

# **Firearm Disqualifying Behaviors, Individual and Public Health**

**Informing public policy with medical  
and public health evidence**

# Outline

- Physicians are primary stakeholders
- Impossible to predict violence
- Known risk factors for violence: stratify risk
- Prevent violence/improve outcomes by restricting firearm access among a persons at high risk

# Emergency physicians are primary stakeholders



<http://goldenhourblog.com/2013/03/27/shocktrauma/shock-trauma-20/>



American College of  
Emergency Physicians®

ADVANCING EMERGENCY CARE 

- Create a confidential national firearm injury research registry while encouraging states to establish a uniform approach to tracking and recording firearm related injuries;
- Promote access to effective, affordable, and sustainable mental health services;
- Protect the duty of physicians and encourage health care provider discussions with patients on firearm safety;
- Promote the development of technology that increases firearm safety;
- Support universal background checks for firearm transactions;
- Require the enforcement of existing laws and support new legislation that prevents high risk and prohibited individuals from obtaining firearms by any means;

RESOLUTION: 21(14)

SUBMITTED BY: Washington Chapter  
California Chapter

SUBJECT: Emergency Department Mental Health Information Exchange

**PURPOSE:** Support the development of state integrated care management programs and create a task force to further the collaboration of stakeholders in devising integrated care management programs aimed at identifying patients at the highest risk for gun violence and reducing their access to firearms.

**FISCAL IMPACT:** Budgeted staff resources and member travel for Hill visits to advocate for federal funding and attendance at health information exchange (HIE) meetings by key stakeholders such as ONC, CDC, SAMSHA, and others. Funding for a task force is dependent on whether in-person meetings would be required. Costs could range from \$5,000 – \$15,000 depending on the scope of the task force.

1 WHEREAS, Emergency Departments (ED) are becoming the principal site for the evaluation and  
2 disposition of patients with mental health issues because of evolving federal and state regulations and laws despite  
3 concurrent declines in funding and outpatient and inpatient resources; and  
4

5 WHEREAS, Some patients with mental health conditions that are detained or boarding in EDs may be  
6 and should be disqualified from acquiring and possessing firearms under the 1993 Federal Brady Law, and as  
7 evidenced by multiple recent tragic events of gun violence involving patients with mental health conditions  
8 \*(Aurora, CO and Seattle Pacific University); and  
9

10 WHEREAS, The mental health records of these patients often originate from or are updated in EDs, but  
11 are not uniformly and reliably available to appropriate law enforcement agencies despite current HIPAA Privacy  
12 Rule guidance that permits such disclosure \*(HHS 2013 Letter); and  
13

14 WHEREAS, Individual states have successfully implemented and used state-wide Health Information  
15 Exchange (HIE) programs (such as EDIE in Washington State) for identifying and reducing opioid-related deaths,  
16 and improving ED resource utilization; and  
17

18 WHEREAS, HIE programs have the potential and capability to share mental health records amongst EDs  
19 and appropriate law enforcement agencies; therefore be it  
20

# ED Accountabilities

## Report of man with gun places school, bank under lockdown

Police resolved situation quickly, no injuries or threats, man taken to hospital

[http://www.benningtonbanner.com/localnews/ci\\_26876680/report-man-gun-places-school-bank-under-lockdown](http://www.benningtonbanner.com/localnews/ci_26876680/report-man-gun-places-school-bank-under-lockdown)

ED - high risk patients

Firearms have destabilizing clinical effect

Physicians intervene to prevent bad outcomes

Essential to maintain firearm restrictions as part of treatment

# VT ED Reality #1

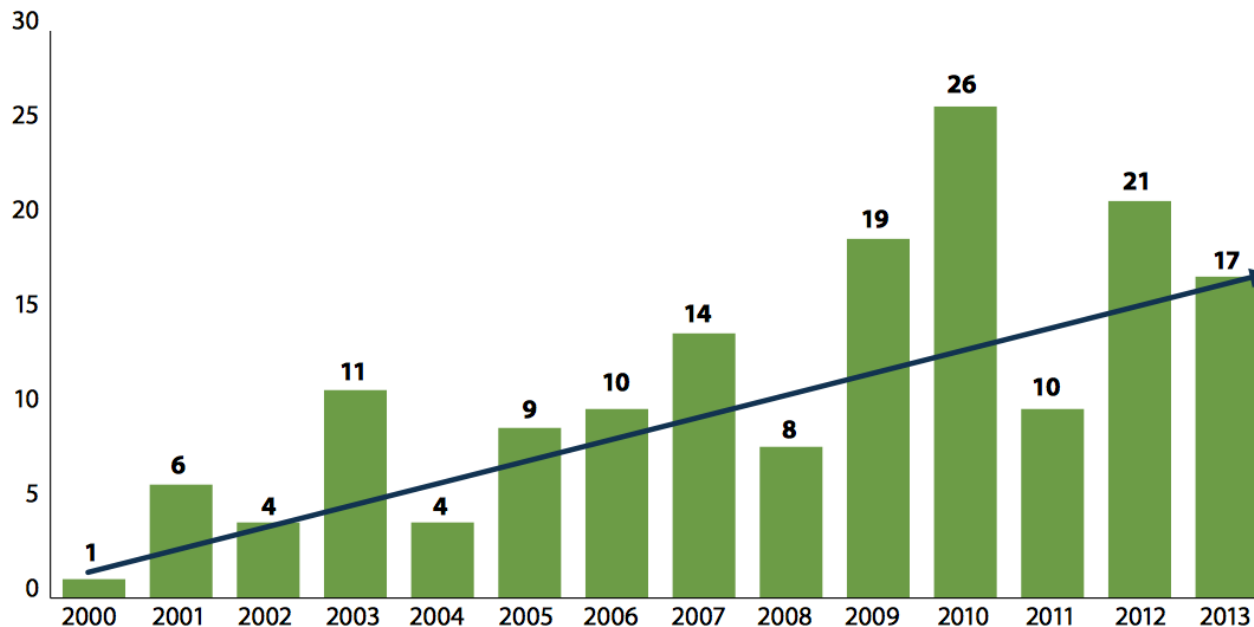
- Patient dangerous to others admitted involuntarily
- Treated and released from hospital
- Continued access to firearm
- Completes interpersonal violence with same or new firearm
- Bad outcome

