NEW JERSEY MIDDLE SCHOOL

RISK AND PROTECTIVE FACTORS SURVEY

2021 STATEWIDE REPORT

Updated November 2024

PREPARED FOR

NJ Department of Human Services
Division of Mental Health and Addiction Services (DMHAS)

PREPARED BY

Center for Research and Evaluation on Education and Human Services (CREEHS)
Montclair State University

ABOUT CREEHS

Since 2011, the Center for Research and Evaluation on Education and Human Services (CREEHS) at Montclair State University (MSU) has provided evaluation and applied research services to institutions of higher education, school districts, government agencies, community-based organizations, and foundations to assist them in meeting their accountability and program improvement needs. The vision of CREEHS is to partner with organizations and scholars to plan, strengthen, and sustain the services they provide for the well-being of communities. The mission of CREEHS is to partner with clients to collect and use data to strengthen their programs and services. We tailor our services to meet the unique needs of our clients and their stakeholders. We provide high quality program planning and evaluation services, applying innovative and collaborative techniques to bridge the gap between research and practice. This includes building capacity and providing hands-on training to individuals who serve the community.

CREEHS VALUES

DIVERSITY & EQUITY: We value diversity of experience, expertise, worldview, and approach in our workforce and partnerships. We recognize the power of encouraging and embracing diverse perspectives to inform the work we do on behalf of partners and communities. We strive to create an environment that is equitable for all.

COMMUNICATION: We value meaningful and open communication and acknowledge that this starts with listening. We strive to be approachable and accessible and do our best work when we are in continuous communication with our partners.

COLLABORATION: We value partnerships grounded in respect for each other's strengths, a shared vision, and a culture of learning. We strive to practice a community-centered approach and meet partners where they are by building trusting relationships and tailoring our approach to their readiness and goals.

ADAPTABILITY: We value responsiveness to changing needs and emerging challenges. We strive to adapt and think creatively to identify solutions when contexts shift, while remaining focused on meeting project goals.

COMMITMENT: We value deep commitment to our work and the work of our partners in strengthening communities. We are passionate and thoughtful about providing high-quality service that is relevant and useful toward driving change. We strive to help our partners make a meaningful difference in the lives of the people they serve.

CONTACT CREEHS

Center for Research and Evaluation on Education and Human Services (CREEHS)
Montclair State University
University Hall, Suite 3124
One Normal Avenue
Montclair, New Jersey 07043

Telephone: (973) 655-4247

Email: evalcenter@montclair.edu

Website: www.montclair.edu/creehs

MONTCLAIR STATE UNIVERSITY
Center for Research and Evaluation on Education and Human Services

Report Updates

November 2024

Errata: Summary

Due to a coding error during the production of the *2021 Statewide Report*, the averages for five risk and protective factors were incorrectly reported in Tables 2 and 3. The following 2021 factors were affected by the error: community transitions and mobility, low commitment to school, academic failure, perceived risks of drug use, and school opportunities for prosocial involvement. The corresponding domain averages were affected: Community risk, School risk, Peer and Individual risk, and School protective domains. The following sections identify where incorrect averages for 2021 can be found throughout the report, as well as provide corrected averages for trends over time and for demographic and county subgroups. Averages for 2021 that are incorrect are displayed in red and corrected are displayed in blue.

Looking Back: 10-Year Trends

Averages for 2021 that have been corrected are displayed below in blue. These averages are corrected in Tables 2 and 3 in the *2023 Statewide Report* as well as in the Trend View of the Middle School Survey Data Explorer dashboard.

