



# Psychiatric Aspects of Student Violence

2015

CSMH Conference

**William Dikel, M.D.**

**Independent Consulting**

**Child and Adolescent**

**Psychiatrist**

# School Shootings and Student Mental Health - What Lies Beneath the Tip of the Iceberg

National School Board Association  
Council of School Attorneys

William Dikel, M.D.  
Independent Consulting Psychiatrist  
dikel002@umn.edu  
[www.williamdikel.com](http://www.williamdikel.com)

False

# Youth Violence

Mass media tends to focus on dramatic, very rare events of youth violence such as mass murder school shootings

In fact, most adolescent homicides are committed in inner cities and outside of school. They most frequently involve an interpersonal dispute and a single victim.



On average seven youths are murdered in this country each day. Most of these are inner-city minority youths.

From the  
National Youth Violence  
Resource Center:

# Youth as Victims of Violence

1 in 5 victims of serious  
violent crime are  
between the ages of 12  
and 17.

Youth aged 12-17  
are three times as likely as  
adults to be victims of simple  
assault and twice as likely to be  
victims of serious violent crimes

About 1 in 20 high- school seniors say they have been injured with a weapon in the past year,

and almost 1 in 7 say someone has injured them on purpose without a weapon.

More than 1 in 3 high-school students say they have been in a physical fight in the past year, and about 1 in 9 of those students required medical attention for their injuries.

More than 1 in 6 sixth  
to tenth graders say  
they are bullied  
sometimes, and more  
than 1 in 12  
say they are bullied  
once a week or more.



# Youth Perpetrators of Violence

About 1 in 9 murders  
are committed by  
youth under 18. On  
average, about 5  
youths  
are arrested for murder  
in this country each  
day

Youth under 18  
account for  
about 1 in 6  
violent crime  
arrests

For every teen  
arrested, at least 10  
were engaged in  
violence  
that could have  
seriously injured or  
killed another  
person.

A review of surveys found that between 30-40% of male teens and 16-32% of female teens say they have committed a serious violent offense by the age of 17.

Almost 1 in 20  
high-school  
students say  
they have  
carried a gun in  
the past month.

Almost 1 in 4  
teens report  
having easy  
access to guns  
at home.

# School Violence



Almost 1 in 14 students (and  
more than 1 in 10 male  
students) said they had carried  
a weapon  
to school in the past month

More than 1 in 13  
students said they had  
been threatened or  
injured with a weapon  
such as a  
gun, knife, or club on  
school property in the  
past year

However, less than 1% of all violent deaths of school-aged children and teens occur in or around school grounds or on the way to and from school

Youth ages 12-18  
were twice as likely to  
become victims of  
serious violent crimes  
when they were away  
from school

Between 20 and 45% of boys  
who commit serious violent  
crimes by  
the age of 16 or 17 were violent  
as children

45 to 69% of violent  
girls were violent in  
childhood

Teens who were engaged in serious violence before the age of 13 generally commit more crimes, and more serious crimes, than those teens who start later