# A Study of Active Shooter Incidents in the United States Between 2000 and 2013

September 16, 2013  
Washington Navy Yard,  
Washington, D.C.

Unclassified

## A Study of 160 Active Shooter Incidents in the United States Between 2000 - 2013: Incidents Annually



Source: Federal Bureau of Investigation, 2014

**U.S. Department of Justice**  
**Federal Bureau of Investigation**



## VT ED Reality #2

- Patient dangerous to self admitted involuntarily
- Family sequesters firearm
- Treated and released from hospital
- Purchases new firearm
- Completes suicide with new firearm
- Bad outcome

## VT ED Reality #3

- Dangerous patient committed in ED
- Victimizes and threatens ED staff
- Hospitalized involuntarily, treated and released
- Obtained handgun and returned to ED; fired gun prematurely
- No one injured, ED lockdown, patient disarmed by Bennington police

# What We Know About Risk

- There are known risk factors for violent behavior (>100)
- More risk factors → higher risk
- Risk stratification *not* “prediction”
- When we take appropriate measures to mitigate risk
  - Prevent violence
  - Improve health outcomes

# Risk Factor #1: Prior Criminal History

- Previous violent conduct strongest risk factor for future violent conduct
- Individuals with history of arrest 4-5x *increased* risk of re-arrest
  - Increased number of arrests → increased risk of re-arrest

# Risk Factor #1: Prior Criminal History

- 1983: 70% re-arrest within 3 years
- 1994: 67.5% re-arrest; 25.4% return to prison
- 2010: 4.5% firearm purchasers with history of prior *nonviolent* misdemeanor subsequently convicted of firearm-disqualifying crime

## Risk Factor #2: Alcohol

- Felony conviction for 3 DUI
- 1992: Individuals with multiple DUI > 300% risk of arrest *for other misdemeanor and felony crimes* than individuals with a single DUI.
- Multiple studies: strong association between alcohol abuse and risk of self-directed and interpersonal violence
  - Intimate partner homicide

# Risk Factor #2: Alcohol

- 2011: firearm owners who drink abusively (binge) more likely than *other firearm owners* to engage in high-risk behaviors with firearms

**Burlington Free Press**  
A GANNETT COMPANY

## Binge drinking: 1 in 5 Vermonters do it

Nancy Remsen, Free Press Staff Writer 12:08 a.m. EDT April 28, 2014

## Man charged after shooting into neighbor's home

By Patrick McArdle  
STAFF WRITER

SHAFTSBURY — A local man is facing charges for firing what police believe may have been an AK-47 at a neighbor's home on Sunday morning, sending six bullets through a woman's bedroom. No one was hurt, police said.

"had a drunken stupor and started firing his gun."



THE BARRE  
MONTPELIER

TIMES  ARGUS

## **Bennington man faces charges after alleged drunken rampage**

*By Patrick McArdle*  
STAFF WRITER

**BENNINGTON —** A Bennington resident is facing felony charges after police said he pointed a gun at people on the street, attacked emergency room nurses and a sheriff's deputy and knocked down a utility pole while driving drunk on New Year's, which caused a power outage.

<http://www.vermonttoday.com/apps/pbcs.dll/article?AID=/BT/20110103/NEWS02/701039919>

# Risk Factor #3: Intimate Partner Violence

- Most victims of intimate partner homicide killed with gun (national and VT)
- Increase risk of homicide when partner has access to firearm
- Domestic access to firearm associated with increased risk of homicide, *especially among women*

## Risk Factor #3: Intimate Partner Violence

- 2010: Cities in states with law prohibiting firearm access among respondents of domestic ROA orders – 25% fewer firearm-related intimate partner homicides
  - *“Would-be” killers do not replace guns with other weapons to effect the same number of killings*

# Risk Factor #4: Substance abuse

- Multiple studies: illegal use of controlled substances associated with increased risk of violence
- Multiple vs single misdemeanor drug convictions indicates sustained involvement in drug market
  - Increased risk