Risk factor trends, 2010–2021

Risk domains and factors	2010	2012	2015	2021
Community risk	**0.24**	**0.24**	**0.22**	**0.27**
Laws and norms favorable to drug use	0.34	0.33	0.29	0.33
Community transitions and mobility	0.27	0.26	0.26	**0.31**
Low neighborhood attachment	0.28	0.28	0.27	0.35
Perceived availability of drugs	0.26	0.24	0.21	0.27
Community disorganization	0.22	0.21	0.20	0.24
Perceived availability of handguns	0.11	0.11	0.11	0.10
Family risk	**0.13**	**0.12**	**0.11**	**0.19**
Poor family management	0.21	0.20	0.18	0.24
Parental attitudes favorable toward antisocial behavior	0.13	0.13	0.10	0.19
Parental attitudes favorable toward drug use	0.05	0.05	0.04	0.13
School risk	**0.32**	**0.30**	**0.32**	**0.37**
Low commitment to school	0.36	0.34	0.37	**0.44**
Academic failure	0.30	0.27	0.28	**0.29**
Peer-Individual risk	**0.11**	**0.10**	**0.09**	**0.11**
Perceived risks of drug use	0.21	0.22	0.24	**0.26**
Favorable attitudes toward antisocial behavior	0.18	0.16	0.12	0.21
Rewards for antisocial behavior	0.15	0.15	0.15	0.21
Favorable attitudes toward drug use	0.09	0.09	0.07	0.15
Early initiation of drug use	0.09	0.08	0.05	0.05
Friends' use of drugs	0.10	0.09	0.06	0.05
Early initiation of antisocial behavior	0.06	0.05	0.04	0.05
Gang involvement	0.03	0.02	0.02	0.02
Interaction with antisocial peers	0.05	0.05	0.04	0.03
Risk factors (overall mean)	**0.17**	**0.17**	**0.15**	**0.20**

Report Updates

November 2024

Protective factor trends, 2010–2021

Protective domains and factors	2010	2012	2015	2021
School protective	**0.61**	**0.61**	**0.62**	**0.63**
School opportunities for prosocial involvement	0.64	0.63	0.65	**0.65**
School rewards for prosocial involvement	0.59	0.58	0.59	0.61
Peer-Individual protective	**0.46**	**0.47**	**0.47**	**0.44**
Interaction with prosocial peers	0.62	0.64	0.63	0.57
Rewards for prosocial involvement	0.45	0.46	0.47	0.44
Prosocial involvement	0.30	0.31	0.30	0.31
Protective factors (overall mean)	**0.52**	**0.52**	**0.53**	**0.52**

Demographic Subgroups

Corrected averages for demographic subgroups for the following affected factors are displayed below. Please also see below for a list of figures and tables that contain incorrect averages for demographic subgroups.

Community transitions & mobility

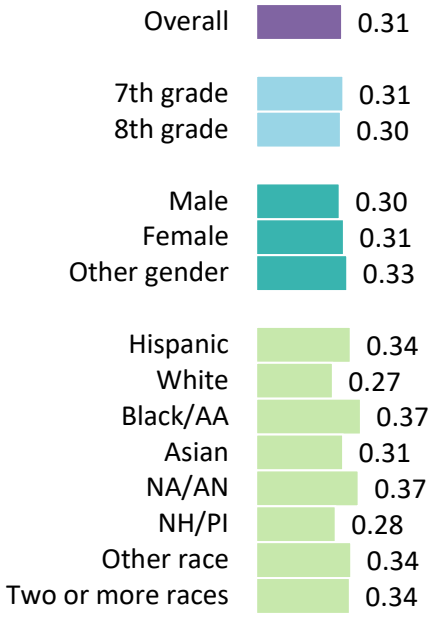


Figure 3 (“Community Risk Factor Scores by Grade”), Figure 4 (“Community Risk Factor Scores by Gender”), and Table 4 (“Community Risk Factor Scores by Race and Ethnicity”) contain incorrect subgroup averages for “community transitions & mobility.”

Eighth-grade students had higher risk scores for all community-related risk factors than seventh-grade students, except for community transitions & mobility.

