the greatest risk for gun violence; understanding these risk profiles may better inform who should or should not be permitted to purchase guns.
2. The study may help to determine if there are dealers from whom high risk people purchase guns.
3. The study may serve as a guide for public health professionals to determine which individuals and families should be considered for increased gun safety efforts or decreased gun access.

D. Study Staff:

1. Frederick Rivara, MD MPH, Professor of Pediatrics and Research Faculty Harborview Injury Prevention and Research Center, University of Washington School of Medicine.
2. Douglas Zatzick, MD, Professor of Psychiatry and Research Faculty Harborview Injury Prevention and Research Center, University of Washington School of Medicine (Both Drs. Rivara and Zatzick would volunteer their time on the project)
3. Beth Ebel, MD MPH, Associate Professor of Pediatrics and Research Faculty Harborview Injury Prevention and Research Center, University of Washington School of Medicine.

4. Data Analyst(s): The data analyst will link the data sets and perform analyses under the supervision of the project epidemiologist and Co-Principal investigators
5. Epidemiologist: The epidemiologist will oversee data analyses related to estimation of risk and 95% confidence estimates for the population of Washington State residents included in the study
6. Research Assistant: The research assistant will assist with human subjects/institutional review board applications and communications at the state and university level. The research assistant will also assist with data cleaning and any manuscript or report publications that derive from the project

E. Database linkage:

- 1) Washington State Comprehensive Hospital Abstract Reporting System (CHARS)
- 2) Washington State Death Registry
- 3) Washington State Criminal Records Registry*
- 4) Washington State County and Statewide Gun Registries*

(* Note for both Criminal Records and Gun Registries, access and linkage issues would be a central thrust of the project academic and policy initiative). We will work to obtain data from the following agencies:

- Department of Health to obtain un-redacted CHARS data
- Department of Licensing to get access to gun license data
- Holders of the criminal justice data in the state

F. Timeframe: approximately 12 months (this includes time required to request and access databases and obtain both Washington State and University of Washington Institutional Review Board Approval (IRB)).

F. Costs: Approximately \$150,000 direct costs– of note all efforts would be made to avoid University of Washington indirect cost incurrence.

This would include reporting back first to the Seattle City Council with the findings.

Thank you Seattle City Council for demonstrating leadership to advance this long-denied research.

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