

## Original Investigation

## Trends in Children's Exposure to Violence, 2003 to 2011

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**IMPORTANCE** The study suggests that years of public policy designed to reduce the burden of violence and victimization among youths is having some success.

**OBJECTIVE** To identify trends in children's exposure to violence, crime, and abuse from 2003 through 2011.

**DESIGN, SETTING, AND PARTICIPANTS** Three national telephone surveys of representative samples of children and caregivers from 2003, 2008, and 2011 were compared, all obtained using the Juvenile Victimization Questionnaire; samples included parents of children 2 to 9 years old and youth 10 to 17 years old.

**EXPOSURES** Direct and indirect experiences of violence, abuse, and victimization during the previous year.

**MAIN OUTCOMES AND MEASURES** Change in rates between 2003 and 2011 and between 2008 and 2011.

**RESULTS** Of 50 trends in exposure examined, there were 27 significant declines and no significant increases between 2003 and 2011. Declines were particularly large for assault victimization, bullying, and sexual victimization. There were also significant declines in the perpetration of violence and property crime. For the recession period between 2008 and 2011, there were 11 significant declines and no increases for 50 specific trends examined. Dating violence declined, as did one form of sexual victimization and some forms of indirect exposure.

**CONCLUSIONS AND RELEVANCE** Victimization surveys with general population samples confirm patterns seen in police data and adult surveys. Crime and violence have been declining in the child and youth population as well.

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Rates of violent crime have declined in the United States since the mid-1990s.<sup>1</sup> This decline includes violent crimes, property crimes, and sex crimes.<sup>2-4</sup> Children may also have benefitted from these trends. For example, rates of physical and sexual abuse substantiated by child protection authorities declined 56% and 63%, respectively, from 1992 to 2011.<sup>5,6</sup> Violence against youth aged 12 to 17 years, measured by self-report surveys such as the National Crime Victimization Survey, also declined substantially from the mid-1990s onward.<sup>7</sup> Surveys of bullying and school violence have shown similar large drops.<sup>8</sup>

We recently released a report that presented incidence estimates for a wide range of childhood exposures to violence and victimization for 2011 based on a national survey of children and caregivers.<sup>9</sup> Although that report looked at short-term changes since 2008, we also have the ability to look at changes during a longer period, since 2003.

We have completed 3 comprehensive national surveys of children's exposure to violence and abuse, in 2003, 2008, and 2011, which all used similar methods and questionnaires. Although we have reported some of the shorter-term changes in victimization rates,<sup>9</sup> we have not previously analyzed the changes over the longer period, nor have we analyzed the trends by demographic subgroups to see whether the changes may have affected children differentially. We have also added analyses of perpetration rates to compare with victimization trends.

## Methods

### Participants

This analysis draws on 3 similarly designed national telephone surveys: The Developmental Victimization Survey (2003)<sup>10</sup> and the National Survey of Children's Exposure to Vio-

lence (NatSCEV) I (2008)<sup>11</sup> and II (2011).<sup>9</sup> The primary foundation of the design for all 3 studies was a nationwide sampling frame of residential telephone numbers from which a sample of households was drawn by random digit dialing. The NatSCEV I was supplemented with oversamples of households in areas with high concentrations of minorities and low-income families, and the NatSCEV II was supplemented with 2 additional samples, a random digit dialing of cell phones, and an address-based sample<sup>9</sup> to represent the growing number of households that rely entirely or mostly on cell phones. Although the NatSCEV I and II had information on children and youth aged 1 month through 17 years, because the Developmental Victimization Survey had information only on children and youth aged 2 to 17 years, this more restricted age group was the basis of comparison among the surveys, yielding samples of 2030, 4046, and 4107 for 2003, 2008, and 2011, respectively.

### Procedure

In all 3 surveys, a short interview was conducted with an adult caregiver (usually a parent) to obtain family demographic information. One child was then randomly selected from all eligible children living in a household by selecting the child with the most recent birthday. If the selected child was 10 to 17 years old, the main telephone interview was conducted with the child. If the selected child was younger than 10, the interview was conducted with the caregiver who "is most familiar with the child's daily routine and experiences."

Respondents were promised complete confidentiality, provided oral informed consent, and were paid \$20 for their participation. Respondents who disclosed a situation of serious threat or ongoing victimization were recontacted by a clinical member of the research team, trained in telephone crisis counseling, whose responsibility was to stay in contact with the respondent until the situation was appropriately addressed locally. All procedures were reviewed and approved by the institutional review board at the University of New Hampshire.

