

# Violence Prevention:

A brief assessment of approaches



December 2019

## Contents

<b>Introduction .....</b>	<b>4</b>
<b>Gathering Data to Understand the Problem.....</b>	<b>5</b>
Cardiff Model.....	5
Main Components .....	5
Equity Approach.....	5
Strengths.....	5
Challenges.....	6
Partners Needed for Success .....	6
Known Community Interest .....	6
Resources Needed .....	6
Resources Available.....	6
Injury Prevention Model – (Haddon Matrix).....	7
Main Components .....	7
Core Strategies .....	7
Equity Approach.....	8
Strengths.....	8
Challenges .....	8
Partners Needed for Success .....	8
Known Community Interest .....	8
Resources Needed.....	8
Resources Available.....	8
<b>Intervening to Respond to Known Problems .....</b>	<b>9</b>
Cure Violence Model.....	9
Main Components .....	9
Equity Approach.....	9
Strengths.....	9
Challenges .....	10
Partners Needed for Success .....	10
Known Community Interest .....	10
Resources Needed.....	10
Resources Available.....	10
<b>Office of Juvenile Justice and Delinquency Prevention Comprehensive Gang Model.....</b>	<b>11</b>
History in Tacoma .....	11
Main Components.....	11

Equity Approach .....12

Strengths.....12

Challenges .....12

Partners Needed for Success .....12

Known Community Interest .....12

Resources Needed .....12

Resources Available .....12

**Restorative Models ..... 13**

Restorative Justice.....13

Restorative Practice.....13

Main Components .....13

Core Strategies .....13

Equity Approach .....14

Strengths.....14

Challenges .....14

Partners Needed for Success .....14

Known Community Interest .....14

Resources Needed .....14

Resources Available .....14

**References and Resources ..... 15**

Cardiff Model..... 15

Cure Violence Model..... 15

Injury Prevention Model - Haddon Matrix..... 15

Office of Juvenile Justice & Delinquency Prevention – Comprehensive Gang Model ..... 15

Restorative Justice and Restorative Practice ..... 16

## Introduction

In 2019, the City of Tacoma experienced a resurgence of gun violence.

The community is also concerned about the surge in violent acts. People living in East Tacoma and nearby areas of unincorporated Pierce County became concerned about increasing rates of interpersonal violence in their communities. *See Figure 1*

This year, Tacoma–Pierce County Health Department took two steps to respond to these concerns:

- Gathered readily available data to better define the problem. The [Violence Prevention Data Report](#) describes measures of interpersonal violence in Tacoma and Pierce County.



- Reviewed a small set of high-profile violence prevention models or approaches in use in the United States that have demonstrated a positive effect. This is not a comprehensive list.

Figure 1

To get helpful information into the hands of concerned residents, we have summarized five approaches to help understand and address community-based interpersonal violence.

Gathering data to understand the problem:

- Cardiff model.
- Injury prevention model.

Intervening to respond to known problems:

- Cure Violence model.
- Office of Juvenile Justice and Delinquency Prevention - Comprehensive Gang Model.
- Restorative models.

We remain committed to work with our community to reduce violence and improve the health and safety of residents.

If community groups are interested in different data, an assessment of other models, or have questions about the models reviewed, please contact Michelle Fredrickson at [mfredrickson@tpchd.org](mailto:mfredrickson@tpchd.org).

## Gathering Data to Understand the Problem

### Cardiff Model

The Cardiff Model, created in Cardiff, Wales, is a multi-agency approach to address violence in specific communities. US Centers for Disease Control sanctioned this public health-led model. Cardiff, London, Philadelphia, Milwaukee, and other cities worldwide use this approach. Heat maps built with violent injury data from law enforcement, hospitals and other sources identify neighborhoods with high-density violence.

### Main Components

- Public health convenes a coalition of partners - schools, law enforcement, clinical medicine, businesses, and elected officials.
  - Violent injuries are underreported to official sources. To address this, the model pulls in violent injury information from de-identified personal health records and other sources not typically used in public health.
- Analysts map point data from three main datasets:
  - 911 calls, hospital emergency departments, and electronic health records.
  - This data is primarily geographic. It identifies where an incident occurs and includes any data about when the incident happened and what was the method of violence (e.g. firearm, fistfight, knife).
  - Analysts map the point data to discover neighborhoods (small areas) where a high-density of violent events occur and where interventions could make a positive impact.
- The coalition uses the map to select focus areas for targeted interventions.
  - The coalition includes stakeholders who can take decisive action as well as those who have real time information on the identified areas.
  - The geographic-specific interventions allow for constant consideration of community needs and health equity.