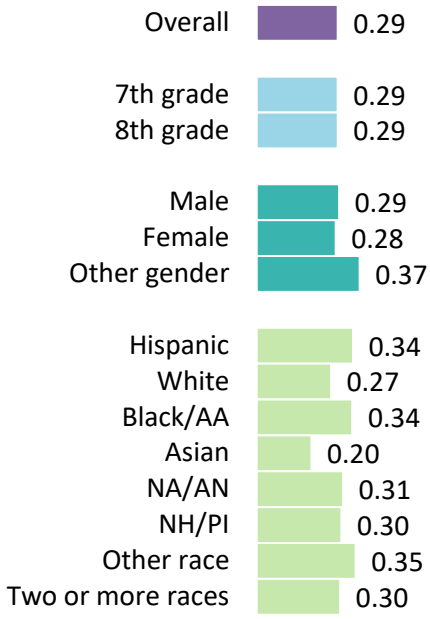
All other demographic comparative statements are still accurate.

Report Updates

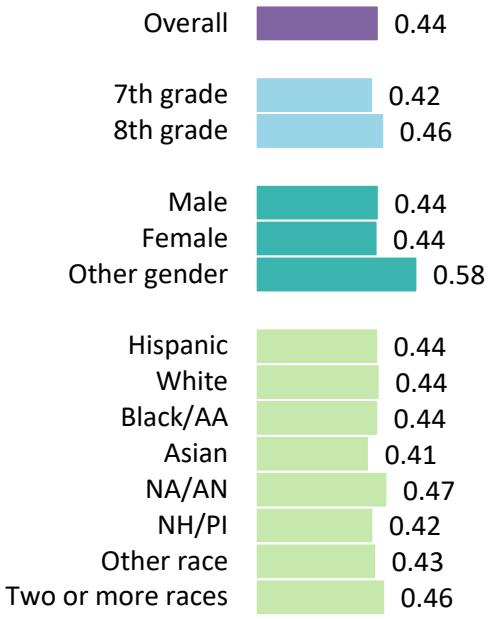
November 2024

Figure 7 (“School Risk Factor Scores by Grade”), Figure 8 (“School Risk Factor Scores by Gender”), and Table 6 (“School Risk Factor Scores by Race and Ethnicity”) contain incorrect subgroup averages for both “academic failure” and “low commitment to school.” All demographic comparative statements are still accurate.

Academic failure



Low commitment to school



Perceived risks of drug use

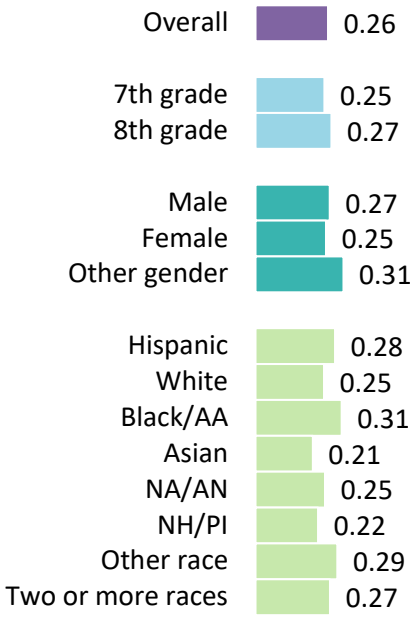


Figure 9 (“Peer and Individual Risk Factor Scores by Grade”), Figure 10 (“Peer and Individual Risk Factor Scores by Gender”), and Table 7 (“Peer and Individual Risk Factor Scores by Race and Ethnicity”) contain incorrect subgroup averages for “perceived risks of drug use.”

All demographic comparative statements are still accurate.