### Measurement

#### Victimization

All 3 surveys used versions of the Juvenile Victimization Questionnaire, an inventory of childhood victimization described in detail elsewhere.<sup>12</sup> The 3 versions of this questionnaire differed slightly because survey questions were added and deleted over time. However, nearly all items common to the 3 versions retained identical wording over time, and items were asked in the same order in all 3 surveys. Specific items reflecting the events are included in eAppendix 1, and definitions of the rescored and aggregate victimizations in eAppendix 2, both in the Supplement. Although information was obtained on lifetime exposure to each victimization type, the trend analysis was conducted only on exposures that occurred in the past year. This is because lifetime exposure is less sensitive for documenting trends. Moreover, official data documenting trends are typically reported as a single-year incidence.

#### Delinquency

The 3 surveys also asked children and youth whether they had engaged in specific types of delinquent behavior in the past year.

For these analyses, 2 binary variables measuring violent delinquency and property delinquency were created for respondents 6 years or older from 7 items common to the 3 surveys.

### Demographics

Demographic information was obtained in the initial parent interview, including the child's sex, age (in years), race/ethnicity (coded into 4 groups: white non-Hispanic, black non-Hispanic, other race non-Hispanic, and Hispanic any race), socioeconomic status (SES), and family structure. Socioeconomic status is a composite based on the sum of the standardized annual household income and standardized parental education (for the parent with the highest education) scores, which was then re-standardized. Family structure was categorized into 3 groups: children living with (1) two biological or adoptive parents, (2) a biological parent plus partner (spouse or non-spouse), or (3) a single biological parent or other adult caregiver. *Region* refers to the census region (Northeast, Midwest, South, or West) where the child lives.

We used these demographic variables in two ways: (1) to control for the possibility that changing demographic composition of the 2- to 17-year-old US population might be responsible for changes in rates of children's exposure to violence and (2) to determine whether trends in exposure to violence are specific to certain demographic subgroups or regions of the country.

### Weighting

Each sample used weights to make it nationally representative of the population in the year of the survey by correcting for sample-population differences in race/ethnicity, age, and household income and for the differential probability of selection within households.

### Statistical Analysis

To facilitate comparing rates across time, comparable variables were first created in 3 separate data sets and then merged into a single pooled data file. Estimated rates were calculated by year using Stata 13 (StataCorp). Differences in rates between years were tested for significance using Stata's "lincom" post-estimation command. Rates were compared between 2003 and 2011 and between 2008 and 2011. Changes in overall rates are shown as point changes in Table 1 and Table 2.

Second, logistic regression models were used to test whether changes in overall rates were significant while controlling for demographic factors. Logistic regression models were tested with each victimization and delinquency type as the dependent variable, demographic variables as control variables, and dummy variables for year. Odds ratios from these regressions were used to derive percentage changes in rates which are shown in Tables 1 and 2. Finally, comparisons were made to determine if subgroups differed in their changes across time. Interaction terms for subgroup by year were added to the regression models in the second analysis, with 1 subgroup omitted in each regression as the reference group. Significant subgroup-by-year interaction terms indicated that the *difference* between the change for 1 group and the change for the reference group was significant.

