The OHSU Gun Violence Prevention Research Center: What We Do and Why

Washington County Public Health Advisory Council Meeting June 13, 2023

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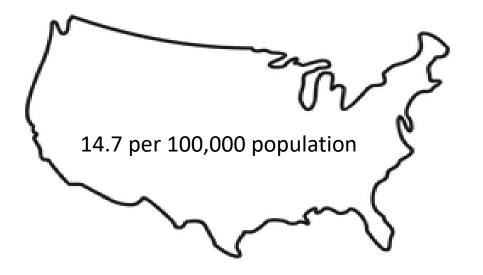
### Take care...

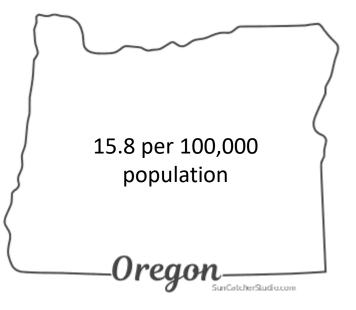
- 988 Suicide & Crisis Lifeline: 988
- Oregon Crisis Text Line (English, Spanish): text OREGON to 741741
- Veterans Crisis Line (English, Spanish): 1-800-273-8255 or 988 Press 1; text 838255
- The Trevor Project (for LGBTQ young people): 1-866-488-7386; text Start to 678-678
- LGBT National Hotline (all ages): 1-888-843-4564; help@LGBThotline.org

