

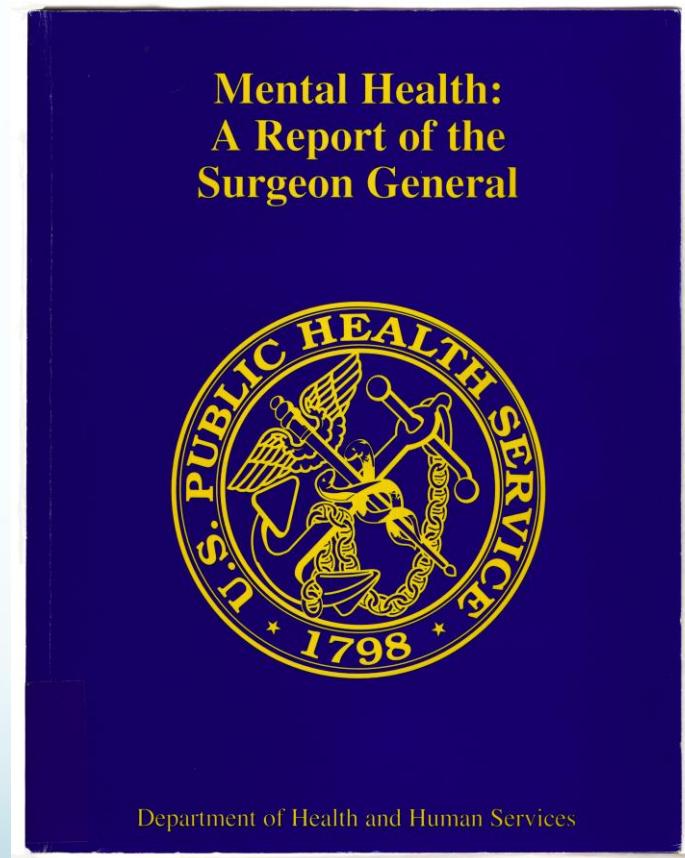


# U.S. National Data on Prevalence of Mental Disorders in Children

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National Institute of Mental Health*

**Mental disorders and mental health problems appear in families of all social classes and of all backgrounds. No one is immune.**



# **NIMH Initiatives in Child Mental Health Epidemiology**

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- Included a parental dimensional rating scale of child mental health in National Health Interview Survey (NHIS)
- Added a structured diagnostic interview to the National Health and Nutrition Examination Survey (NHANES)
- Extended the National Comorbidity Survey-Replication (NCS-R) and the National Survey of American Life to Adolescents (NCS-A)

