



# RESEARCHERS

## Bullying is a public health problem.

Bullying has long been tolerated by many people as a rite of passage among children and teens. But bullying is not a normal part of childhood. It is a serious public health problem. ***Bullying harms the child who is bullied, the child who is the bully, and the bystanders.***

## There are four main types of bullying:

1. **Physical bullying** involves the use of physical force (such as shoving, hitting, spitting, pushing, and tripping).
2. **Verbal bullying** involves words or writing that cause harm (such as taunting, name calling, offensive notes or hand gestures, verbal threats).
3. **Relational bullying** is behavior designed to harm the reputation and relationships of the targeted youth (such as social isolation, rumor-spreading, posting mean comments or pictures online).
4. **Damage to property** is theft or damaging of the target youth's property by the bully in order to cause harm.

Cyberbullying is not a separate type of bullying, but a way in which some types of bullying can happen. For example, verbal bullying and relational bullying can happen online.

Bullying can happen as early as preschool, but bullying is most likely to happen during middle school. It can happen in many different settings—in classrooms, in school gyms and cafeterias, on school buses, and online.

## THE LANDSCAPE OF BULLYING





## Bullying affects a large number of children and youth.

School-based bullying probably affects between 18 and 31 percent of children and youth, and cyberbullying probably affects about 7 to 15 percent of youth. Some young people are more likely to be bullied: youth with disabilities, obese youth, and lesbian, gay, bisexual, and transgender (LGBT) youth.

## The harm caused by bullying can last a long time.

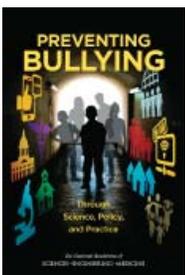
Bullying can have long-lasting effects on youth who are bullied, for youth who bully others, and for youth who witness bullying. These consequences include poor school performance, anxiety, depression, and future delinquent and aggressive behavior. The harmful results of being bullied can last into adulthood.

Bullying can have long-lasting consequences for those who are bullied:

- Children and youth who have been bullied can experience problems such as sleeping problems, headaches, stomachaches, and bedwetting.
- Psychological problems are also common after being bullied, and can include depression, anxiety, and especially for girls, self-harming behavior. Anger, aggression, use of alcohol, and conduct problems are common, especially for boys.
- Children and youth who have been bullied can suffer academic problems such as poor grades or test scores.
- The harmful consequences of being bullied can last into adulthood.
- Children and youth who both bully others and are bullied themselves are at even greater risk of experiencing harm as a result.
- Individuals who are bullied or who bully others—or both—are much more likely to consider or attempt suicide, compared to children who are not involved in bullying.

## Bullying CAN Be Prevented.

Reducing the presence and impact of bullying will require many groups working together: families and schools, communities, health care workers, the media and social media, and federal and state governments and agencies.



[www.nas.edu/ScienceOnBullying](http://www.nas.edu/ScienceOnBullying)



## More research is needed on bullying.

Filling certain research gaps will lead to a more comprehensive understanding of the consequences of bullying for children and youth; the dynamic between the bullying perpetrator and target; and factors that contribute to resilient outcomes of children and youth involved in bullying—whether as the perpetrators, the target, or a bystander. The table below summarizes needed research. (Chapter 7 in this report provides the committee’s specific recommendations for research in detail.)