# The Why...



### Fatal Firearm Injuries in US and Oregon

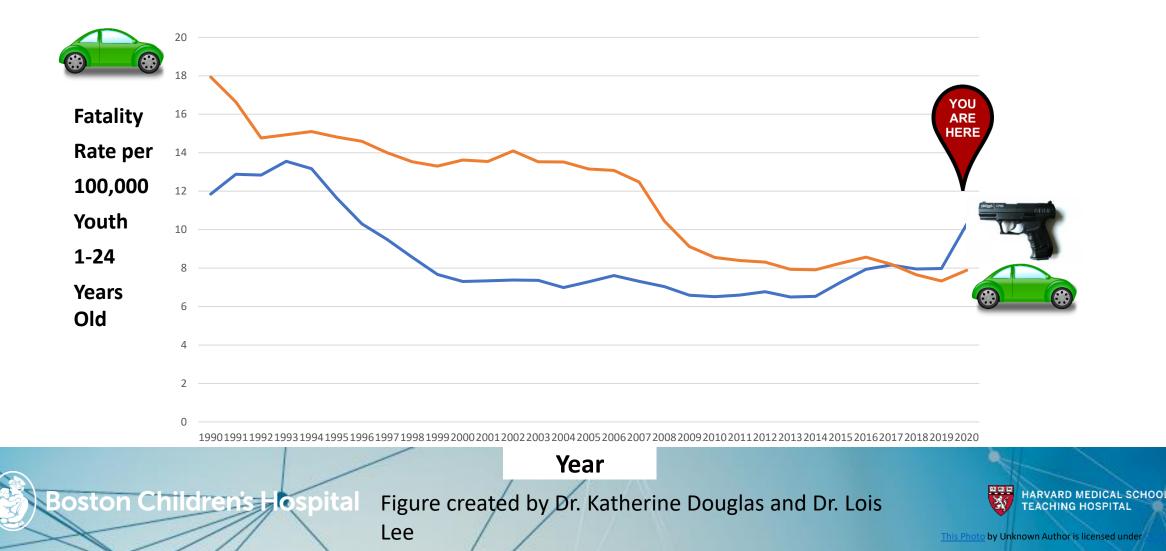




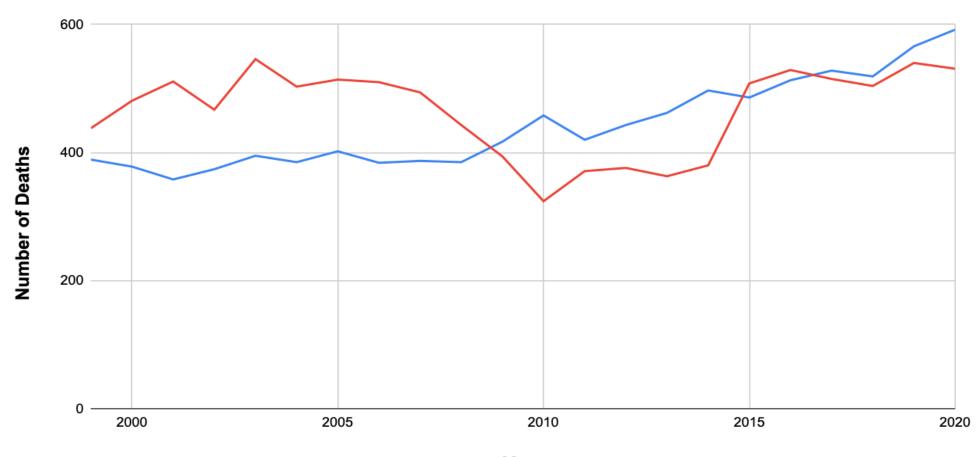
Nationally, **48,830** people died from a firearm injury in 2021

In Oregon, *670 people died* from a firearm injury in 2021

# Firearm and Motor Vehicle Crash Fatality Rates, Youth 1-24 Years Old, United States 1990-2020



#### Oregon: Firearm Deaths vs. Motor Vehicle Deaths between 1999 and 2020 (Count)



- Death by firearm - Death by motor vehicle

Year

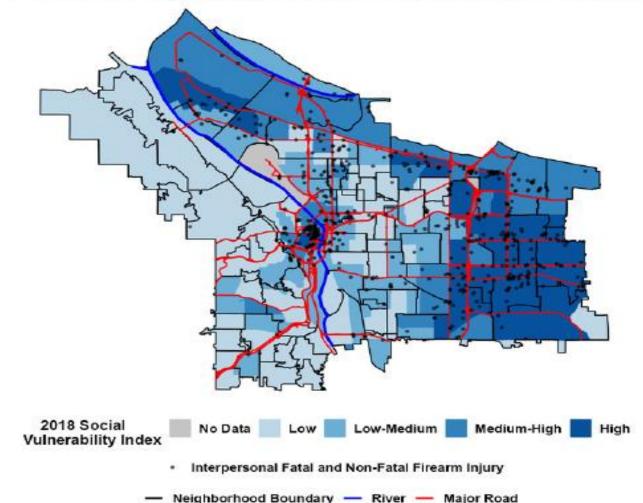
While people of all races and ethnicities in the U.S. and Oregon are impacted by the firearm injury epidemic, communities of color are disproportionately affected...

Nationally, firearm injury is the leading cause of death for black males ages 1-44.

- The firearm injury epidemic is not "new" in communities of color.
- Systemic inequities rooted in racism have contributed to high rates of poverty and a lack of economic opportunity and social mobility that puts historically marginalized populations at high risk for firearm injury and death.

CDC WISQARS, 2023; Kegler SR, Simon TR, Zwald ML, et al. *Vital Signs*: Changes in Firearm Homicide and Suicide Rates — United States, 2019–2020. *MMWR Morb Mortal Wkly Rep* 2022;71:656–663.

