

Suicide Research Priorities Update

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Goal:

Assess NCIPC suicide research efforts and update the Center's Suicide Research Priorities

2015 Self-Directed Violence (SDV) Research Priorities

1. Evaluate the effectiveness and economic efficiency of innovative and culturally relevant **programs and policies to prevent** SDV in the most vulnerable populations.
2. Evaluate the feasibility, scalability, and economic efficiency of strategies to **reduce access to lethal means** in the community.
3. Improve **methods to measure** SDV and related risk factors to inform monitoring of trends, etiological research, and evaluation of prevention strategies.

Overall Process

- Set guiding principles and scope
- Establish workgroup and roles
- Gather and review materials
 - Inventory of NCIPC projects
 - Landscape review
- Synthesize findings
- Draft new priorities

Guiding Principles and Scope

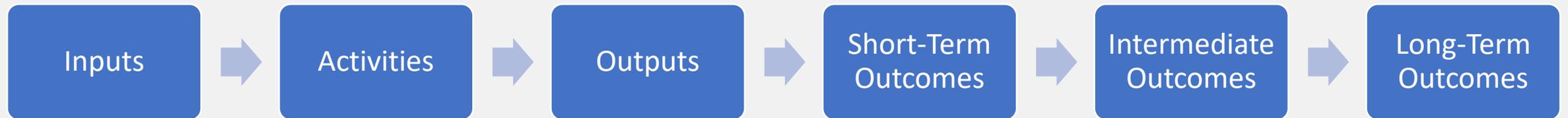
- Research priorities
 - Research questions under each priority
- For next 3-5 years
- Intramural and extramural projects
- Need to demonstrate progress
- Review back to 2015



Workgroup and Roles

- Key Division of Injury Prevention (DIP) participants
 - Ellen Yard, Elizabeth Gaylor, Sally Thigpen, Mick Ballesteros
- Workgroup
 - DIP subject matter experts
 - Center, Division of Violence Prevention (DVP) and Division of Overdose Prevention's (DOP) Associate Directors of Science
 - Center Office of the Director representatives
- Contract support from Guidehouse

Logic Model



Evaluation Question Examples



- Has CDC done enough to address the current priorities?
- Have evidence-based interventions been adequately studied in disproportionately affected populations?
- How has the suicide prevention landscape changed in the past 5 years?
- Have emerging research issues related to suicide prevention surfaced?
- What is CDC's role?
- Which of the new priorities rises to the top for immediate focus?

Gather and Review Materials: Inventory of NCIPC Projects – Extramural Inputs

Extramural

- Office of Science
 - External Research Program Office files
 - Research Priorities Tracking System
- DVP's list of externally funded projects
- Injury Control Research Center projects

Gather and Review Materials: Inventory of NCIPC Projects – Intramural Inputs

Intramural

- Research Priorities Tracking System
- Agency internal review system
- Bibliographies from all divisions
- Concept development system
- Project list from Suicide Prevention Team

Gather and Review Materials: Landscape Review - Inputs

- Discussions with internal and external subject matter experts
- Website reviews and targeted web searches
 - Substance Abuse and Mental Health Services Administration, Indian Health Service, Veterans Health Administration, National Institute for Mental Health
- Literature – only review articles
- Key datasets – summary reports
 - National Vital Statistics System
 - National Violent Death Reporting System
 - Youth Risk Behavior Surveillance System
 - National Electron Injury Surveillance-All Injury Program
 - National Survey on Drug Use and Health
 - Nationwide Emergency Department Sample

Synthesize Findings: Inventory (2015-2020)

- 272 projects/papers initially identified
- 54 left after removing duplicates, non-suicide, non-research

	Extramural (n=26)	Intramural (n=28)
P1: Effective Prevention	10	1
P2: Means Access	1	0
P3: Methods to Measure	6	13
Other	9	14

Synthesize Findings: Inventory – Key Findings

- Most effectiveness research (2015 Priority 1) was extramural
- Little research on lethal means access (2015 Priority 2)
- Almost half of intramural research was on methods to measure (2015 Priority 3)
- Twenty-three research projects were in areas not specified in the 2015 priorities

Synthesize Findings: Landscape Review – Key Findings

- Other federal agencies
 - Clinical screening
 - Treatment
 - Health system delivered interventions
 - Targeted populations
- CDC's unique federal role
 - Convener
 - Focal point on national goals around suicide outcomes
 - Opportunities for dissemination and implementation

Synthesize Findings: Landscape Review – Key Findings (continued)

More work needed on

- Risk and protective factors
- Strategies for disproportionately affected groups
- Implementation science

Proposed New Priorities

1. Identify risk and protective factors associated with suicide among groups at higher risk.

- a. What are the key risk factors that increase the likelihood of suicide among disproportionately affected populations?
- b. What are the key protective factors that lower the likelihood of suicide among disproportionately affected populations?
- c. What factors protect individuals who are experiencing suicidal ideation from attempting or completing suicide?

Proposed New Priorities

2. Develop and evaluate community- and population-based approaches to suicide prevention.

- a. Which community-based programs, policies, and practices (e.g., economic policies, school-based programs) are most effective and economically efficient at preventing suicide?
- b. Which strategies that reduce access to lethal means among people at risk for suicide are most effective and accepted by the general public, and how does effectiveness vary across age or other demographic groups?

Proposed New Priorities

2. Develop and evaluate community- and population-based approaches to suicide prevention.
(continued)

- c. Which suicide prevention strategies with the best available evidence also show evidence of addressing common risk and protective factors for other types of violence and injury (e.g., intimate partner violence, overdose/substance abuse)?
- d. What is the impact of public education, communication, and prevention messaging interventions in reducing suicide and suicide risk?
- e. What factors contribute to or inhibit successful implementation of suicide prevention strategies?

Proposed New Priorities

3. Improve methods to measure and analyze suicide-related risk factor data to inform monitoring of trends, etiological research, and evaluation of prevention strategies.

- a. How can data quality (e.g., misclassification, lack of completeness) of existing sources be improved?
- b. What is the validity and utility of non-traditional data sources (e.g., social media, syndromic surveillance) for monitoring suicide or factors associated with suicide?

Proposed New Priorities

3. Improve methods to measure and analyze suicide-related risk factor data to inform monitoring of trends, etiological research, and evaluation of prevention strategies.
(cont.)



- c. What innovative analytic tools, methods, and techniques (e.g. artificial intelligence, machine learning, data visualizations) can be used to track and monitor suicide-related outcomes?
- d. How can short-to-medium term proxy measures for suicide (e.g., coping mechanisms, resilience) be measured and used in addressing suicide prevention?

Thank you!

Discussion

The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