Report Updates

November 2024

School opportunities for prosocial involvement

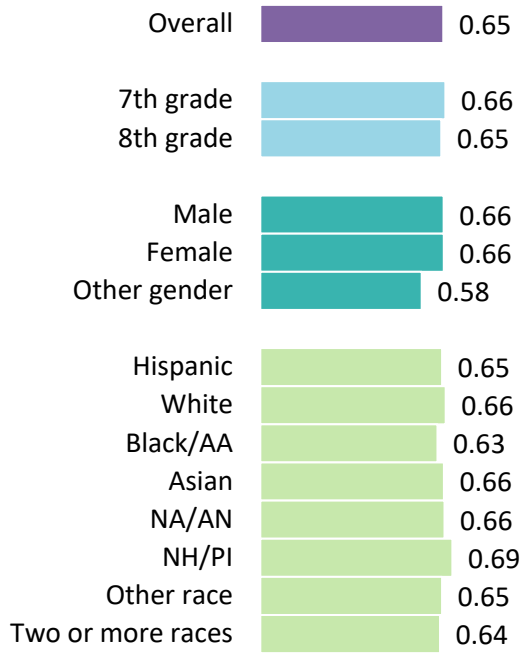


Figure 13 ("School Protective Factor Scores by Grade"), Figure 14 ("School Protective Factor Scores by Gender"), and Table 9 ("School Protective Factor Scores by Race and Ethnicity") contain incorrect subgroup averages for "school opportunities for prosocial involvement."

All demographic comparative statements are still accurate.

Pre-Post Emergence of COVID-19

The results of the significance tests presented in Figure 15 ("Changes in Community Risk Perceptions and Behaviors, 2020 to 2021"), Figure 16 ("Changes in School Risk Perceptions and Behaviors, 2020 to 2021"), Figure 17 ("Changes in Peer and Individual Risk Perceptions and Behaviors, 2020 to 2021"), and Figure 18 ("Changes in School Protective Perceptions and Behaviors, 2020 to 2021") may have been affected for these five factors.

Of the 16 factors with pre-post COVID-19 statistically significant differences identified in the report, the likelihood of detecting significant differences may have been artificially higher for five factors due to the reduced size of standard errors around the factor means.

Risk and Protective Factors Probabilities

The predictions presented in Figure 56 ("Probability of Substance Use by Community Risk Score"), Figure 57 ("Probability of Substance Use by Peer and Individual Risk Score"), Figure 58 ("Probability of Substance Use by School Protective Score"), Figure 67 ("Probability of Antisocial Behaviors by Community Risk Score"), Figure 68 ("Probability of Antisocial Behaviors by Peer and Individual Risk Score"), and Figure 69 ("Probability of Antisocial Behaviors by School Protective Score") may have been affected by these five factors.

County-Level Statistics

Appendix C-6 ("Risk Domains and Factors Averages by County") and Appendix C-7 ("Protective Domains and Factors Averages by County") contain incorrect county averages for those five factors in 2021. Averages displayed for counties and the state overall that have been corrected are displayed below in blue.