#### Fatal and Non-Fatal Interpersonal Firearm Injuries in Portland by Neighborhood Social Vulnerability, 2018-2021



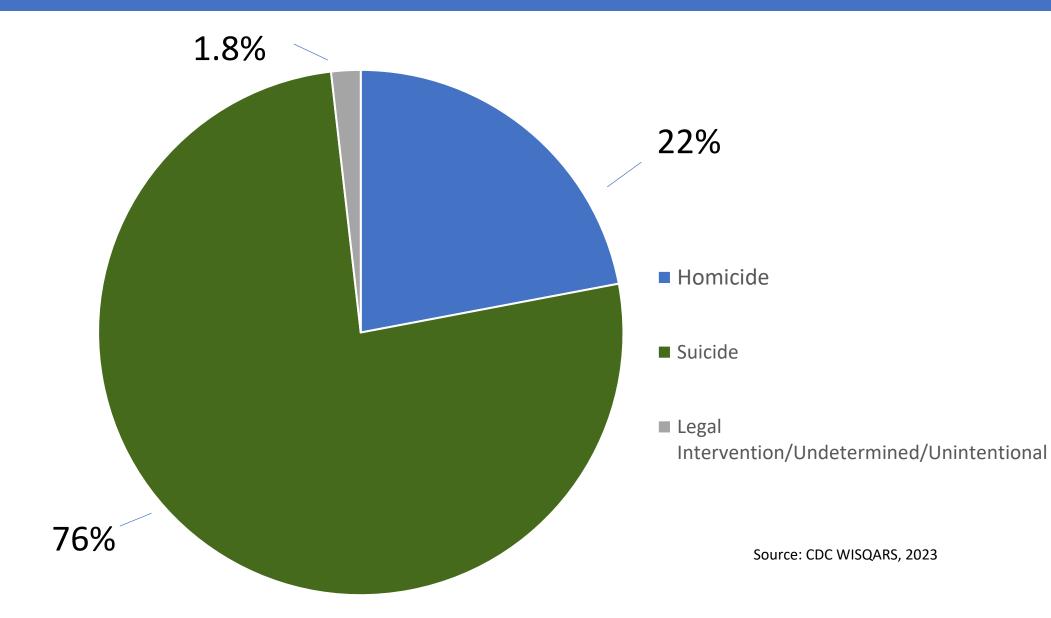
Neighborhoods with greater social and economic disadvantage experienced higher interpersonal firearm injury and death.

70% of firearm injuries in Portland occurred in census tracts with medium-high or high social vulnerability.

No SVI data exists for Swan Island, and Maywood Park is not part of the City of Portland.

OHUS Gun Violence Prevention Research Center: Interpersonal Firearm Injury and Death in Portland, Oregon: 2018-2021, https://www.ohsu.edu/GVPHI

#### Oregon Firearm Fatalities by Intent, 2021



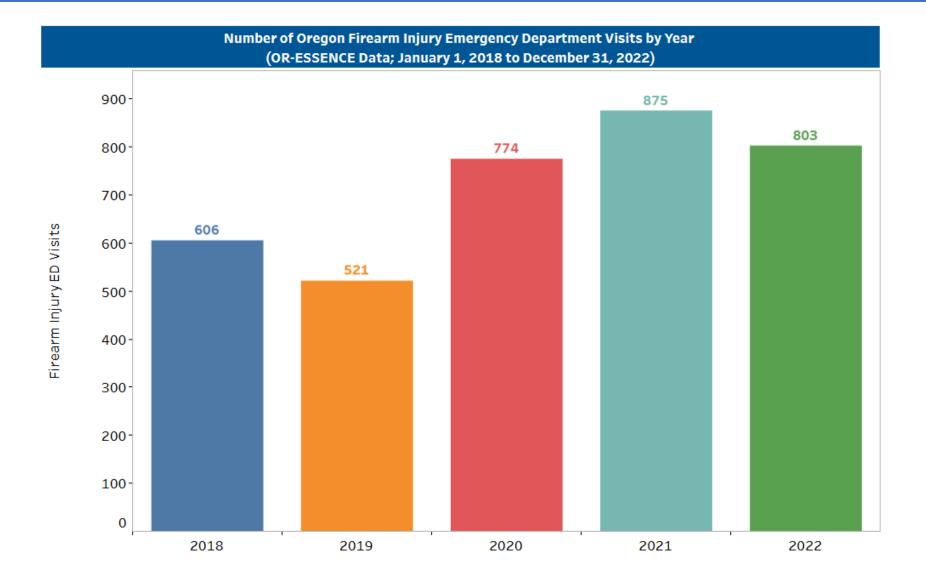
Firearm deaths are the tip of the iceberg

There were a total of 3,579 firearm injury ED visits between 2018-2022 in Oregon.