### Equity Approach

Communities use the maps and their lived knowledge to develop interventions tailored for each neighborhood.

### Strengths

This model pulls in violent injury information from a variety sources to provide a more complete picture of the problem.

- This model is evidence-based as developed and focuses attention on the geographic areas with the most violence.
- It is flexible enough to incorporate other models or approaches in the interventions.
- Because the model allows for great flexibility in interventions, it creates opportunities to strengthen community involvement and put health equity at the forefront.
- A correlation exists between geographic areas of high violence and all-cause poor health outcomes (e.g. diabetes, heart disease, cancer), for a geography-centered public health approach in the lens of *Weisburd and White (2019)*.

### Challenges

- This model does not offer specific interventions or identify what type of intervention is appropriate. It assumes partners will develop locally appropriate interventions.
- All partners must start with the same mission, vision, and communication goals. Building relationships early is critical, especially among groups without a history of working together.
- The model requires additional training for front-line staff, especially emergency department nurses. Staff may need to collect additional data or be retrained to collect data, so it is consistent with the required inputs.
- Data challenges, including:
  - Requires data storage infrastructure for the high volume of information.
  - Data Sharing Agreements or updates to receive necessary information.

### Partners Needed for Success

- Law enforcement.
- Emergency departments in Pierce County (corporate level).
- Elected officials willing to help by convening, sponsoring and investing.
- Public health.
- For each identified hot spot: business owners, property owners, developers, community members, emergency medical services, fire departments, social service agencies, school district, park district (depends on *what* is identified).

### Known Community Interest

- Safe Streets Executive Director and staff became aware of the model and its application in sites within the United States. They believe it could be a strategy to focus interventions and engage community members in addressing neighborhood violence.

### Resources Needed

- Data-sharing agreements for electronic health records.
- 911 call data for Tacoma and Pierce County (distinct from violent incidents).
- Violent incidents reports from the Pierce County Sheriff, Washington State Patrol, and the municipal police departments of Bonney Lake, DuPont, Edgewood, Fife, Gig Harbor, Lakewood, Milton, Orting, Puyallup, Sumner, Tacoma, and University Place.
- Washington State Department of Corrections data on violence with incarceration as the outcome.
- Upgraded ArcGIS software for more advanced heatmapping.
- Staff resources- time, coalition-building, outreach.

### Resources Available

- Tacoma Police Department data on violent incidents and identified gang members.
- Death certificate data.
- Violent injury and death information (including intent and method) on the Washington State Community Health Assessment Tool – available by census tract.
- RHINO-Essence emergency room data.
- Basic ArcGIS desktop software for geocoding and mapping.

### Injury Prevention Model – (Haddon Matrix)

Dr. William Haddon Jr., a physician and engineer, was the first administrator of what would become the National Highway Traffic Safety Administration (NHTSA). He introduced the Haddon Matrix in the 1970s as a scientific approach to understand how to better control and prevent automobile injuries. It revolutionized highway safety evaluation and injury prevention strategy development.

#### Main Components

The Haddon Matrix makes it easier to analyze all the factors that contribute to an injury event to design interventions for each factor. One dimension of the matrix considers the factors influencing the injury: the person (host), the equipment (agent), and the environment. The other dimension considers the effect of time on the event (before, during and after) and the severity. Separating contributing factors helps decision makers decide where and how to begin efforts to prevent future injuries.

#### Core Strategies

#### Haddon Matrix

	Host (person)	Agent (equipment)	Physical Environment	Social Environment
Pre-event				
Event				
Post-event				