GENERAL CATEGORY	SPECIFIC RESEARCH NEEDS
<b>Behavioral health consequences of bullying</b>	Conduct longitudinal research to track children through adulthood in order to more fully understand links among being bullied, substance abuse, and other behaviors including violence and aggression.
<b>Consequences of bullying on brain function</b>	Probe how and why bullying alters brain functioning.
<b>Digital devices and cyberbullying</b>	Better understand usage of digital devices among younger children and how these devices are used in cyberbullying.
<b>Educators and education support professionals</b>	Better understand the roles of educators, education support professionals (e.g., cafeteria workers, school bus drivers), and school resource officers in preventing and intervening in bullying.
<b>Epigenetic consequences of bullying</b>	Investigate epigenetic changes, such as in DNA methylation and bullying.
<b>Genetic predisposition to mental health outcomes and bullying</b>	Understand the role of genetic influences on both bullying and victimization; for example, studies that examine bullying perpetration in relation to serotonin transporter polymorphisms.
<b>Health care professionals</b>	Investigate evidence-based practices for integrating content on bullying preventive interventions into curricula for health care professionals.
<b>Law and policy</b>	<p>Conduct systematic evaluation of local policies to: (1) understand which components of anti-bullying policies must be included in an anti-bullying law to ensure a positive impact; (2) determine the full range of remedies available under state and local laws and policies; and (3) assess the capacity of federal antidiscrimination laws to address various forms of bullying.</p> <p>Investigate state civil rights laws, the balance between schools’ authority and students’ rights to freedom of expression and privacy, and moderating factors to more fully understand for whom anti-bullying policies are most and least effective, including whether they are effective in reducing disparities in bullying.</p> <p>Investigate anti-bullying policy implementation.</p>
<b>Media</b>	<p>Understand the risks and opportunities associated with media-focused campaigns and social-norms-based interventions in relation to bullying.</p> <p>Conduct research on cyberbullying prevention programs.</p> <p>Track bullying incidents and conduct research on the effectiveness of media companies’ policies in addressing cyberbullying.</p>
<b>Neuroendocrinology of stress</b>	<p>Examine the relation between bullying, sleep, learning/memory, and cortisol dysregulation.</p> <p>Explore how testosterone and cortisol interact together in relation to being a target or perpetrator of bullying, or both.</p>
<b>Parents</b>	<p>Explore the role parents play in helping youth navigate social challenges and adapting to stress.</p> <p>Support additional research and evaluation of programs developed specifically to prevent bullying is essential.</p>



GENERAL CATEGORY	SPECIFIC RESEARCH NEEDS
<b>Peers as a Context</b>	Explore the effects of peers on bullying, especially peers as bystanders and as leaders of anti-bullying programming.
<b>Physical health consequences of bullying</b>	Examine the physical health consequences for children and youth who bully and for those who both bully and are bullied, including how outcomes vary over time for different groups of youth, why individuals with the same bullying and victim experiences may have different physical health outcomes, and how physical and emotional health outcomes intersect over time.
<b>Prevalence of bullying</b>	Study the disparities in prevalence between different groups (e.g., LGBT youth, overweight/obese youth, youth with specific developmental disabilities, socioeconomic status, immigration status, minority religious status, youth with intersectional identities, urbanicity).
<b>Preventive interventions</b>	<p>Understand the role of social-cognitive and emotion regulation processes as targets for preventive interventions.</p> <p>Conduct more large-scale, rigorous studies on the combined effects on bullying of multi-tiered programs.</p> <p>Develop systematic studies to assess the impacts of selective and indicated programs on bullying.</p> <p>Investigate evidence-based interventions that are targeted toward youth from vulnerable populations (e.g., LGBT youth, youth with chronic health problems, and youth with developmental disabilities) to reduce bullying-related disparities.</p> <p>Study how to improve the adoption and implementation of evidence-based programs, including testing models to better understand what works for whom and under what conditions.</p>
<b>Protective factors and contexts</b>	<p>Identify contexts that are uniquely protective for subgroups of youth, particularly those who are vulnerable to bullying.</p> <p>Explore more fully the ways in which school ethnic diversity can be a protective factor, the contextual factors that make teachers more or less likely to intervene; and the role(s) of school diversity clubs, extracurricular programs, acculturation, virtual and media contexts, and the policy context.</p>

## Researchers can support efforts to understand and prevent bullying.

- Researchers can seek funding to place a greater emphasis on this topic in their current research.
- Research can compare different methods and operational definitions of bullying to determine the impact of different definitions on prevalence and incidence rates, changes over time, or effects of interventions on outcome behaviors.
- Researchers can support wide adoption and use of a consistent definition of bullying.
- Researchers should collaborate further to share their data and information.
- Research should focus not only on children who are targets of bullying but also on children who are perpetrators of bullying behavior or bystanders.