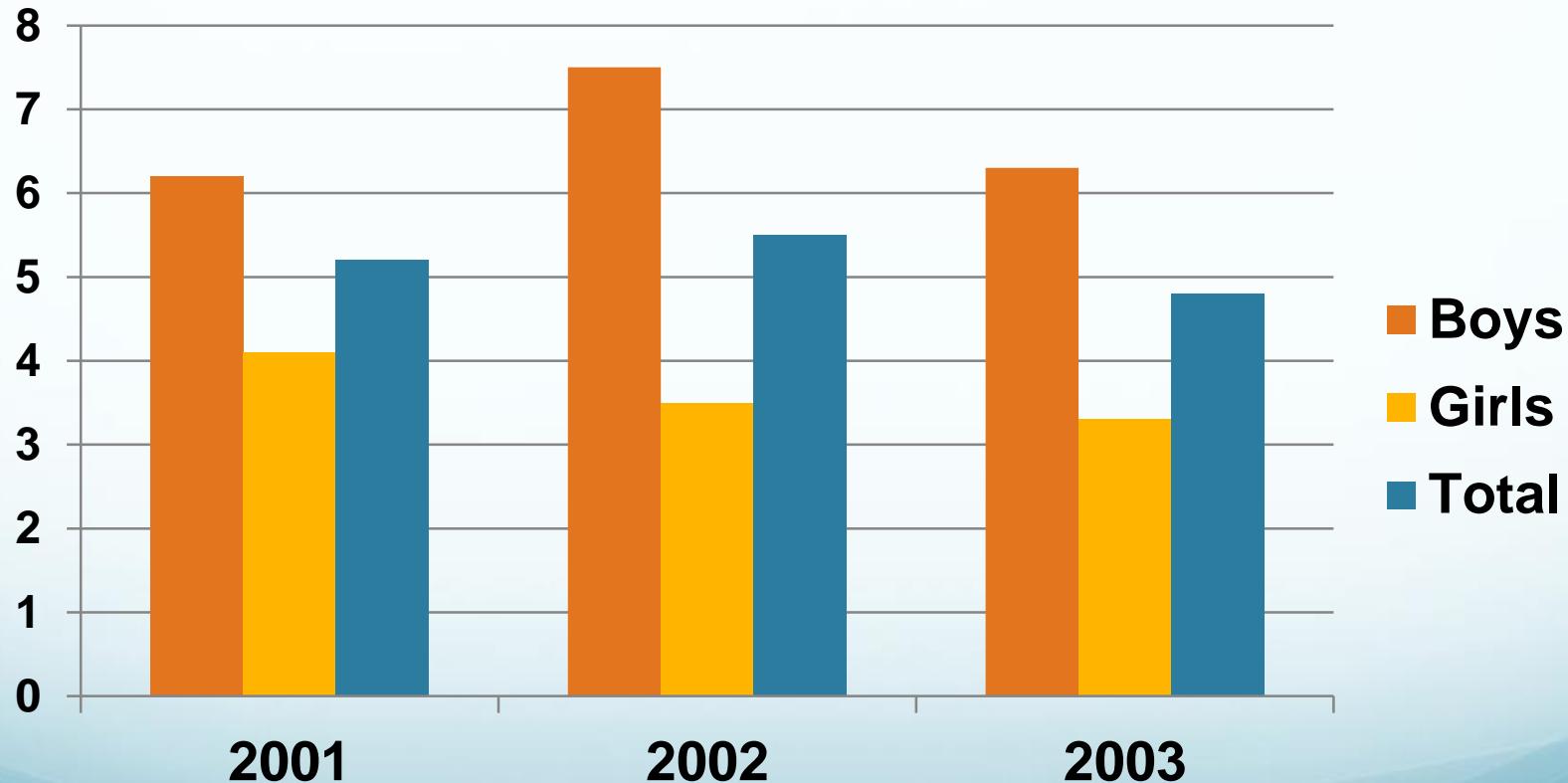
# **Serious Emotional Disorder: National Health Interview Surveys**

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- Annual household survey of a nationally representative sample
- One adult and one child (ages 4-17) per household
- Sample sizes:  
**2001 = 10,367; 2002 = 9,512; 2003 = 9,399**
- Strength and Difficulties Questionnaire (SDQ)(Goodman et al, 1997)

# % U.S. Children with Severe Difficulties in Emotional or Behavioral Functioning: National Health Interview Survey

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Simpson et al, 2003

## Prevalence and Treatment of Mental Disorders among US Children in the 2001–2004 NHANES

Kathleen Ries Merikangas, Jian-Ping He, Debra Brody, Prudence W. Fisher, Karen Bourdon and Doreen S. Koretz

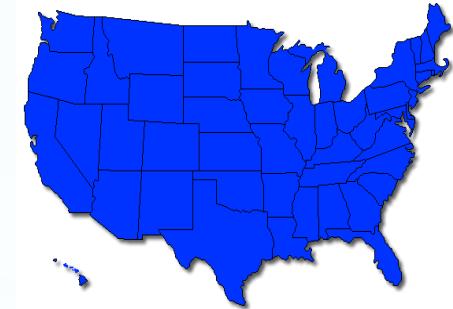
*Published online Dec 14, 2009*

# NHANES Survey Methodology

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- **Sample**
  - ✓ Mobile examination centers of 2001-2004 NHANES
  - ✓ Nationally representative probability sample of US
  - ✓ Complex, stratified, multistage, probability cluster design
- **Initial In-person Interview**
  - ✓ Computer-Assisted Personal Interview (CAPI) administered by trained interviewers
  - ✓ Diagnostic Interview for Children (DISC) (*Shaffer et al, 1996*)
- **Medical Examination Center Examination**
  - ✓ Administered by a physician; medical and health technicians; and dietary and health interviewers
- **Follow-up Questionnaires**
  - ✓ Telephone interview with survey staff using Computer-Assisted Telephone Interview (CATI) and a food frequency questionnaire