## VT ED Reality #4

- Male patient with high-capacity firearm to ED on “welfare check” because of “mental health issues”
- Emergency medical condition?
- Review of EMR, prescription-monitoring database indicates opiate addiction

The Boston Globe

# Drugs-for-guns traffic troubles police in Mass., Vt.

Cheap firearms from one side of border, opiates from other bring peril

<http://www.bostonglobe.com/metro/2014/04/27/guns-and-heroin-traverse-deadly-path-between-massachusetts-and-vermont/zJVoPvPmOLtBVFY7Vho0MI/story.html>

# Guns ↔ Drugs

**The New York Times**

## *Heroin Scourge Overtakes a 'Quaint' Vermont Town*

By KATHARINE Q. SEELYE MARCH 5, 2014



Stephanie Predel is off heroin. But the Bennington, Vt., area, where she lives, is in the throes of an epidemic.

Cheryl Senter for The New York Times

[http://www.nytimes.com/2014/03/06/us/bulwark-in-revolutionary-war-town-in-vermont-faces-heroin-scourge.html?\\_r=0](http://www.nytimes.com/2014/03/06/us/bulwark-in-revolutionary-war-town-in-vermont-faces-heroin-scourge.html?_r=0)

# Mental Illness

- *NOT* an independent risk factor for violence
  - 4% of interpersonal violence attributed to mental illness alone
- Individuals with mental illness more likely to be victims of violence rather than perpetrators
  - *Unless have other risk factors*



# Mental Illness

- Certain subgroups at elevated risk *at certain times*:
  - First episode of psychosis
  - Period surrounding psychiatric hospitalization
  - High-risk circumstances

# Mental Illness

- Other mental health conditions at elevated risk for violence
  - Alcohol and/or substance abuse
  - Conduct disorders and antisocial personality disorders
  - Paranoid delusions, anger and impaired impulse control
    - *Risk of violence reduced by treatment*

# Connecticut

- 2013: Impact of reporting of gun-disqualifying mental health records pre/post 2007
- 96% of crime committed during study period completed by persons *without mental health disqualification* at time of offense.
  - *Many had disqualifying criminal record*

# Connecticut

- Significant reduction in risk of violent crime among persons with history of involuntary psychiatric hospitalization
- Mental illness with gun disqualification (involuntary)
  - Decreased violent crime risk by 53%
    - 6.7% → 3.9% annually

# Actuarial Model of Violence Risk Assessment

- 2005: Studied acutely hospitalized US psychiatric patients
- Correlated stratified risk of violence with outcomes during 20 wk follow-up
  - High risk: 49% completed violence
  - Low risk: 9% completed violence

# Self-directed Violence

- Mental illness more strongly associated with risk of *self-directed vs interpersonal* violence
- Most strongly associated depression dx
- Increased risk of self-directed violence during periods surrounding psychiatric hospitalization
- Multiple studies: domestic access to firearm associated with increased risk of completed suicide *for all household members*

# Self-directed Violence

- Suicide impulsive act
  - Time between thought and attempt < 1 hr
    - Often 5-10 minutes
  - Often does not recur
- ~1/3 suicides effective on 1<sup>st</sup> attempt
- 51-53% of suicides completed with firearm
- 90% of suicide attempts with firearm lethal

# Self-directed Violence

- Impact of Brady Act
  - 6% decline in suicide rate in among individuals >55 y/o



## **Suicide Deaths**

The Healthy Vermonters 2020 goal is to reduce suicide deaths from 15.7 per 100,000 in 2010 to 11.7 per 100,000 in 2020. Suicide accounted for the deaths of 108 Vermonters in 2010. From 2005 to 2010 the number of suicide deaths gradually increased from 75 to 108. The 2010 Vermont suicide rate was significantly higher than the U.S. death rate (15.7 versus 12.1 per 100,000). [http://healthvermont.gov/family/injury/documents/data\\_brief\\_suicide.pdf](http://healthvermont.gov/family/injury/documents/data_brief_suicide.pdf)



# Private Firearm Transfers

- 2005, 2013: > 40% incarcerated for firearm crime - including homicide - *prohibited* at time of offense
- 2013: > 95% prohibited persons who commit gun-related crimes obtain them through private transfers
- Obvious method of movement firearms from legal market → disqualified persons

# Benefits of Comprehensive Background Checks

- 1999, 2001: Background checks and denial of firearm purchase reduced risk of re-arrest among prohibited persons.
  - Decreased risk of new firearm violent crimes by 25%
- 2009, 2012: Decreases in-state firearm trafficking
- 2007, 2009: Disrupt illegal firearm markets

# Comprehensive Background Checks

- State-level benefits undermined by trafficking from adjacent states
- 2007: 30% of vehicles at NV-CA border gun show with CA plate

# Summary

- Behaviors, not diagnoses
- Risk stratification, not prediction
- Firearm restriction among persons with known risk factors reduces *risk of violence*
- Individual and public health benefits impaired by lack of universal background checks
- *Physicians, patients at risk by ineffective/absent gun laws*