Tracking Non-Fatal Self-Harm Injuries with State-Level Data

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Overview

• Virginia’s sources of state-level self-harm data
• Obtaining and maintaining access
• Management and analysis resources
• Limitations
• Summarize Virginia’s approach
Data Sources in Virginia

Hospital Discharge

ESSENCE
Data Sources

- Hospital Discharge Data
  - All non-federal, acute care hospital discharges occurring in Virginia
  - Includes diagnoses, ecodes, demographics, hospital charges, payer source, residency information
  - Self-harm injuries derivable from diagnosis and ecode fields
  - Can be restricted by status at discharge
  - Analyze according to national standards set by Injury Surveillance Workgroup, 2003 publication
Age-Adjusted Rate of Self-Inflicted Injury Hospitalization, Virginia, 2003-2012

Source: VHI data, compiled by Division of Policy and Evaluation, Office of Family Health Services
Data Sources

- **ESSENCE**
  - Johns Hopkins data product
  - Syndromic surveillance
  - Aggregates chief complaint data
  - Most EDs, some urgent care centers
  - Updated daily
  - Suicide query preprogrammed
  - Some demographic and geographic information
Suicidal Ideation and Attempts by Month, Virginia, 2013

Data source: ESSENCE
Data Access: Hospital Discharge

- Database developed in mid 1990s
  - Mandated by state law
  - VDH named by law as institutional end user
- Data used to inform surveillance and identify emerging trends in chronic disease and injury
- Access available to epi staff in Office of Family Health Services since 2005
- Collaboration with program staff in multiple units to monitor trends and track outcomes
Data Access: Hospital Discharge

• State access commonly through hospital associations
• Data use requirements
  • Security and confidentiality
  • Restrictions on types of access and uses
    • Protected health information
• State injury programs often have access
• Data management issues
  • Large data sets, require different management
• Policies about reporting small numbers, rates
Data Access: ESSENCE

• Access to ESSENCE is restricted
  • Within state health department
  • By job function
  • Geographic restrictions on available data
• In Virginia, operates out of Division of Surveillance and Investigation
• May have to request data from similar work unit at state health department
Management and Analysis Resources

- Management and analysis skills with large data sets
- Training and experience with SAS, STATA or similar statistical software package
- Staff with experience working with ICD 9 CM coded data
- Familiarity with standards for reporting injury hospitalization data
- Familiarity with chief complaint/syndromic surveillance systems
Limitations

- Hospital Discharge
  - Non-representative cross-section of self-harm injuries
  - Reporting delay

- ESSENCE
  - Incomplete coverage
  - Text field data
  - Missing some types of data common to discharge datasets
Virginia’s Approach

- Leverage existing data systems
- Rely on data management protocols already in place
  - Develop as needed
- Develop skill base with new systems as they come on line
- Monitor data quality over time
- Collaboration
  - Injury/Violence Prevention team
  - Office of Family Health Services Epi Staff
  - Epi staff in other offices (Division of Surveillance and Investigation)
  - Data Managers in Office of Information Management
Reference