Report Updates

November 2024

Risk domains and factors averages by county

	Atlantic (N=300)	Bergen (N=416)	Burlington (N=254)	Camden (N=198)	Cape May (N=224)	Cumberland (N=204)	Essex (N=429)	Gloucester (N=210)	Hudson (N=335)	Hunterdon (N=320)	Mercer (N=316)
Risk domains and factors											
Community risk	**0.29**	**0.24**	**0.25**	**0.25**	**0.27**	**0.32**	**0.30**	**0.26**	**0.29**	**0.25**	**0.27**
Laws and norms favorable to drug use	0.34	0.30	0.33	0.31	0.36	0.39	0.33	0.35	0.33	0.33	0.33
Community transitions and mobility	**0.36**	**0.30**	0.33	**0.29**	**0.31**	**0.35**	**0.32**	**0.30**	**0.33**	**0.29**	**0.34**
Low neighborhood attachment	0.39	0.31	0.32	0.36	0.35	0.45	0.40	0.35	0.38	0.30	0.35
Perceived availability of drugs	0.28	0.26	0.26	0.26	0.31	0.29	0.28	0.27	0.25	0.27	0.28
Community disorganization	0.27	0.21	0.15	0.18	0.20	0.32	0.37	0.21	0.33	0.16	0.20
Perceived availability of handguns	0.12	0.07	0.13	0.10	0.13	0.14	0.10	0.09	0.09	0.13	0.10
Family risk	**0.18**	**0.18**	**0.18**	**0.19**	**0.21**	**0.20**	**0.18**	**0.19**	**0.18**	**0.19**	**0.20**
Poor family management	0.24	0.24	0.23	0.23	0.26	0.26	0.24	0.23	0.24	0.24	0.27
Parental attitudes favorable toward antisocial behavior	0.19	0.19	0.20	0.20	0.22	0.19	0.18	0.19	0.19	0.20	0.21
Parental attitudes favorable toward drug use	0.12	0.12	0.13	0.12	0.15	0.15	0.13	0.14	0.13	0.14	0.14
School risk	**0.35**	**0.35**	**0.35**	**0.33**	**0.36**	**0.38**	**0.39**	**0.37**	**0.37**	**0.36**	**0.37**
Low commitment to school	**0.41**	**0.43**	**0.44**	**0.44**	**0.46**	**0.43**	**0.43**	**0.44**	**0.42**	**0.45**	**0.46**
Academic failure	**0.29**	**0.28**	**0.27**	**0.22**	**0.27**	**0.34**	**0.36**	**0.29**	**0.33**	**0.27**	**0.27**
Peer-Individual risk	**0.13**	**0.10**	**0.10**	**0.11**	**0.12**	**0.15**	**0.12**	**0.11**	**0.12**	**0.10**	**0.13**
Perceived risks of drug use	**0.29**	**0.24**	**0.24**	**0.24**	**0.26**	**0.34**	**0.27**	**0.27**	**0.27**	**0.25**	**0.29**
Favorable attitudes toward antisocial behavior	0.22	0.21	0.20	0.20	0.22	0.22	0.20	0.20	0.21	0.20	0.22
Rewards for antisocial behavior	0.22	0.18	0.19	0.23	0.21	0.24	0.22	0.24	0.22	0.16	0.23
Favorable attitudes toward drug use	0.16	0.15	0.14	0.14	0.18	0.20	0.15	0.16	0.15	0.16	0.17
Early initiation of drug use	0.05	0.04	0.03	0.03	0.07	0.07	0.05	0.04	0.05	0.03	0.06
Friends' use of drugs	0.06	0.04	0.04	0.03	0.08	0.06	0.05	0.05	0.04	0.04	0.06
Early initiation of antisocial behavior	0.07	0.03	0.04	0.05	0.04	0.10	0.06	0.05	0.06	0.03	0.05
Gang involvement	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.02	0.01	0.03
Interaction with antisocial peers	0.05	0.02	0.03	0.03	0.02	0.05	0.04	0.03	0.04	0.02	0.04
Risk factors (overall mean)	**0.21**	**0.18**	**0.18**	**0.18**	**0.21**	**0.23**	**0.21**	**0.19**	**0.20**	**0.18**	**0.21**

Risk domains and factors averages by county (continued)

