

Supplementary Online Content

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eTable 1. Major surveillance systems capturing information about violence

eFigure 1. Estimates of the annual burden of child maltreatment and reporting to medical and safety authorities

eFigure 2. Estimates of the annual burden of intimate partner violence (IPV) and reporting to medical and safety authorities

eFigure 3. Estimates of the annual burden of adult violent crime and reporting to medical and safety authorities

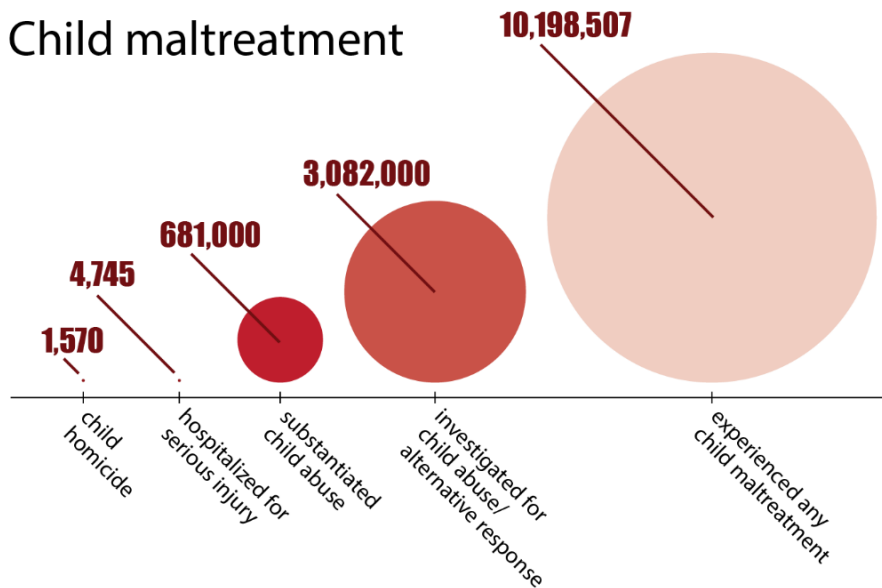
eReferences

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Major surveillance systems capturing information about violence

Data source	Description	Main measures of interest
National Vital Statistics System (NVSS)	CDC's National Center for Health Statistics compiles national vital registration data (including death certificate data) from states, territories, and the District of Columbia. The manner of death is coded using the International Classification of Diseases (ICD).	Homicide
Uniform Crime Reports (UCR)	Federal Bureau of Investigation aggregates crime data from local law enforcement agencies participating in the Uniform Crime Reporting Program throughout the U.S. Approximately, 18,000 agencies throughout the country contribute data to the program.	Murder and non-negligent manslaughter, aggravated assault
National Crime Victimization Survey (NCVS)	Bureau of Justice Statistics samples approximately 90,000 households (comprising about 160,000 individuals aged 12 or older) to understand the frequency, characteristics, and consequences of criminal victimization in the United States. Surveys are nationally representative and may occur in-person or over the phone. Each household is interviewed twice during the year.	Aggravated assault, simple assault, rape/sexual assault, robbery
National Survey of Children's Exposure to Violence (NatSCEV)	This a nationwide random-digit dial telephone survey of the incidence and prevalence of children's exposure to violence conducted by the U.S. Department of Justice with support from CDC. The survey interviews youth age 10 to 17 and caregivers for children who are younger than age 9. Survey topics cover crime, child maltreatment, multiple forms of victimization, witnessing violence, and school and Internet violence.	Maltreatment by a caregiver (includes physical abuse, emotional abuse, sexual abuse, neglect, custodial interference or family abduction)
National Child Abuse and Neglect Data System (NCANDS)	U.S. Administration on Children, Youth and Families (ACYF) Children's Bureau aggregates nationwide administrative data on child abuse and neglect from cases known to state child protective service (CPS) agencies.	Sexual abuse, physical abuse, neglect, substantiated child maltreatment, investigations for child maltreatment or alternative response provided
National Intimate Partner and Sexual Violence Survey (NISVS)	CDC conducts an annual national random-digit dial telephone survey of noninstitutionalized adults aged ≥ 18 years in the U.S. The survey gathers data on experiences of sexual violence, stalking, and intimate partner violence among adult women and men. The survey uses a dual-frame sampling strategy that includes both landline and cellular telephones and is designed to produce national and state-level estimates.	Intimate partner violence (physical, sexual, psychological); sexual violence and stalking by any perpetrator
Youth Risk Behavior Surveillance System (YRBS)	CDC conducts a biennial nationally representative school-based survey of 9th to 12th grade students on health risk behaviors such as alcohol, tobacco, and drug use; behaviors that contribute to unplanned pregnancy and sexually transmitted infections, including HIV; physical activity; and behaviors that contribute to unintentional injury and violence.	Physical fighting in school, physical or sexual teen dating violence, weapon carrying (including on school property)
National Electronic Injury Surveillance System—All Injury Program (NEISS-AIP)	CDC, in collaboration with the U.S. Consumer Product Safety Commission, gathers data on non-fatal injuries treated in U.S. emergency departments. These data are collected from a nationally representative sample of hospitals.	Non-fatal assault (physical and sexual) injuries treated in an emergency department

eFigure 1. Estimates of the annual burden of child maltreatment and reporting to medical and safety authorities^a