#### Sample Haddon Matrix - Applied to Motor Vehicle Crashes *(partially complete)*

Phases	Factors			
	Host (Driver or Passenger)	Agent (Vehicle) <i>(objects that transmit kinetic energy)</i>	Physical Environment	Social Environment (Traffic Safety Culture)
<b>Pre-Event</b> (Before the crash occurs)	<ul style="list-style-type: none"> <li>• Driver vision.</li> <li>• Seat belt use.</li> <li>• Alcohol impairment.</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance of brakes and tires.</li> <li>• Speed of travel.</li> </ul>	<ul style="list-style-type: none"> <li>• Adequate roadway markings.</li> <li>• Adequate shoulders and rumble strips.</li> </ul>	<ul style="list-style-type: none"> <li>• Public / community attitudes on drinking and driving.</li> <li>• Impaired driving laws.</li> <li>• Speed limits.</li> </ul>
<b>Event</b> (During the crash)	<ul style="list-style-type: none"> <li>• Spread out energy in time and space with seat belt/ airbag use.</li> </ul>	<ul style="list-style-type: none"> <li>• Vehicle size.</li> </ul>	<ul style="list-style-type: none"> <li>• Guard rails, median barriers.</li> </ul>	<ul style="list-style-type: none"> <li>• Adequate seat belt and child seat laws.</li> </ul>
<b>Post-Event</b> (After the crash)	<ul style="list-style-type: none"> <li>• Crash victim's overall health.</li> </ul>	<ul style="list-style-type: none"> <li>• Gas tanks designed to minimize fires.</li> </ul>	<ul style="list-style-type: none"> <li>• Availability of effective EMS systems and staffing.</li> <li>• Distance to quality trauma care.</li> </ul>	<ul style="list-style-type: none"> <li>• Policies and funding supporting emergency and medical response systems.</li> </ul>

Adapted from: Injury Prevention: Meeting the challenge. AJPM, 1989; Christoffel T. Gallagher S. Prevention and Public Health, Gaithersburg, MD. 1999

### **Equity Approach**

Sometimes, a [value dimension](#) is added to help with decisions. Decision points could be equity, cost, feasibility, etc. Community members use their unique lens to help select priorities and investments.

### **Strengths**

Haddon's model highlights the variety of factors influencing injuries and demonstrates that a combination of intervention strategies works together to reduce frequency and severity of injuries. A model like this can help communities prioritize strategies based on the factors they feel are more relevant to the type of injury they want to prevent. The model:

- Provides insight into the range of issues and concerns and helps focus on possible solutions.
- Is effective in identifying gaps in knowledge or information.
- Considering time as an element in injury prevention helps identify all the partners who may need to be included in developing solutions.

### **Challenges**

Where a contributing factor fits in the model does not indicate how strongly it contributes to the injury. Choosing the intervention strategies can be subjective. Additional data and research can help fill this gap.

For example, if a community was trying to reduce unintentional injury from firearm violence, identifying host, agent and environmental factors does not highlight which factors contribute more than others. It's important to identify other concerns that could lead a community to choose a focus area for prevention work.

### **Partners Needed for Success**

- Law enforcement.
- Community partners.
- Schools.
- Legislators.
- Risk management partners.
- Medical professionals.
- Other partners as needed, depending on approach selected.

### **Known Community Interest**

- Unknown.

### **Resources Needed**

- Sustained comprehensive commitment to the approach.
- Flexibility.
- Data.

### **Resources Available**

- Unknown.

## Intervening to Respond to Known Problems

### Cure Violence Model

The [Cure Violence](#) model maintains that violence is communicable and can be transmitted from person to person in a community setting. People exposed to violence are more likely to become violent. Like other communicable diseases, violence can be prevented with prompt response to an initial case to prevent spread to others. Dr. Gary Slutkin, a researcher in communicable diseases developed it in the late 1990s in Chicago. It is a data-driven, research-based, community-centric approach.

#### Main Components

- Detect and interrupt potentially violent conflicts.  
Trained violence interrupters and outreach workers identify and mediate potentially lethal conflicts in the community to prevent shootings. They also follow up to ensure the conflict does not reignite. Goals are to:
  - Prevent retaliations.
  - Mediate ongoing conflicts.
  - Keep conflicts “cool.”
- Identify and treat highest risk.  
Trained, culturally appropriate outreach workers work within the highest risk situations to prevent people from committing violence. They meet people where they are at, talk to them about the costs of using violence, and help them to obtain the social services they need – such as job training and drug treatment. Goals are to:
  - Access highest risk.
  - Change behaviors.
  - Provide training or treatment.
- Mobilize the community to change norms.  
Workers engage leaders in the community as well as community residents, local business owners, faith leaders, service providers, and the high risk, conveying the message that residents, groups, and the community do not support the use of violence. Goals are to:
  - Respond to every shooting.
  - Organize community.
  - Spread positive norms.

#### Equity Approach

The model was piloted in 2000 in West Garfield Park area of Chicago and spread to Washington DC, New Orleans and other cities around the world among diverse populations.

#### Strengths

The Cure Violence model is potentially cost-efficient compared to other alternatives because its prevention focus places less demand on law enforcement and the criminal justice system. Other benefits include stronger relationships between law enforcement and the community and improved employment outcome for those receiving treatment. Several national and international organizations and publications consider Cure Violence a best practice model.

### **Challenges**

Evidence of effectiveness is mixed. The US Department of Justice Crime Solutions Database describes this approach as “promising” rather than “effective.”