Source: Oregon FASTER Data Dashboard

### Firearm Injury Visits in Oregon EDs



### Oregon Firearm injury ED Visits by Race/Ethnicity

Proportion of Oregon Firearm Injury Emergency Department Visits by Race and Ethnicity, Compared to Oregon Population Proportions (OR-ESSENCE Data; January 1, 2018 to December 31, 2022)							
American Indian or Alaska Native	<b>2.3% 1.5%</b>						
Asian	0.8% 4.6%						
Black or African American	<b>14.6%</b> 2.0%						
Hispanic or Latino/a/x	12.5% 8.9%						
Native Hawaiian or Other Pacific Islander	0.7%						
White	<b>49.6%</b>						
Another Race	3.1% No matching census category						
Missing	16.4% No matching census category						
	0.0% 10.0% 20.0% 30.0% 40.0% 50.0% 60.0% 70.0% 80.0%						
<ul> <li>Percent of Total Firearm Injury ED Visits</li> <li>Percent of Oregon Population</li> </ul>							

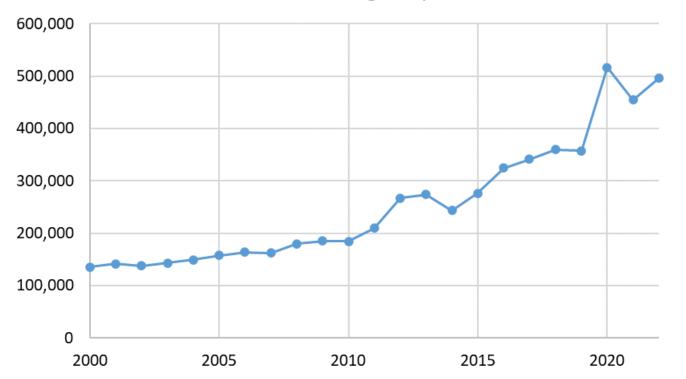
Mental health outcomes from direct and indirect exposure to firearm violence... A recent study of nonfatal shooting survivors and family members in Indianapolis – linked police data (2008-2015) with Medicaid claims (2007-2016).

Youth family members (<19 years of age) of nonfatal shooting survivors in 12-month post injury period were most likely to receive a new mental health diagnosis compared to adult family members.

Most prevalent conditions for both survivors and family members were disruptive behavior disorders, stress and anxiety disorders, and depression and mood disorders.

Magee, L. A., Aalsma, M. C., Fortenberry, J. D., Gharbi, S., & Wiehe, S. E. (2022). <u>Mental health outcomes from direct and indirect</u> <u>exposure to firearm violence: A cohort study of nonfatal shooting survivors and family members</u>. *Journal of Criminal Justice*, *83*, 101961.

### Firearms in Oregon



NICS Firearm Checks in Oregon by Year, 2000-2022

- There were an estimated 5,860,558 total firearm sales in Oregon from 2000-2022.
- That's 1.6 million more guns in Oregon than Oregon residents.

NICS Firearm Checks: Month/Year by State — FBI These statistics represent background checks initiated through the NICS, not the number of firearms sold. NICS checks do not have a 1:1 ratio with purchased firearms.



## 1. Define and monitor the problem

Define the violence problem through systematic data collection.