	Middlesex (N=276)	Monmouth (N=415)	Morris (N=225)	Ocean (N=288)	Passaic (N=384)	Salem (N=211)	Somerset (N=273)	Sussex (N=332)	Union (N=240)	Warren (N=336)	New Jersey (N=6,175)
Risk domains and factors											
Community risk	**0.24**	**0.25**	**0.24**	**0.29**	**0.28**	**0.31**	**0.23**	**0.24**	**0.28**	**0.28**	**0.27**
Laws and norms favorable to drug use	0.32	0.32	0.33	0.33	0.34	0.38	0.31	0.33	0.35	0.35	0.33
Community transitions and mobility	**0.25**	**0.29**	**0.28**	**0.34**	**0.31**	**0.31**	**0.29**	**0.28**	**0.30**	**0.28**	**0.31**
Low neighborhood attachment	0.33	0.32	0.31	0.38	0.40	0.39	0.29	0.32	0.43	0.36	0.35
Perceived availability of drugs	0.26	0.26	0.26	0.30	0.26	0.30	0.24	0.25	0.25	0.29	0.27
Community disorganization	0.20	0.21	0.17	0.27	0.30	0.30	0.17	0.18	0.30	0.27	0.24
Perceived availability of handguns	0.06	0.08	0.07	0.12	0.09	0.18	0.07	0.10	0.06	0.13	0.10
Family risk	**0.18**	**0.18**	**0.20**	**0.19**	**0.20**	**0.20**	**0.18**	**0.18**	**0.20**	**0.19**	**0.19**
Poor family management	0.22	0.24	0.26	0.24	0.26	0.25	0.22	0.24	0.26	0.24	0.24
Parental attitudes favorable toward antisocial behavior	0.18	0.18	0.20	0.19	0.20	0.21	0.19	0.18	0.20	0.19	0.19
Parental attitudes favorable toward drug use	0.13	0.13	0.14	0.13	0.14	0.15	0.12	0.12	0.13	0.14	0.13
School risk	**0.33**	**0.36**	**0.34**	**0.36**	**0.40**	**0.40**	**0.35**	**0.36**	**0.40**	**0.38**	**0.37**
Low commitment to school	**0.43**	**0.44**	**0.45**	**0.43**	**0.46**	**0.49**	**0.44**	**0.43**	**0.46**	**0.45**	**0.44**
Academic failure	**0.23**	**0.27**	**0.23**	**0.29**	**0.33**	**0.31**	**0.26**	**0.29**	**0.34**	**0.30**	**0.29**
Peer-Individual risk	**0.09**	**0.11**	**0.10**	**0.13**	**0.12**	**0.13**	**0.10**	**0.10**	**0.12**	**0.12**	**0.11**
Perceived risks of drug use	**0.21**	**0.24**	**0.25**	**0.27**	**0.27**	**0.30**	**0.22**	**0.25**	**0.27**	**0.27**	**0.26**
Favorable attitudes toward antisocial behavior	0.18	0.20	0.20	0.21	0.21	0.23	0.20	0.18	0.22	0.22	0.21
Rewards for antisocial behavior	0.22	0.20	0.19	0.24	0.24	0.23	0.17	0.18	0.21	0.21	0.21
Favorable attitudes toward drug use	0.13	0.14	0.14	0.16	0.15	0.17	0.13	0.14	0.16	0.16	0.15
Early initiation of drug use	0.03	0.05	0.03	0.06	0.05	0.07	0.03	0.03	0.03	0.06	0.05
Friends' use of drugs	0.03	0.06	0.04	0.06	0.05	0.07	0.03	0.04	0.04	0.08	0.05
Early initiation of antisocial behavior	0.02	0.04	0.03	0.06	0.05	0.06	0.03	0.03	0.06	0.05	0.05
Gang involvement	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Interaction with antisocial peers	0.02	0.03	0.01	0.03	0.04	0.05	0.02	0.03	0.05	0.05	0.03
Risk factors (overall mean)	**0.17**	**0.18**	**0.18**	**0.21**	**0.21**	**0.22**	**0.17**	**0.18**	**0.21**	**0.21**	**0.20**