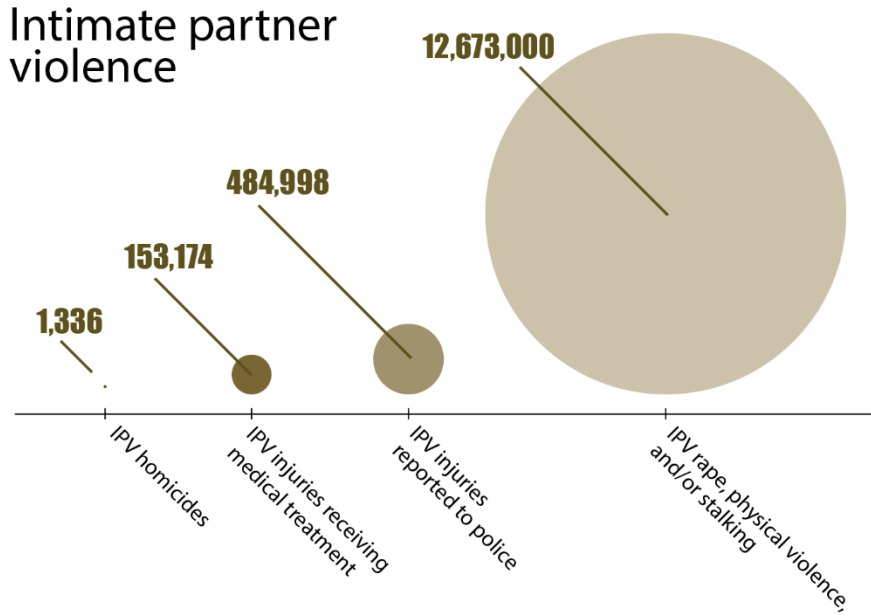
Measure	Child homicide	Hospitalized for serious injury	Substantiated child abuse	Investigated for child abuse/alternative response	Experienced any child maltreatment ^b
Unit of analysis	Children	Hospitalizations	Children	Children	Children
Data source and year	NCANDS, 2011	KID, 2009	NCANDS, 2011	NCANDS, 2011	NatSCEV II, 2011
Reported or observed no.	1545 from 51 states reporting	6.4 (95% CI, 5.7-7.2) hospitalizations per 100,000 children; child population of 74,134,167 from census bureau estimates, 2009 ¹	676,569 from 51 states reporting	3,049,679 from 51 states reporting	13.8% of 4503 children; child population of 73,902,222 from census bureau estimates, 2011 ¹
National estimate	1570	4745	681,000	3,082,000	10,198,507
Reference no.	2	3	2	2	4

NCANDS: National Child Abuse and Neglect Data System, KID: Kids' Inpatient Database, NatSCEV: National Survey of Children's Exposure to Violence
 Figure attempts to provide a crude estimate of the limited degree to which child maltreatment episodes are reported to child welfare agencies or attended to by clinicians. Child homicides, hospitalizations, and substantiated and investigated abuse can be interpreted as a subset of the total number of children maltreated however significant caution should be exercised as variables are drawn from different sources, have slightly different definitions, and thus are not perfectly nested. Substantiated child maltreatment cases are a subset of those children investigated for child abuse or receiving an alternative response. Year selected for display is the most recent year for which nearly all variables are available.

^a Circle sizes are weighted to the frequency of each event to indicate magnitude (circle for homicide and hospitalization added manually, would otherwise not be visible due to small count).

^b Child maltreatment committed by a caregiver includes physical abuse, emotional abuse, neglect, sexual abuse, or custodial interference/family abduction.

eFigure 2. Estimates of the annual burden of intimate partner violence (IPV) and reporting to medical and safety authorities ^a



Measure	IPV homicide	IPV injuries receiving medical treatment	IPV injuries reported to police	IPV rape, physical violence, and/or stalking ^b
Unit of analysis	Individual	Incidents	Incidents	Individual
Data source and year	UCR ^c , 2010	NCVS ^d , 2010	NCVS ^d , 2010	NISVS ^e , 2010
National estimate ^f	1336	153,174	484,998	12,673,000
Reference no.	⁵	⁶	⁶	⁷

UCR: Uniform Crime Reports, NCVS: National Crime Victimization Survey, NISVS: National Intimate Partner and Sexual Violence Survey

Figure attempts to provide a crude estimate of the limited degree to which intimate partner violence episodes are reported to police or receive medical attention. IPV homicides, injuries receiving treatment, and injuries reported to police can be interpreted as a subset of the total number of individuals reporting IPV episodes however significant caution should be exercised as variables are drawn from different sources, have slightly different definitions, and thus are not perfectly nested. Year selected for display is the most recent year for which all variables are available.