## 2. Identify risk factors and protective factors

Conduct research to find out why violence occurs and who it affects

## 4. Ensure widespread adoption of effective strategies

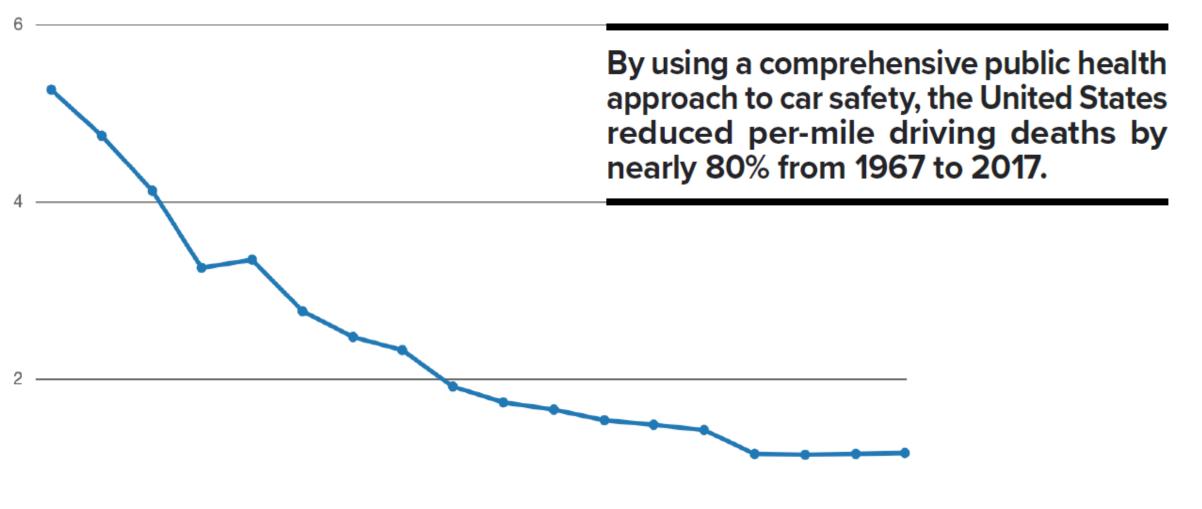
Scale-up effective and promising interventions and evaluate their impact and cost-effectiveness

### 3. Develop and test prevention strategies

Design, implement and evaluate interventions to see what works



Per Mile Car Crash Deaths, 1967-2017



1967 1970 1973 1976 1979 1982 1985 1988 1991 1994 1997 2000 2003 2006 2009 2012 2015 2017

#### OHSU-PSU Gun Violence as a Public Health Issue Initiative

 In 2016, in the wake of the Pulse nightclub shooting, OHSU launched the Gun Violence as a Public Health Issue Advisory Committee –

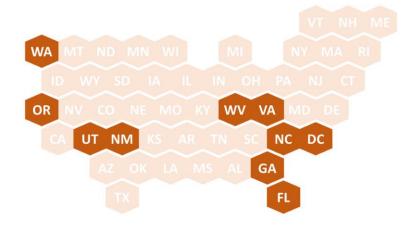
The mission of the GVPHI initiative is to prevent firearm-related violence and injuries in Oregon by applying public health approaches. We are concerned community members, health care and public health professionals, researchers, and survivors with lived experiences. Our work is guided by anti-racism, community engagement, and collaborative principles. Through research, education, advocacy and action, we will identify the causes and consequences of gun violence, and advance best practices and policies for prevention and healing.



Fire Arminjury Surveillance Through Emergency Rooms

#### Oregon FASTER Project Goals:

- Enhance the quality, monitoring, and timely reporting of firearm injury data from OR-ESSENCE
- Share data with state and local partners working to prevent and respond to firearm injuries



### FASTER Data Dashboard

- Features socio-ecological context for understanding firearm injury
- Firearm injury emergency department visits (2018-2022)
- Additional sources of firearm injury data are being added
- Updated quarterly