Report Updates

November 2024

Protective domains and factors averages by county

	Atlantic (N=300)	Bergen (N=416)	Burlington (N=254)	Camden (N=198)	Cape May (N=224)	Cumberland (N=204)	Essex (N=429)	Gloucester (N=210)	Hudson (N=335)	Hunterdon (N=320)	Mercer (N=316)
Protective domains and factors											
School protective	**0.65**	**0.64**	**0.65**	**0.64**	**0.65**	**0.59**	**0.62**	**0.63**	**0.64**	**0.63**	**0.62**
School opportunities for prosocial involvement	**0.67**	**0.67**	**0.68**	**0.66**	**0.67**	**0.60**	**0.64**	**0.64**	**0.67**	**0.65**	**0.64**
School rewards for prosocial involvement	0.63	0.61	0.63	0.61	0.63	0.58	0.60	0.61	0.61	0.60	0.59
Peer-Individual protective	**0.47**	**0.47**	**0.49**	**0.47**	**0.49**	**0.38**	**0.42**	**0.42**	**0.43**	**0.45**	**0.41**
Interaction with prosocial peers	0.62	0.61	0.65	0.62	0.61	0.48	0.54	0.56	0.56	0.58	0.53
Rewards for prosocial involvement	0.45	0.45	0.45	0.44	0.47	0.45	0.46	0.38	0.43	0.46	0.46
Prosocial involvement	0.34	0.33	0.36	0.36	0.38	0.22	0.25	0.31	0.29	0.32	0.26
Protective factors (overall mean)	**0.54**	**0.54**	**0.55**	**0.54**	**0.55**	**0.46**	**0.50**	**0.50**	**0.51**	**0.52**	**0.49**

	Middlesex (N=276)	Monmouth (N=415)	Morris (N=225)	Ocean (N=288)	Passaic (N=384)	Salem (N=211)	Somerset (N=273)	Sussex (N=332)	Union (N=240)	Warren (N=336)	New Jersey (N=6,175)
Protective domains and factors											
School protective	**0.64**	**0.64**	**0.65**	**0.63**	**0.63**	**0.61**	**0.64**	**0.64**	**0.65**	**0.61**	**0.63**
School opportunities for prosocial involvement	**0.65**	**0.68**	**0.67**	**0.66**	**0.64**	**0.63**	**0.67**	**0.65**	**0.65**	**0.64**	**0.65**
School rewards for prosocial involvement	0.63	0.60	0.63	0.59	0.61	0.59	0.60	0.62	0.65	0.58	0.61
Peer-Individual protective	**0.46**	**0.47**	**0.47**	**0.44**	**0.37**	**0.42**	**0.47**	**0.44**	**0.37**	**0.45**	**0.44**
Interaction with prosocial peers	0.59	0.62	0.61	0.57	0.49	0.51	0.62	0.58	0.48	0.61	0.57
Rewards for prosocial involvement	0.45	0.45	0.44	0.40	0.39	0.42	0.43	0.45	0.41	0.41	0.44
Prosocial involvement	0.32	0.36	0.36	0.34	0.23	0.32	0.35	0.30	0.22	0.32	0.31
Protective factors (overall mean)	**0.53**	**0.54**	**0.54**	**0.51**	**0.47**	**0.49**	**0.54**	**0.52**	**0.48**	**0.51**	**0.52**

Some numbers may have been affected due to rounding.

EXECUTIVE SUMMARY

In 2018, the New Jersey Department of Human Services, Division of Mental Health and Addiction Services (DMHAS) commissioned the Center for Research and Evaluation on Education and Human Services (CREEHS) at Montclair State University to conduct the *New Jersey Middle School Risk and Protective Factors Survey* (NJRPFS). The NJRPFS is an 80-item student health survey that asks seventh and eighth grade students about their use and perceptions of alcohol, tobacco, and illicit drugs. The survey also measures factors that encourage or discourage substance use and participation in antisocial behaviors. DMHAS has administered the NJRPFS once every three years since 1999. Results from this survey are used to help communities plan and implement meaningful prevention and education programs at the state and local levels, and inform State investments.

Survey administrations began in November 2019 using an in-person format and were intended to continue through June 2020. On March 18, 2020, all New Jersey (NJ) schools were closed due to the COVID-19 pandemic. As a result, all study and data collection activities were put on hold. Survey administrations resumed in January 2021 and concluded in March 2021 using a fully virtual administration design. In total, CREEHS collected 6,490 student surveys from 97 schools across all of NJ's 21 counties between 2019 and 2021.