The Cure Violence Model creators argue that fidelity to the model is essential, limiting opportunity to blend in other interventions.

Recruiting credible community “interrupters” is challenging. Careful vetting and monitoring is appropriate but can limit recruitment and retention.

The model’s individual approach may be more costly than violence prevention models that focus on policy and systems approaches alone. Significant and consistent long-term community investment and commitment is necessary for success.

### **Partners Needed for Success**

- Law enforcement.
- Hospitals.
- Community leaders and members in the focus area.
- Cure Violence organization.

### **Known Community Interest**

- Unknown.

### **Resources Needed**

- Funding to support training and capacity for violence interrupters.

### **Resources Available**

- Unknown.

## Office of Juvenile Justice and Delinquency Prevention Comprehensive Gang Model

The federal Office of Juvenile Justice and Delinquency Prevention (OJJDP) Comprehensive Gang Model provides a framework for coordinated action between law enforcement and residents. The goal is to improve community capacity to prevent youth from joining gangs and to reduce street gang crime and violence. The model combines prevention, intervention, and suppression tactics to tackle the root causes of gang violence.

### History in Tacoma

The City has focused on preventing gang violence, and in 2013, launched [a Youth Gang Reduction Project](#) closely modeled on the Office of Juvenile Justice and Delinquency Prevention Comprehensive Gang framework.

The City of Tacoma issued a January [2019 Tacoma Gang Assessment Report](#). It found:

- Gun violence remains high and is primarily perpetrated by adults age 18-30.
- Intensive, coordinated, flexible and comprehensive services are lacking.
- Consistent exposure of younger children to risks creates a recruiting pool.
- Gaps in data collection continue and contribute to challenges in identifying and responding to gang problems.

Key recommendations included:

- Greater emphasis is needed on gang intelligence gathering.
- The social intervention component of the model should be strengthened and refocused on individuals age 15-30.
- The social intervention component should be more comprehensive to help young adults succeed in non-gang lifestyle.
- The prevention component for youth age 11-15 should be strengthened and broadened to identify and intervene with youth who have multiple risk factors.

### Main Components

The model is focused on youth gang violence. A steering team of community members and community leaders use a detailed assessment to focus on specific geographic areas and make the resources described in the model available. Core strategies include:

- Mobilize Community
  - Involve neighborhood residents, including former gang members, community groups, agencies. Coordinate programs and staff functions.
- Provide Opportunities
  - Develop a variety of specific education, training, and employment programs targeting gang-involved youth.
- Social intervention
  - Many community and criminal justice organizations reach out to gang-involved youth and their families to serve as links to needed services.
- Suppression
  - Criminal justice, schools and community groups use formal and informal social control procedures including arrests, probation and routine check ins.

- Organizational change & development
  - Develop and implement policies and procedures to use resources to better address the gang problem.

### **Equity Approach**

[The model has been implemented and studied](#) in Los Angeles, Milwaukee, WI., North Miami Beach, FL, and Richmond, VA. When followed closely it demonstrates some reductions in gang violence. The model has demonstrated some success in neighborhoods composed predominately of African American, Latinx and Haitian-American youth.

### **Strengths**

- With strong fidelity to the model, this approach has reduced gang violence in communities.
- The OJJDP website contains toolkits and other resources.

### **Challenges**

- Replication can be difficult. All model elements must be implemented in a robust fashion. Not all communities experience a reduction in gang violence. The model is focused on youth gang violence, which is a subset of the larger community problem of interpersonal violence.

### **Partners Needed for Success**

- Law enforcement.
- School district leadership.
- Elected officials.
- Community: business owners, property owners, developers, community members, emergency medical services, fire departments, social service agencies, park district, etc.

### **Known Community Interest**

The City of Tacoma has invested 7 years in implementing the model. RAIN, Rising Above the Influence, a program of Comprehensive Life Resources, is the contractor.

### **Resources Needed**

- Broad executive steering committee.
- Successful implementation of recommendations.

### **Resources Available**

- City of Tacoma is funding this model and has a contractor.

## Restorative Models

### Restorative Justice

Restorative justice is an accountability approach used within the criminal justice system. It is an evidence-based, community-focused approach that builds on repairing harm through healing, recovery and accountability. Communities use this approach to build meaningful partnerships to preserve safety and pride. The three main elements are dealing with crime, effects of crime, and prevention of future crime.