# NHANES Sample



Informant	Age	Total N
Parents	8-15	3,082
Youths	8-19	8,447

# Lifetime Prevalence of Mental Disorders in U.S. Adolescents: Results from the National Comorbidity Survey Replication- Adolescent Supplement (NCS-A)

Kathleen Ries Merikangas, Ph.D., Jian-ping He, M.Sc., Marcy Burstein, Ph.D.,  
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Corina Benjet, Ph.D., Katholiki Georgiades, Ph.D., Joel Swendsen, Ph.D.

JOURNAL OF THE AMERICAN ACADEMY OF CHILD & ADOLESCENT PSYCHIATRY  
VOLUME 49 NUMBER 10 OCTOBER 2010

# Methods: NCS-A

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- Dual household-school sampling frame
- A modified version of the World Health Organization (WHO) Composite International Diagnostic Interview Version 3.0 (CIDI)
- Parent/surrogate self administered questionnaire on adolescent mental health

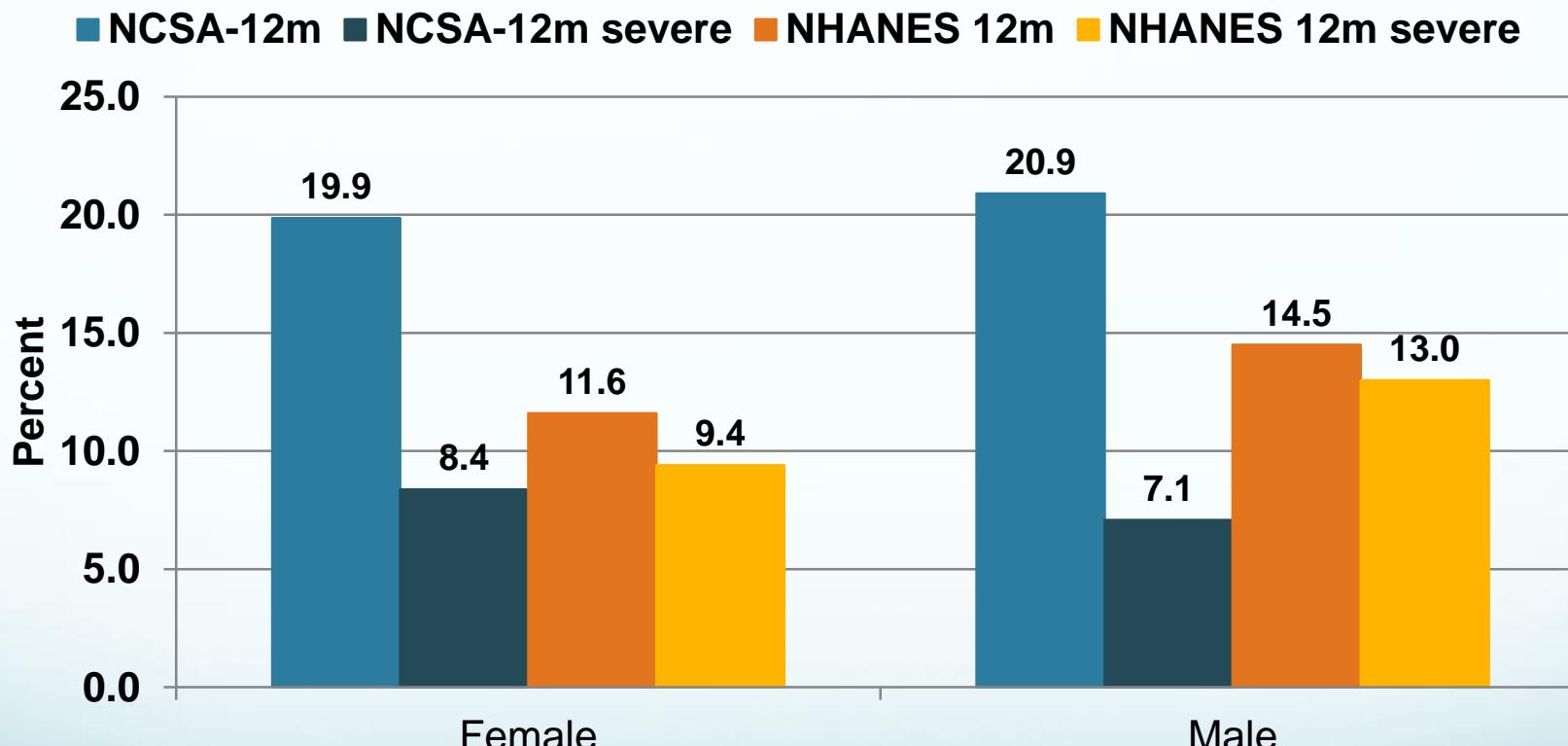
# NCS-A Sample



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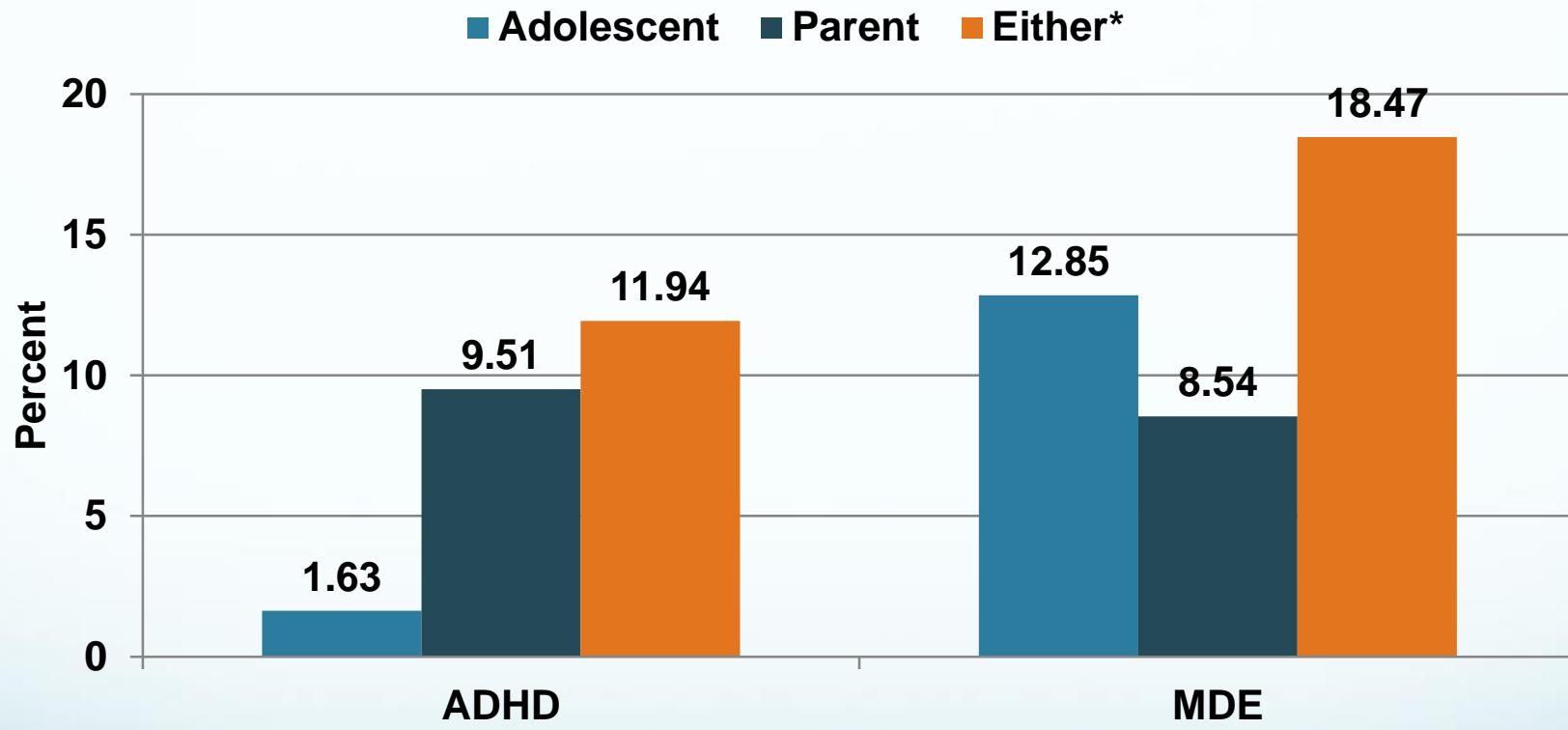
Informant	Age	Total N
Parent	13-18	6,491
Youths	13-18	10,123