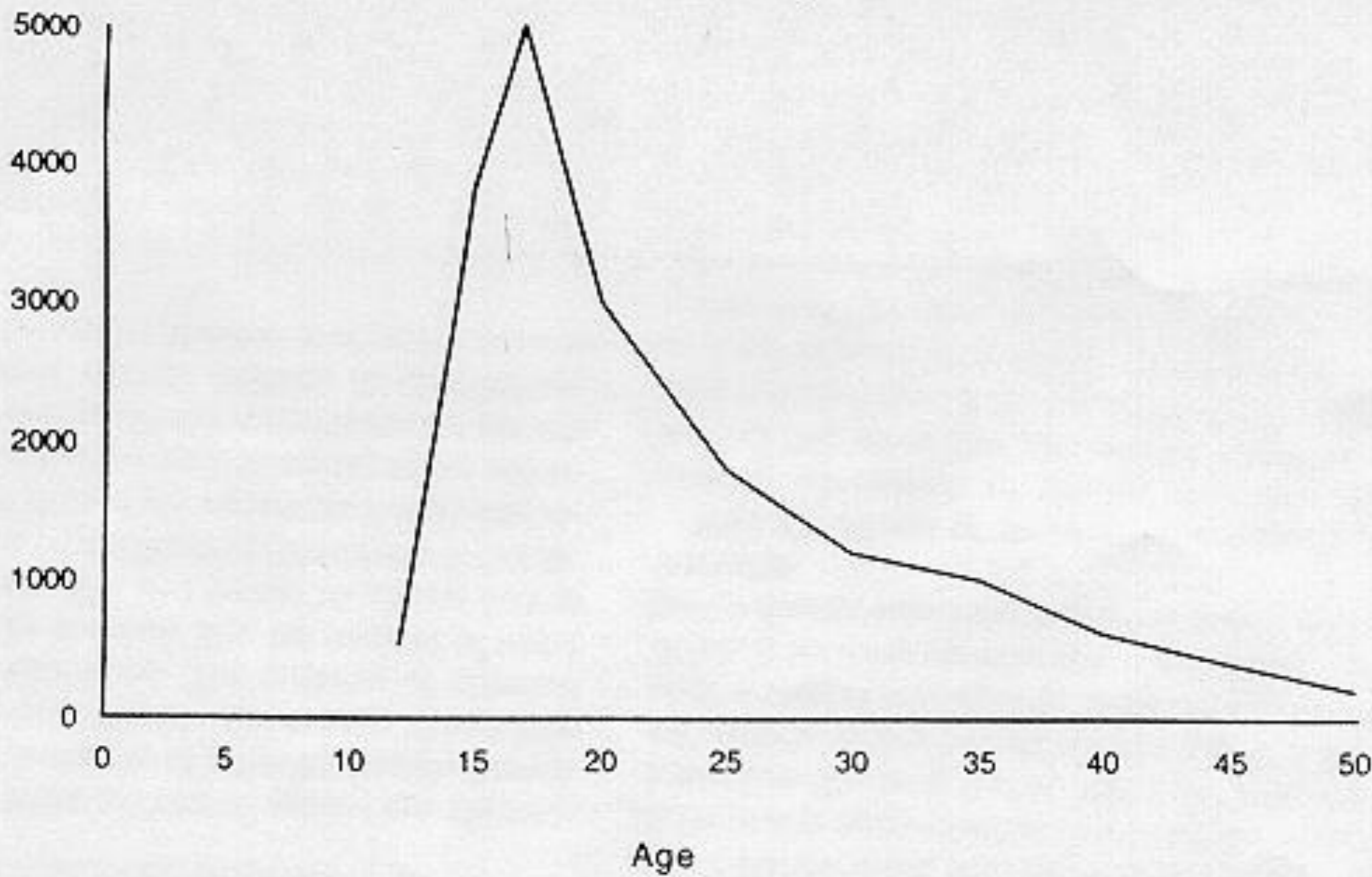
They are  
also more likely to  
continue to engage  
in violence into adulthood



The earlier the age of onset of antisocial behaviors, the more severe they tend to be and the more likely that they will persist into adulthood