**Table 1. Victimization Rates Across 3 Samples in 2003, 2008, and 2011<sup>a</sup>**

Victimization Type (Past Year)	Point Change (% Change) <sup>b</sup>	
	2003-2011	2008-2011
<b>Assault</b>		
Any physical	-9.3 (-33) <sup>c</sup>	-2.4 (-10)
Weapon	-2.5 (-36) <sup>d</sup>	-0.3 (-14)
Injury	-2.1 (-29) <sup>d</sup>	-0.7 (-6)
No weapon or injury	-8.6 (-31) <sup>c</sup>	-3.3 (-14)
Attempted assault	-1.2 (-21)	-0.2 (-7)
Kidnapping, attempted or completed	-0.2 (-46)	0.0 (-14)
Peer or sibling	-11.4 (-38) <sup>c</sup>	-2.2 (-8)
Genital	-0.1 (-5)	-0.6 (-8)
Dating violence (age ≥12 y)	-1.3 (-39)	-2.2 (-53) <sup>d</sup>
Bias attack	-0.1 (-8)	0.1 (12)
Physical intimidation	-8.0 (-43) <sup>c</sup>	-0.3 (2)
Emotional victimization	-3.9 (-22) <sup>d</sup>	-0.4 (-3)
<b>Sexual victimization</b>		
Any sexual victimization	-1.9 (-27) <sup>e</sup>	-1.0 (-17)
Sexual assault	-0.8 (-30)	0.0
Rape, completed	-0.1 (-38)	0.2 (206)
Rape, attempted or completed	-0.8 (-43) <sup>e</sup>	-0.2 (-7)
Sexual assault by known adult	0.1 (54)	0.1 (12)
Sexual assault by adult stranger	-0.1 (-22)	0.0 (-31)
Sexual assault by peer	-0.3 (-21)	0.3 (38)
Flashing by peer	-1.0 (-41) <sup>e</sup>	-1.2 (-43) <sup>e</sup>
Flashing by adult	-0.1 (-19)	-0.2 (-48)
Sexual harassment (age ≥6 y)	-0.7 (-20)	0.2 (11)
Statutory sexual offense (age ≥12 y)	-3.0 (-57) <sup>d</sup>	-0.8 (-14)
<b>Maltreatment</b>		
Any maltreatment	-2.3 (-26) <sup>d</sup>	-0.6 (-3)
Physical abuse	0.2 (2)	-0.9 (-20)
Emotional abuse	-2.3 (-27) <sup>d</sup>	0.2 (5)
Neglect	-0.2 (-33)	-0.4 (-23)
Custodial interference	-0.2 (-39)	0.0
<b>Property victimization</b>		
Any property victimization	-7.1 (-34) <sup>c</sup>	-3.0 (-13)
Robbery	-1.0 (-15)	-1.1 (-20)
Vandalism	-3.2 (-26) <sup>e</sup>	-1.5 (-9)
Theft	-4.9 (-36) <sup>c</sup>	-1.4 (-9)
<b>Witnessing or indirect victimization</b>		
Any witnessing or indirect victimization	-5.3 (-28) <sup>c</sup>	-1.2 (-12)
Witnessing partner assault	0.3 (-9)	0.0 (-11)
Witnessing physical abuse	0.0 (-8)	-0.8 (-48) <sup>d</sup>
Witnessing assault with a weapon	-6.3 (-52) <sup>c</sup>	-0.8 (-19)
Witnessing assault with no weapon	-5.3 (-35) <sup>c</sup>	-1.2 (-10)
Exposure to shooting, bombs, or riots	-1.0 (-28)	-1.4 (-36) <sup>e</sup>
Exposure to war	0.3 (111)	-0.1 (-48)
Murder of someone close	-0.1 (-9)	-0.8 (-34) <sup>e</sup>
Household theft	-2.1 (-28) <sup>e</sup>	1.0 (8)

<sup>a</sup> Samples included 10 183 children and youth aged 2 to 17 years.

<sup>b</sup> Percentage change is based on logistic regression odds ratio obtained while controlling for sex, age, race, family structure, socioeconomic status, and census region.

<sup>c</sup> *P* < .001.

<sup>d</sup> *P* < .01.

<sup>e</sup> *P* < .05.

**Table 2. Delinquency Rates Across 3 Samples in 2003, 2008, and 2011<sup>a</sup>**

Delinquency	Point Change (% Change) <sup>b</sup>	
	2003-2011	2008-2011
Any violent delinquency	-9.4 (-48) <sup>c</sup>	-5.0 (-30) <sup>c</sup>
Hitting, slapping, or pushing other children	-8.2 (-46) <sup>c</sup>	-4.0 (-26) <sup>d</sup>
Hitting, slapping, or pushing adults	-2.7 (-66) <sup>c</sup>	-2.0 (-48) <sup>d</sup>
Any property delinquency	-8.5 (-51) <sup>c</sup>	-6.5 (-40) <sup>c</sup>
Vandalizing property	-7.1 (-67) <sup>c</sup>	-3.7 (-49) <sup>c</sup>
Stealing something at school	0.3 (2)	0.4 (17)
Stealing something at home	-0.8 (-26)	-0.9 (-13)
Shoplifting	-2.2 (-50) <sup>c</sup>	-2.7 (-45) <sup>d</sup>
Graffiti	-1.8 (-52) <sup>d</sup>	-1.0 (-36)

<sup>a</sup> Samples included 7656 children and youth aged 6 to 17 years.

<sup>b</sup> Percentage change is based on logistic regression odds ratios obtained while controlling for sex, age, race, family structure, socioeconomic status, and census region.

<sup>c</sup> *P* < .001.

<sup>d</sup> *P* < .01.