# Sex-Specific Prevalence of 12-month Mental Disorders by Sex, NCS-A (13-18y) and NHANES (8-15y)



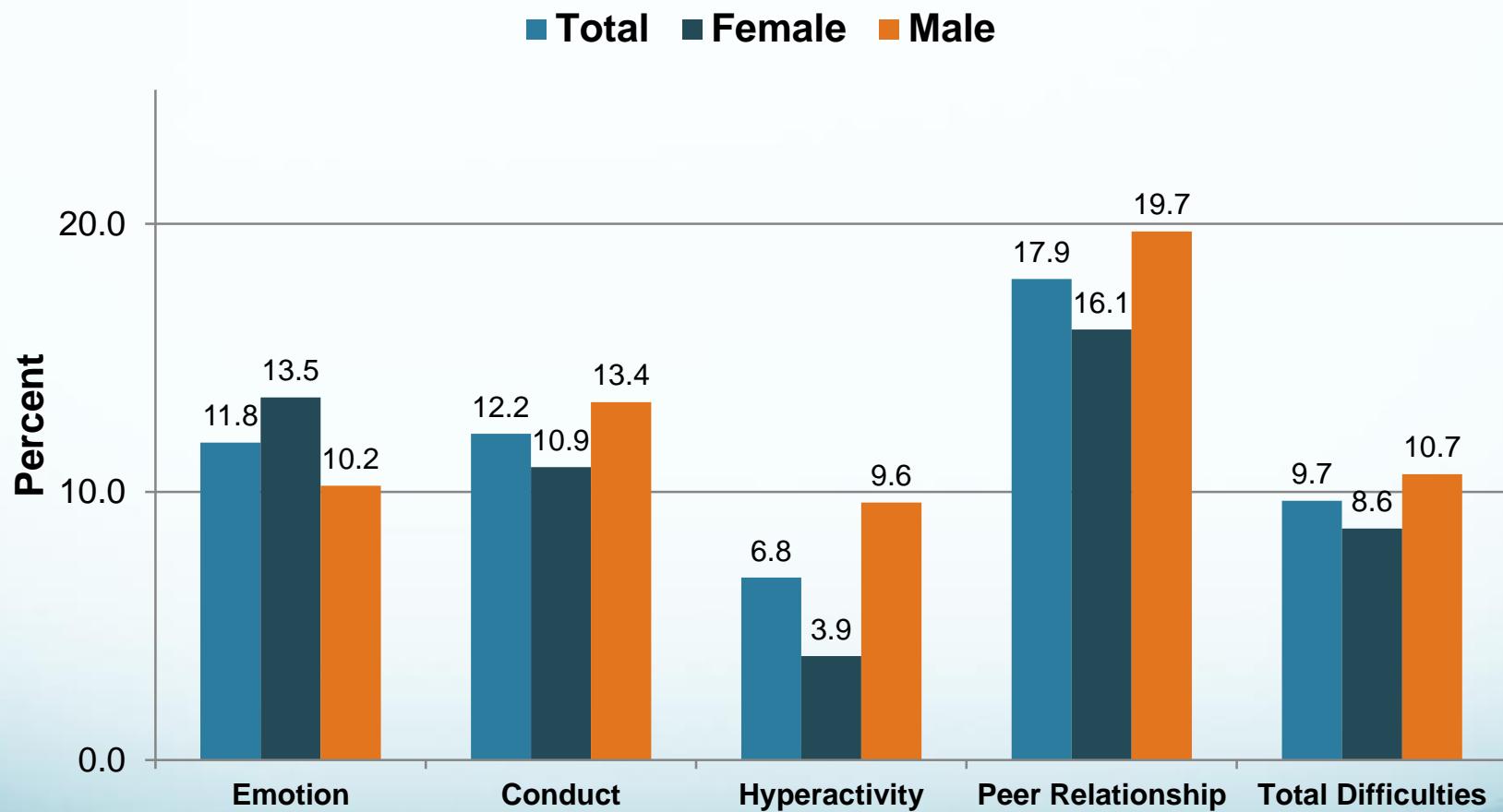
\*Any Mental Disorder included anxiety (GAD/Panic), mood (MDD/Dysthymia), ADHD, Conduct, Eating