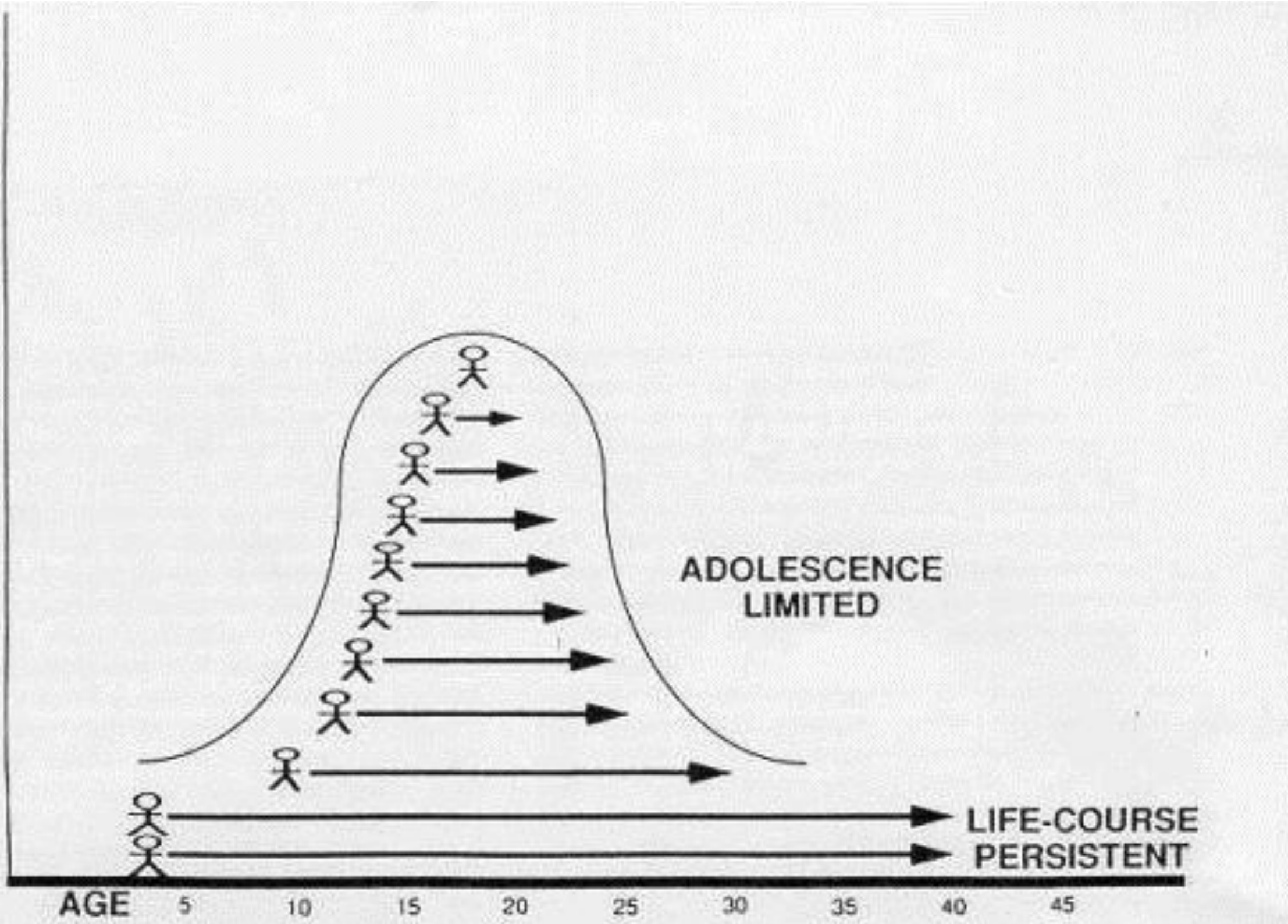
Only about 20% of all  
seriously violent teens  
continue  
to commit violent acts as  
adults

FBI index arrests per 100,000 population



PREVALENCE OF ANTISOCIAL BEHAVIOR

100%  
90%  
80%  
70%  
60%  
50%  
40%  
30%  
20%  
10%



# Risk Factors for Youth Under Age 13

Early involvement in serious criminal behavior, early substance use, being male, a history of physical aggression toward others, low parent education levels or poverty, and parent involvement in illegal activities

# Risk Factors for Youth Over Age 13:

Friendships with antisocial or  
delinquent peers,  
membership in a gang, and  
involvement in other criminal  
activity



So, multiple factors  
contribute to and  
shape antisocial  
behavior over the  
course of development

Many of these are within the social environment. Peers, family, school, community and neighborhood contexts shape, enable and maintain antisocial behavior, aggression and related behavior problems.

