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

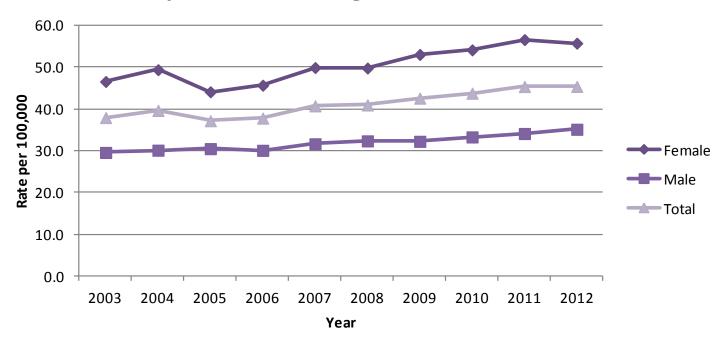
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Data Sources

- 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



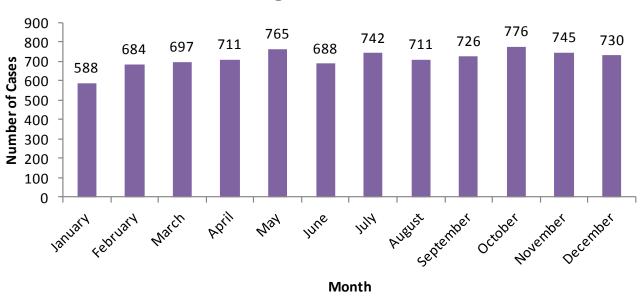
Data Sources

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- 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

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- 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

• Injury Surveillance Workgroup. Consensus Recommendations for Using Hospital Discharge Data for Injury Surveillance. Marietta (GA): State and Territorial Injury Prevention Directors Association; 2003. Accessed at: http://www.safestates.org/?page=ISWReports.