^a Circle sizes are weighted to the frequency of each event to indicate magnitude (circle for homicide added manually, would otherwise not be visible due to small count).

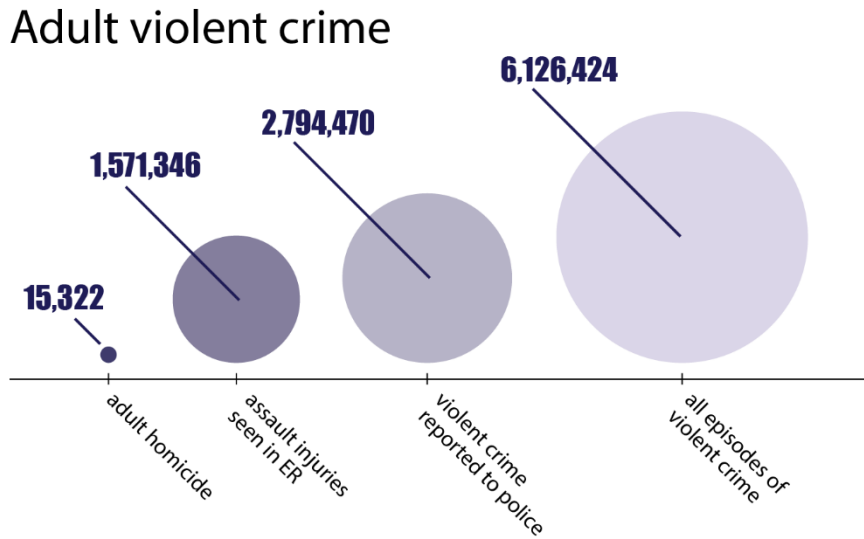
^b Rape defined as completed forced penetration, attempted forced penetration, or completed alcohol or drug facilitated penetration.

^c All ages with a victim-offender relationship specified as husband or wife (includes both common-law and ex-spouses), boyfriend, or girlfriend.

^d Respondents age ≥ 12 . Treated injuries defined as those receiving medical treatment at scene, home, medical office, or other location. Injuries defined as rape/sexual assault, simple assault, or aggravated assault committed by spouses or ex-spouses, boyfriends or girlfriends, and ex-boyfriends or ex-girlfriends. Unit of data collection listed an incidents because some individuals could possibly be counted more than once if experiencing multiple/repeat violence.

^e Respondents age ≥ 18 .

^f Row of reported/observed no. not provided as in child maltreatment example as the surveys cited directly estimate national counts; UCR data is official count data from reporting law enforcement agencies.

eFigure 3. Estimates of the annual burden of adult violent crime and reporting to medical and safety authorities^a

Measure	Homicide	Assault injuries seen in emergency room ^b	Violent crime reported to police ^c	All episodes of violent crime ^c
Unit of analysis	Individual	Incidents	Incidents	Incidents
Data source and year ^d	NVSS, 2013	NEISS-AIP, 2013	NCVS, 2013	NCVS, 2013
National estimate ^e	15,322	1,571,346	2,794,470	6,126,424
Reference no.	¹	¹	⁶	⁶

NVSS: National Vital Statistics System, NEISS-AIP: National Electronic Injury Surveillance System—All Injury Program, NCVS: National Crime Victimization Survey

Figure attempts to provide a crude estimate of the limited degree to which violent crimes are reported to the police or result in emergency department visits. Homicides, assaults seen in the ER, and events reported to police can be interpreted as a subset of the total number of violent crime episodes however significant caution should be exercised as variables are drawn from different sources, have slightly different definitions, and thus are not perfectly nested. Year selected for display is the most recent year for which all variables are available.

^a Circle sizes are weighted to the frequency of each event to indicate magnitude.

^b Assault injuries may be from either physical or sexual assaults.

^c Violent crime is a composite of aggravated assault, simple assault, robbery and rape/sexual assault.

^d All measures are for individuals age ≥ 12 . For NCVS, unit of data collection listed as incidents because some individuals could possibly be counted more than once if experiencing multiple/repeat violence.

^e Row of reported/observed no. not provided as in child maltreatment example as the surveys cited directly estimate national counts.

eReferences for online supplementary figures (eFigure 1, 2, 3):

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3. Leventhal JM, Gaither JR. Incidence of serious injuries due to physical abuse in the United States: 1997 to 2009. *Pediatrics*. Nov 2012;130(5):e847-852.
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7. Black MC, Basile KC, Breiding MJ, et al. The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. 2011.