# Risk Factors for Violence in Parents

- Previous violence
- Young age at first violence
  - Relationship instability
  - Employment problems
  - Substance use problems

- Psychopathy
- Early maladjustment
- Personality disorder
- Prior supervision failure  
at work

- Lack of insight
- Negative attitudes
- Active symptoms of major mental illness
  - Impulsivity
- Unresponsive to treatment

So, risk factors in the home environment:

- Weak bonding

- Ineffective parenting (poor monitoring, inconsistent discipline, inadequate supervision)

- Exposure to violence in the home

- An environment that supports aggression and violence

**Risk factors in the child or adolescent:**

- Early conduct problems**
- Attention-Deficit Hyperactivity Disorder and associated impulsivity and poor judgment**
- Depression**
- Anxiety disorders**
- Lower cognitive and verbal abilities**



## External risk factors:

- Peer rejection
- Competition for status and attention
- Association with antisocial peers who are experiencing academic failure
- Peers who engage in violent activities

Life course persistent behaviors  
are correlated with neurological  
deficits, language deficits,  
cognitive deficits and are  
exacerbated by stressful home  
situations

Youth with conduct problems plus a mental health disorder such as ADHD, Depression or Anxiety Disorders are more likely to engage in aggression than youth who only have conduct problems.

Research indicates that placing violent youth together in programs (e.g., Setting IV sites for Emotionally Disturbed delinquent students) increases the risk of violent behavior

Although students with the characteristics outlined above tend to be at a higher risk of violence, there are also those who are not conduct disordered, but who suffer from mental health problems.

Some of these students have been victims of significant bullying. Their fragile mental health status and severe mental health symptoms may “push them over the edge” into committing violent acts

Highly adaptive parenting, good verbal ability and success in school are protective factors against antisocial behavior

# Predicting Violence



**“Prediction is very difficult-  
especially about the future.”**

**Niels Bohr**  
Danish Physicist  
Nobel Laureate

**The best predictor of future  
violence is past violence**

The vast majority of people who are violent do not have psychiatric disorders.

The vast majority of people who have psychiatric disorders are not violent.

Issues that raise the risk of violence  
in an individual who has a mental  
health disorder:

- Substance use disorder
- A history of violence, juvenile  
detention or physical abuse
- Recent stressors such as being a  
crime victim, getting a divorce or  
losing one's job

In general, mental health disorders do not raise the risk of aggression.

Exceptions include individuals who have paranoid delusions and those who have agitated Bipolar Mood Disorder. Highly impulsive conduct disordered youth who have ADHD are at increased risk, as are youth who are abusing chemicals such as alcohol and PCP.

# Predicting Violence

## False Positives and False Negatives

If, at any one time, in a large metropolitan area, there was one person in a million who was planning a mass murder, and you had a predictive test that was 99% accurate...

You would have to detain  
10,000 individuals in order to  
identify the one who is planning  
the violence.



Screening tests are not nearly  
that accurate.

Clinical judgment has been shown to be worse than flipping a coin for predicting dangerousness beyond imminent danger.

Research-based screening tools have better predictive value, but are not infallible.

Is a youth's violent behavior  
caused by “clinical” or by  
“behavioral” factors?

The issue is not “either/or”

# The Clinical Behavioral Spectrum

Jan Ostrom and  
Will Dikel

Behavioral / Predominately / Mixed /Predominately/  
Clinical

Behavioral

Clinical

# Treating Violent Youth

Aggression is a non-specific, serious symptom most associated with ADHD, Conduct Disorder, Oppositional Defiant Disorder. It is also associated with Autism Spectrum Disorder, mood disorders, PTSD and psychotic disorders.



When aggression is chronic in these conditions, treatment tends to be longer, more intensive and to have poorer outcomes.

Successful treatment  
depends on understanding  
the underlying contributors to  
the violence

When clinical factors are at the root of the problem, e.g., irritability and agitation stemming from bipolar mood disorder

Then clinical interventions that  
may include medication  
management are the treatment  
of choice

Medication ideally is specifically focused on the nature of the mental health disorder.

E.g., is the aggression due to impulsivity of ADHD? Due to mood swings? Due to auditory hallucinations?