# Lifetime Prevalence of ADHD and MDE by Different Informants, NCS-A



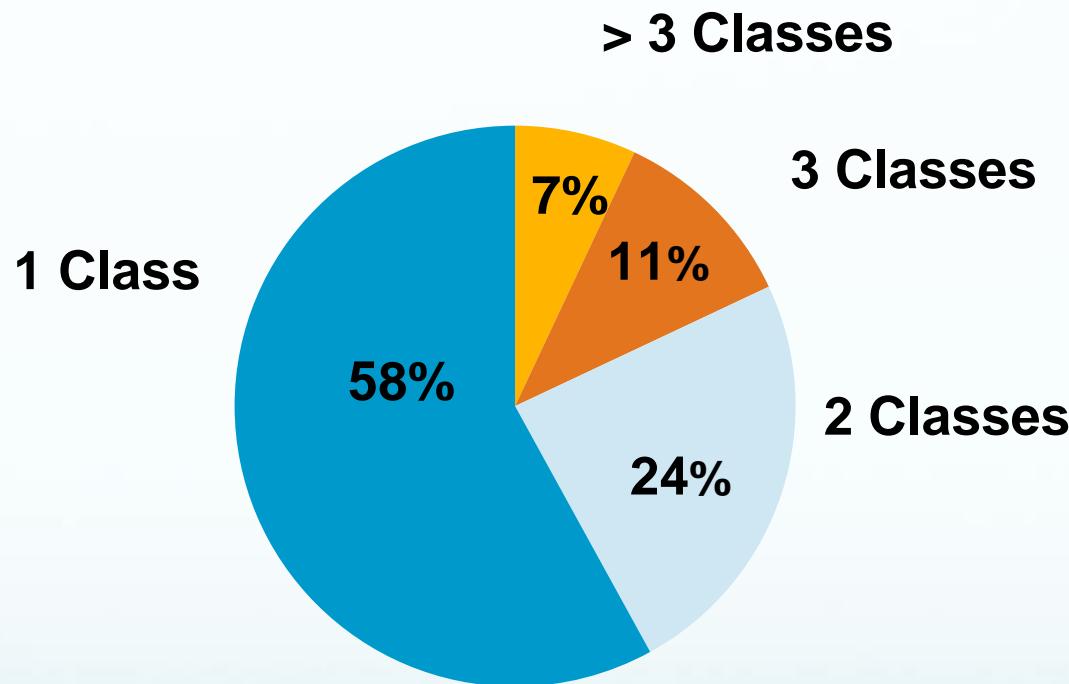
\*Adolescent and parent's reports were combined at symptom level using 'OR' rule.