## Results

Past-year assault rates against children showed a broad decline from 2003 to 2011 (Table 1). The decline was 9.3 points, or 33%. Significant declines occurred during the entire period for assaults involving weapons or injuries and assaults by peers and siblings. Rates of physical intimidation and emotional victimization (bullying) also declined during this period; physical intimidation dropped 8 points, or by more than one-third. Sexual victimization rates declined significantly from 2003 to 2011, down by 25%. In regard to specific forms, rates of rape, flashing, and statutory sex offenses were reduced significantly. The rate of child maltreatment declined by 26% from 2003 to 2011; this decline was significant only for emotional abuse and did not pertain to physical abuse, which was unchanged. Property victimization rates for children declined overall from 2003 to 2011, particularly for vandalism and theft. Children's exposure to household theft also declined during this period. Reports of children witnessing violence declined overall from 2003 to 2011. Delinquent behavior also declined during this period (Table 2). Violent delinquency rates were reduced by almost half between 2003 and 2011, as were rates of property delinquency. To summarize, of 50 specific trends examined between 2003 and 2011, there were 27 significant declines and no significant increases.

The overall trends from 2008 to 2011 have been reported elsewhere,<sup>9</sup> but without the controls for possible demographic shifts and without the perpetration items. Only 11 of the 50 tested trends showed significant declines during this more recent period, with no significant increases. Assault rates declined by 10% from 2008 to 2011, particularly for assaults with no weapon or injury, assaults involving peers and siblings, and dating violence (Table 1). Since 2008, overall sexual victimization rates were not down significantly, but the rate of flashing was. There were significant declines for

Table 3. Differences in Victimization Change by Demographic Subgroups From 2003 to 2011 and From 2008 to 2011<sup>a</sup>

Victimization Type	Age Group, y		Socioeconomic Status			Family Structure			Sex	
	2-9	10-17	Low	Medium	High	2 Parents	Parent and Stepparent or Partner	Single Parent or Other Caregiver	Female	Male
<b>2003 to 2011</b>										
Physical assault	-6.8	-11.4	-14.5	-6.0	-14.5	-8.7	-18.3	-8.0	-8.2	-10.6
Assault with no weapon or injury	-4.1*	-12.8*	-15.7 <sup>†</sup>	-5.7 <sup>†</sup>	-11.1	-6.6	-16.5	-8.8	-7.7	-9.7
Attempted assault	1.4*	-3.8*	-3.2	-1.0	-0.3	-0.3	-2.1	-4.0	0.1	-2.6
Assault by peer or sibling	-9.1	-13.7	-16.1	-8.9	-15.8	-10.0	-17.7	-11.7	-12.1	-11.1
Genital assault, nonsexual	-0.9	0.6	-2.3	-0.8	-1.0	-0.4	-0.8	-0.7	-2.0 <sup>‡</sup>	1.5 <sup>‡</sup>
Dating violence (age ≥12 y)	-	-1.3	-0.3	-1.0	-2.9	-1.8	1.6	-1.8	0.7 <sup>‡</sup>	-3.2 <sup>‡</sup>
<b>Maltreatment</b>										
Any maltreatment	-1.0	-3.7	-9.5 <sup>†,§</sup>	-1.0 <sup>†</sup>	1.4 <sup>§</sup>	-1.3 <sup>  </sup>	-16.9 <sup>  </sup>	-2.8	-1.6	-3.0
Emotional abuse	-3.3	-1.3	-7.9 <sup>†,§</sup>	-1.7 <sup>†</sup>	2.6 <sup>§</sup>	-1.9	-4.5	-4.2	-1.3	-3.1
<b>2008 to 2011</b>										
Physical assault	0.4	-6.7	-0.7	-2.2	-2.1	0.0	-7.0	-5.1	-2.4	-2.2
Assault with no weapon or injury	0.1*	-6.5*	-3.1	-3.0	-2.0	-0.1 <sup>  </sup>	-7.4	-7.5 <sup>  </sup>	-3.7	-3.0
Attempted assault	2.0	-2.6	-2.4	0.3	-0.4	0.6	-1.1	-1.4	1.0	-1.4
Assault by peer or sibling	-0.2	-4.1	-1.2	-2.2	-2.3	0.4	-3.3	-6.2	-3.2	-1.2
Dating violence (age ≥12 y)	-	-1.8	1.0	-3.0	-2.3	-1.8	0.7	-3.7	-0.6 <sup>‡</sup>	-3.7 <sup>‡</sup>
Property victimization	-7.2*	-1.0*	-1.4	-3.7	-5.1	-3.1	-11.5	-1.1	-2.87	-3.09

<sup>a</sup> Values represent point changes across time. Samples included 10 183 children and youth aged 2 to 17 years. Symbols denote changes that differed significantly from those in comparison group with the same symbol ( $P < .05$ ).

witnessing abuse of other children in the household; for exposure to shooting, bombings, or riots; and for having someone close murdered. Since 2008, both violent delinquency and property delinquency rates also declined (Table 2).