Thus, typically, medication management would utilize stimulants, antidepressants, mood stabilizers, anti-anxiety medications and/or antipsychotics in the treatment of underlying pathology

**Note: Some clinical disorders  
(e.g., autism spectrum  
disorders, phobias, etc.) are  
also treated with behavioral  
interventions.**

Behavioral  
interventions are  
generally more  
effective with violence  
stemming from  
behavioral factors



And, for youth in the  
“predominately” or “mixed”  
categories, interventions that  
blend clinical and behavioral  
approaches work best

Much of the research on medication treatment of aggressive youth focuses on aggression as an associated factor to other disorders such as ADHD, mood disorders, etc.

Research studies are limited, and more research is necessary to clarify types of aggression and the treatments that work best for each type.

Research indicates that, in order of highest to lowest effect size for anti-aggression outcomes:

Highest effect size:

Stimulants for treating ADHD with associated aggression

Atypical antipsychotic medication (e.g., Risperidone) for persistent behavioral disturbance in youth with conduct disorder and sub-average I.Q.

Moderate effect size is found with mood stabilizers (e.g., Lithium, anti-seizure medications) and alpha-2 agonists (e.g., clonidine)

No major effect size for antidepressants, beta blockers (e.g., nadolol) and typical antipsychotics.

**Aggression and violence are multi-factorial, and difficult to study as single variables.**



There is evidence that “hot” aggression (e.g., highly impulsive) responds to medication treatment much better than “cold” aggression (volitional, planned, calm, etc.)

This suggests that “hot” aggression may be more on the clinical, biological end of the spectrum, and “cold” aggression on the behavioral end.

There are significant ethical implications to the use of medication for behavior control (e.g., the use of highly sedating antipsychotic medication for conduct disordered youth).

This is considered by many to be a form of “chemical restraint”.

Medications can have significant adverse side effects and the risks vs. the benefits need to be considered. If they are used, they should be part of a larger treatment plan.

Many aggressive youth have simply not yet learned the skills of self-management and self control, and have not learned pro-social alternatives to aggressive behavior.

They can benefit from skills training, including learning mindfulness techniques such as those taught in curriculums such as the “MindUP” program.

Lithium in  
the water  
supply?



# Biological Trace Element Research

Biol Trace Elem Res. 1990

May;25(2):105-13.

Lithium in drinking water and the  
incidence of crime as studied  
in arrests related to drug addiction.  
Schrauzer GN, Shrestha KP.

Results suggest that lithium at a dose of 1800 mg per day is an essential trace element.

in increasing the human dignity  
of the people as the primary goal  
of the state and society. This is  
the basis of the development of  
individual and community level.

# Addressing School Violence

In general, school districts' most aggressive students are in self-contained Setting IV E.D. programs.

A review of records of one such program in a 5000 student district revealed that 85% of these students had already been diagnosed with a mental health disorder, but that only 5% were receiving treatment.

Co-locating mental health services from a community mental health clinic on-site in the district resulted in treatment of these students' disorders, transition to less restrictive placements, significant reduction of aggression and savings of \$800,000.00/year.

The services were voluntary,  
and were not IEP related  
services.



Special education “EBD” students, especially those in Setting 3 and Setting 4 placements, tend to have multiple mental health disorders, and many of them have issues of aggression. Many are in the Mixed category of the Clinical-Behavioral Spectrum.

**Bullying**

Recommendations re: violence perpetrated by students who have mental health disorders

Prevent violence through mental health procedures and guidelines that:

- Clarify the role of school professionals
- Increase access to mental health services through on-site, co-located clinics
- Maintain clear firewalls between the district and mental health providers
- Increase education for teachers regarding student mental health

- Coordinate with parents and community programs
- Provide skills training for students who have minimal coping skills
- Ensure safety in programs that have very high-risk students (e.g., metal detectors)

## Conclusion:

- Violence in school and community settings is a real risk
- There are major problems with accurately predicting violent behavior
- Mental health disorders are generally not predictors of violence, but when they occur in the context of other behavior problems and significant stressors, they can lead to violent behaviors
  - Proactively addressing youth's mental health problems through collaborative efforts can improve behaviors, reduce the risk of violence and cut costs