# Percent of adolescents with severe difficulties (SDQ) in the past 6 months by domain, NCS-A



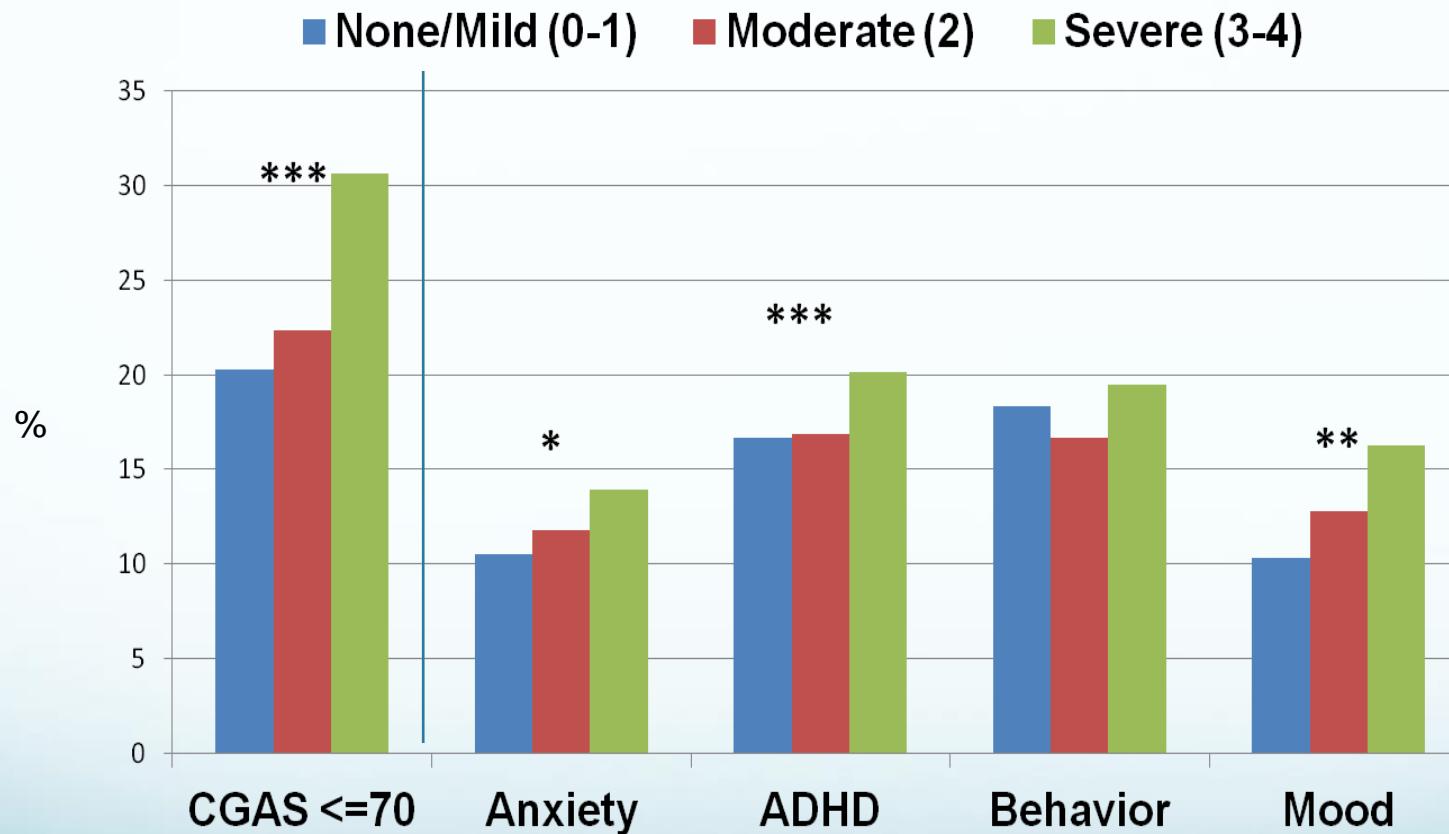
# Number of Classes of Disorders Among Youth with Any Disorder: NCS-A

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Merikangas et al, 2010

# Prevalence of Mental Disorders by Severity of Medical Disorders (n=9014)



U Penn Neurodevelopmental Genomics Study,  
Merikangas et al, 2013

# Contributions of Population Diagnostic Surveys

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- **Magnitude and sociodemographic correlates of different disorders**
- **Patterns of service use by sector**
- **Phenomenology and subtypes of disorders**
- **Patterns of comorbidity across mental disorders and with substance use/disorders and physical disorders**

# Limitations of Population Diagnostic Studies

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- **Cross-sectional**
- **Lack of comprehensive assessment of disorders under age 13**
- **Symptoms of the most severe disorders, such as psychosis and pervasive developmental disorders, are not included**
- **Informant variation (parent vs child) & lack of teacher report**

# Challenges in Diagnoses for SED

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- 12 month prevalence rates, though more reliable, don't account for prior history
- Solely based on DSM system, that has limited predictive or biologic validity
  - ✓ Categorical level with arbitrary thresholds
  - ✓ Unique to US -- lack of international comparability with ICD-10
- Comorbidity, both mental and physical, is pervasive
- Difficulty in defining SED below age 6

# NCS-A Investigators

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