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The Social-Ecological Model: A Publi	lic Health Fi	ramework for Prevention	The Social-Ecol	saical Model		FASTER Da	ata Dashboa	ard at a Glar	ice 🔤	Here for in-Depth Via	iow of Each Graph
The context in which firearm injuries occur a ecological model, a public health framework multiple overlapping individual, relationship	k used to help	understand the	Firearm injury and death result from the interaction of factors operating at four social-acological levels -	Secary	Nur	nber of Oregon Firearm Inju (OR-ESSENCE Data; Ja	ry Emergency Department inuary 2018 to December 2	021)	of Oregon Firearm Injury En (OR-ESSENCE Data; Janua	regency Departm ry 2018 to Decem	ent Visits by Month Iber 2021)
that affect health. Within this public health informed prevention and risk resultion store novides. This includes strategister that ador es unintentional and firearm suicide/self-ha s critical to identify ing prevention and redu nave a sustainable impact, and address heal	ategies for fir ress interpers arm. This com uction strates	mples of research- earm injury are sonal violence as well prehensive approach gies that are effective,	Individual, relationship, community, and accessial Prevention strategies that act across multiple involts—individual, relationship community, society—are reladed to achieve and sublam the prevention of fineerm injuries across Oregon.		S an uniformation and an	0- 534 44	730	422 100			
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		ces where people live, work, learn, and en result in the creation of physical environment lace-bases interventions that are structural, limitate racial segregation and the impact of eighborhoods dates safety in areas with a high density of novide safe freems discese opportunities in t	s that reclude vierence with cost-effective scalable, and sustainable gentification on established atophol outlets		6 10 10 10 10 10 10 10 10 10 10 10 10 10	0 32 135	473 2 Secolar Main Mailing Par	a <u>s di</u>	JAZ 1 LA Main Mining Trends	100 3 Male Wining Per	27 41. Intals Male Mining
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### The Epidemiology of Firearm Injuries Treated in the Two Level 1 Trauma Centers in Oregon

- Retrospective chart review of firearm-related injuries presenting at OHSU and Legacy Emanuel Medical Center
- Our descriptive analysis will:
  - increase the understanding of the firearm-related injury burden
  - describe the characteristics surrounding firearmrelated incidents
  - and provide direction for future injury prevention interventions

### Evaluation of Healing Hurt People (HHP)

- Hospital-based violence intervention program (HVIP) operated by the Portland Opportunities Industrialization Center in OHSU's emergency room and inpatient areas since March 2022
- Case managers are "credible messengers" who intervene with patients of violent injury during the "critical window" (within 4 hours of hospital arrival)
- Case managers provide 18 months of support
  - Relocation services
  - Referrals to behavioral health
  - Family needs (e.g., SNAP, childcare support)
  - Transition and recovery support (e.g., job readiness, GED completion courses)
- Serves people of color ages 10-35



Examination of the Use of Oregon's Extreme Risk Protection Order Law to Prevent Firearm Violence

- Oregon's Extreme Risk Protection Order (ERPO) or "red flag" law allows family or household members or a law enforcement officer to petition a civil court for an order to temporarily restrict a person's access to firearms if the court determines that the person is at imminent risk of causing harm to themselves or others.
- Conducting an analysis of all ERPO petitions filed in Oregon between January 1, 2018 and December 31, 2022.
- Looking at ERPO utilization, reasons cited for petitioning, and outcomes by petition characteristics.

#### Development of a Multnomah County Gun Violence Review Commission

The Commission will:

- Include public health professionals, law enforcement professionals, criminal justice professionals, service providers, community-based organizations, and gun violence survivors.
- Participate in an intensive examination and discussion of gun violence incidents.
- Identify patterns, in their review of the incidents, that reveal gaps and deficits as well as
  assets within existing systems, policies, and programs and make recommendations to decision
  makers to address concerns and strengthen effective efforts.

**The goal** is to better understand how and why firearm-related death and injury occurs and identify and help focus intervention resources and prevention strategies.

### Firearm Injuries Among Rural Veterans in the U.S.

	Injury Intent, Oregon	Urban	Rural	Overall	
	Unintentional	58.2%	68.2%	63.4%	
	Self -Directed/Suicide	16.5%	22.4%	19.5%	
EHR chart					
review:	Injury Context, Oregon	Urba	n Rural	Overall	
Oregon Veterans	Cleaning Firearm	37.0%	% 34.5%	35.6%	
	Unknown Cause of Discharge	10.9%	% 29.3%	21.2%	

Comprehensive firearm injury prevention program in VA

### **Initial pilot strategies**

Educational campaign about secure firearm storage

Increase access to firearm storage devices in real time, at reduced cost

### Thank you for your interest!

Susan DeFrancesco: <u>defrancs@ohsu.edu</u>

FASTER Data Dashboard Oregon FASTER Data Dashboard

GVPHI webpage: <a href="https://www.ohsu.edu/GVPHI">https://www.ohsu.edu/GVPHI</a>