Image: BARJ model for restorative justice

### Restorative Practice

Restorative practices repair harm and build relationships between individuals and communities to manage conflict and tensions before further escalation. This evidence-based approach builds healthy communities to increase social connections, decrease crime and antisocial behavior, repair harm and restore relationships. This model has been successful in school districts and other youth settings.

### Main Components

Restorative justice and restorative practice are frameworks that can support existing policies and practices rather than creating new services or programs.

Restorative practices are:

- Used to bring healing to the community after a harmful event.
- Used for the learning that comes from the collective wisdom of the room.
- Also called peacemaking circles, talking circles, or healing circles.

### Core Strategies

- Build a common voice to advocate for culturally based, trauma-informed and healing-centered approaches.
- Focus on restoring relationships.
- Encourage authentic accountability (active participation).
- Allow for successful reintegration.

### **Equity Approach**

This model is rooted in the traditional practices of Indigenous people and often addresses historic trauma people of color face, especially boys and men.

### **Strengths**

Restorative models are cost-effective and offer a timely method to resolution. They help increase community safety and build stronger communities.

Specifically, the restorative justice model has been shown to:

- Reduce recidivism.
- Produce greater satisfaction for victims of crime.
- Improve public safety.
- Reduce detention time for youth.
- Reduce future re-offending.

### **Challenges**

Components of restorative models can be challenging to implement, including:

- Obtaining buy-in from community leaders.
- Capacity within the community to sustain the work.

### **Partners Needed for Success**

- Schools.
- Faith organizations.
- Law enforcement and justice system.
- Victims.
- Wrongdoers.
- Community: business owners, property owners, developers, community members, emergency medical services, fire departments, social service agencies, park district, etc.

### **Known Community Interest**

- Tacoma-Pierce County Health Department—Offering restorative practices training in December 2019 for 40 community members at the Eastside Family Support Center.
- University of Washington-Tacoma, Director of Equity and Inclusion—Leading work on increasing access to Restorative Practices across Pierce County.
- City of Tacoma, Office of Equity and Human Rights (OEHR)—Restorative practice approach to be incorporated in the City’s Racial Equity Action Plan.

### **Resources Needed**

- Funding.
- Community engagement.
- Capacity and space.
- Training and technical assistance.

### **Resources Available**

- Unknown.

## References and Resources

### Cardiff Model

Centers for Disease Control and Prevention (CDC), Division of Violence Prevention. “The Cardiff Model Toolkit | Violence Prevention | Injury Center | CDC.” *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 2019.

Weisburd, David, and Clair White. “Hot Spots of Crime Are Not Just Hot Spots of Crime: Examining Health Outcomes at Street Segments - David Weisburd, Clair White, 2019.” *SAGE Journals*, 2019, journals.sagepub.com/doi/abs/10.1177/1043986219832132.

### Cure Violence Model

Annual Review of Public Health. Cure Violence: A Public Health Model to Reduce Gun Violence. <https://www.annualreviews.org/doi/full/10.1146/annurev-publhealth-031914-122509#abstractSection>

DOJ, 2009; *The Economist*, 2009; Skogan et al., 2009; U.S. Conference of Mayors, 2012; Webster et al., 2012).

### Injury Prevention Model - Haddon Matrix

[Using the Haddon Matrix to Define Risk Factors and Policy Strategies for Open Water Drowning in Washington State](#)

[Intervention Strategies Used in Sport Injury Prevention Studies: A Systematic Review Identifying Studies Applying the Haddon Matrix](#)

[US DOT Highway Safety Administration - Haddon Matrix](#)

[Using the Haddon Matrix: Introducing the Third Dimension](#)

[The Application of the Haddon Matrix to Public Health Readiness and Response Planning](#)

### Office of Juvenile Justice & Delinquency Prevention – Comprehensive Gang Model

<https://www.nationalgangcenter.gov/Comprehensive-Gang-Model/About>

<https://ojjdp.ojp.gov/sites/g/files/xyckuh176/files/pubs/implementing/accountability.html>

Department of Justice, Crime Solution Database. <https://www.crimesolutions.gov/>

## Restorative Justice and Restorative Practice

Pavelka, S. and Thomas, D. (2019). The Evolution of Balanced and Restorative Justice. *Juvenile and Family Court Journal* 70, (1).

[Operation Peacemaker Fellowship](#)

[Restorative Justice Peacemaking Circles in Washington State](#)

[Truth, Racial Healing & Transformation](#)

<http://zehr-institute.org/>

[https://www.iirp.edu/images/pdf/Defining-Restorative\\_Nov-2016.pdf](https://www.iirp.edu/images/pdf/Defining-Restorative_Nov-2016.pdf)