We also conducted analyses to study whether the trends were specific to certain demographic subgroups of children. Few trends were specific to demographic subgroups, and only the categories and types of victimization with some significant trends are included in Table 3. From 2003 to 2011, youth (aged 10-17 years) had significantly larger declines than did younger children (aged 2-9 years) for assault with no weapon or injury ( $P = .004$ ) and attempted assault ( $P = .01$ ). Compared with children and youth from families with medium and high SES, those from families with low SES had significantly larger declines in overall maltreatment (low vs medium SES,  $P = .004$ ; low vs high SES,  $P = .002$ ) and for emotional abuse (low vs medium SES,  $P = .01$ ; low vs high SES,  $P = .001$ ). Children from families with stepparents had a significantly larger decline in overall maltreatment than children from 2-parent families ( $P = .02$ ). Boys had a significantly larger decline than girls for dating violence victimization ( $P = .02$ ), and girls had a larger decline for nonsexual assault to the genitals ( $P = .003$ ).

In the more recent period, 2008 to 2011, younger children had larger declines in property victimization rates ( $P = .046$ ). Children and youth from single-parent families had larger declines for assault with no weapon than those from 2-parent homes ( $P = .02$ ), and boys had more decline in dating violence than girls ( $P = .02$ ).

## Discussion

From 2003 to 2011, there were considerable declines in children's past-year exposure to violence, crime, and abuse. Of 50 specific trends examined, 27 showed significant declines, with no significant increases. Declines were particularly large for rates of physical assault, physical intimidation, and sexual victimization. The declines in victimization were validated, as might be expected, by drops in youth perpetration rates as well. This certainly suggests that the decline seen for crime in general applies to children and youth.

The recession era that started in 2008 did not seem to reverse downward trends, although there were fewer significant declines detectable during this shorter period from 2008 to 2011, with 11 declines among 50 specific trends examined. Assault rates continued to decline, as did rates for one form of sexual victimization and some forms of indirect exposure. Perpetration of violence and property offenses continued to decline. This suggests that although the recession may have caused much hardship, it did not translate into more violence and crime exposure for children and youth.

This finding is consistent with other evidence. The National Crime Victimization Survey showed continuing post-2008 declines in violent crime and property crime exposure among youth.<sup>7,8,13</sup> In addition, rates for substantiated child maltreatment fell from 2008 to 2011, including declines for sexual abuse.<sup>5</sup> Police reports of crime and homicide also dropped.

On the other hand, some contradictory evidence exists. Research has found an increase in hospital-treated abusive head trauma cases in 3 regions from 2007 to 2009.<sup>14</sup> Physical abuse and traumatic brain injury hospital admissions were associated with the mortgage delinquency and foreclosure rate but not the unemployment rate, in data from 2000 to 2009.<sup>15</sup> Both of these studies concern small, although serious, segments of the childhood violence exposure spectrum, and they did not cover the full recession period; they also considered types of victimization and part of the age spectrum (very young children) not assessed in our study.

The overarching epidemiologic picture seems to show substantial drops in violence and abuse exposure during the 1990s, with continuing declines during the 2000s that have not been reversed by the economic adversities of the 2008 recession. These declines have occurred for many kinds of exposure, including assault, bullying, sexual assault, property crime, and witnessing violence. Our data suggest that they have occurred for boys and girls and for children of all races, in all regions, and in cities and nonurban areas. However, some differentials were noteworthy. The declines in assaults were significantly larger for teens than for younger children, although they occurred for both. The declines in maltreatment had some differential strength among low-SES and stepparent families.

Some caveats about our findings are warranted. First, even with our large samples, the confidence intervals around rate estimates are large enough that the exact percentage declines are not precise. In addition, some of the categories have very few events, making it difficult to detect change, especially in the analysis of subcategories such as sex, SES, or family structure. Second, the findings do not apply to children younger than 2 years, and there are some indications from other studies that trends in this group might differ from trends for other children. Third, we cannot exclude the possibility that some methodologic artifact, for example, the shifts from landline to cell phone use, may explain some of the trends. However, parallel trends in agency and police data as well as in surveys conducted in school environments make it less likely that methodologic differences explain the declines.

What might account for these trends? Demographic factors do not seem to account for the overall decline. The declines held when age, SES, racial composition, family structure, and region were controlled for.

Other factors would be worth investigating as possible sources of these declines but are beyond the analytic resources of this study. One may be the growth and dissemination of prevention and intervention strategies aimed at reducing youth violence and victimization. Anecdotal information suggests that a variety of programs have been widely disseminated before and during our study period. These include school-based prevention programs targeting bullying, interpersonal conflict, and sexual and dating violence—some of which have been effective in rigorous evaluation studies.<sup>16-19</sup> The disseminated programs also include family prevention and intervention strategies that have shown effectiveness in reducing child maltreatment and delinquent behavior, including parenting education programs.<sup>20-25</sup> Some of the most widely

disseminated programs, such as home visitation, have been differentially effective with low-income families,<sup>23</sup> consistent with the findings from our data. The programs include law enforcement mobilization to reduce youth violence and victimization, including school resource officers.

One potentially relevant intervention has been the growing use of psychiatric medication among youth and adults.<sup>26,27</sup> This survey showed continuing growth from 2008, when 5.6% of children and youth were taking such medication, to 2011, when the rate was 7.8%. Such medication has been specifically targeted at children with aggressive behavior, which showed clear declines in this study. More teens than younger children receive such medication, consistent with our finding about differential declines for older youth. Medication use has also expanded for adults with depression and anxiety, perhaps resulting in less intrafamily conflict and better parenting and child supervision.

Another possible factor in reducing youth violence exposure and delinquency is the growth of electronic technology and communication. As youth socialize and communicate electronically, they may be spending less time in face-to-face contact situations where assaults and violence can occur.<sup>28,29</sup> Youth may also be doing more of their risk taking and independence testing online, which may provide some safeguards against immediate physical exposure to violence. The engrossing quality of the Internet may also have undercut some of the boredom and alienation among youth that have in the past been associated with delinquency and criminal pursuits.<sup>28,30</sup> Electronic media use has grown particularly dramatically among blacks and Hispanics in recent years.<sup>30</sup> At the same time, when children and youth do get into threatening situations, cell phone technology now affords them a way of summoning help or recording misbehavior, which may act as a deterrent.<sup>31,32</sup>

The issue of whether and how economic conditions may apply to youth violence exposure needs more investigation. Our findings and those of other research, however, suggest that the link may be less strong than is sometimes assumed. It is true that some of the largest declines in youth violence and victimization occurred in the mid-1990s at a time of strong economic growth and economic optimism,<sup>33</sup> but declines have continued when economic conditions turned negative. Review articles on the effect of economic cycles on crime have generally concluded that the effect is questionable and better supported for property crime than for violent crime.<sup>34</sup>

More media and policy attention to declines in youth violence and exposure is important for several reasons. It is important to buffer widely held assumptions (often derived from high-profile media stories, such as those on school shootings, Internet predators, or bullying-related suicides) that violence and abuse are on the rise, along with the facile blaming of easy targets, such as video games, the Internet, funding cutbacks, parental laxness, and insufficient criminal penalties. Features of social change may have negative effects, but evidence for such effects cannot be derived from invoking claims about worsening exposure to violence.

Focusing attention on the declines may also help us to better understand what may be effective in preventing violence and

extending such improvements. Although evaluations of specific prevention programs are the most conclusive for guiding prevention strategy, studies comparing local policy environments and their association with violence trends could be helpful in providing feedback about the value of various policy mixes. Epidemiologic studies addressing specific hypotheses, such as the effects of psychiatric medication or cell phones, may provide guidance for the development of more specific programs to increase the positive influence of such social changes.

## Conclusions

The public health field has clearly demonstrated the value of good epidemiologic data for managing and reducing a variety

of health problems. Unfortunately, the need for such data has received less recognition in the fields of crime and child abuse. Given the considerable public concern and policy activity in these areas, however, high-quality epidemiologic data should be a top priority. This should include more comprehensive and regular assessments of many childhood exposures that are still poorly measured, including sexual abuse (particularly sexual abuse by teachers and coaches), neglect, bullying, and child abductions. Our current findings illustrate the value of tracking trends, but our study was not large enough for detecting changes in low-base-rate exposures. More work is also needed to refine measurement and assess the percentages of child survivors of violence who are or are not coming to the attention of physicians, educators, therapists, or law enforcement officials.

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