This report presents key findings regarding students' self-reported substance use, engagement in antisocial behaviors, and risk and protective factors. It also presents findings about new and relevant issues that have emerged since the survey was last administered in 2015, including the use of e-cigarettes (i.e., vapes) with and without marijuana, the availability of substances in the community, mental health, and gambling activities, as well as student experiences during the COVID-19 pandemic. Data findings presented in this report represent data collected between November 2019 to March 2020 ("2020") and January to March 2021 ("2021").

Key Findings

Risk and Protective Factors

- Overall, students indicated higher risk related to school and community factors than family factors or peer and individual factors.
- Nonbinary students consistently reported higher risk than other gender groups for issues related to their community, school, family, and peer and individual.
- Risk and protective factor scores were compared for students who completed the survey just before the COVID-19 pandemic (2020) and those who completed the survey during the pandemic (2021) to identify significant changes. In 2021, as compared to 2020:
    - Students reported less attachment to the community.
    - Fewer students reported using drugs at an early age, friends' use of drugs, and fewer friends engaging in antisocial behaviors.
    - Students reported fewer protective behaviors, including less engagement in prosocial activities and fewer friends engaging in prosocial behaviors.

EXECUTIVE SUMMARY

Alcohol Use

- Alcohol remains the substance most widely used by seventh and eighth grade students in NJ in their lifetime, followed by e-cigarettes and marijuana (16.5%, 9.6%, and 3.2%, respectively).
- Past year alcohol use was above the state average for eighth grade students, female and nonbinary students, and students identifying as Hispanic, White, Native American or Alaskan Native, Native Hawaiian or Pacific Islander, Other race, and two or more races.
- The most common sources for obtaining alcohol were a family member, followed by a friend, then grocery store or drug store.

E-cigarettes Use

- Nearly 1 in 10 students have used e-cigarettes in their lifetime (9.6%) and 3.4% of students specifically used e-cigarettes with marijuana.
- Past year e-cigarettes use was above the state average for eighth grade students, female and nonbinary students, and students identifying as Hispanic, Native American or Alaskan Native, Native Hawaiian or Pacific Islander, Other race, and two or more races.
- Students identified a friend as the most likely source for obtaining e-cigarettes with marijuana, followed by a person that is not a family member or friend, then a gas station or convenience store.

Marijuana Use

- Overall, 3.2% of students have used marijuana in their lifetime, 2.5% within the past year, and 1.7% within the past month.
- Past year marijuana use was above the state average for eighth grade students, female and nonbinary students, and students identifying as Hispanic, Black or African American, Native American or Alaskan Native, Other race, and two or more races.
- The most common sources for obtaining marijuana were a friend, followed by some other person that is not a family member or friend, and the internet.

Polysubstance Use

- Overall, 8.4% of students have used more than one substance in their lifetime, 5.9% during the past year, and 3.5% within the past month.
- Among students that have used e-cigarettes, 68.2% have also used alcohol, 29.4% also used marijuana, 15.2% also smoked cigarettes, and 10.8% also used prescription drugs not prescribed to them.

EXECUTIVE SUMMARY

Substance Use Trends

- Between 2020 and 2021, the percentage of students reporting substance use significantly decreased for all substances, except for binge drinking and the category "other illicit drugs."
- Similar to the patterns of single-drug use, use of multiple drugs significantly decreased from 2020 to 2021.
- As compared to 2020, students who responded to the survey in 2021 more frequently reported obtaining e-cigarettes with marijuana at a gas station or convenience store.

Suspension and Antisocial Behaviors

- Overall, 11.4% of students reported being suspended in their lifetime and 8.1% within the past year. Of these students, the highest prevalence rate for both time periods was reported by Black or African American students (30.9% lifetime, 20.2% within the past year).
- Attacking someone with the intent to harm was the most frequently reported past year antisocial behavior, followed by carrying a handgun, and being drunk or high at school.
- Students reported lower engagement in antisocial behaviors in the past year in 2021 compared to 2020.

Experiences during COVID-19

- Half of all students (50.5%) reported struggling with feelings of sadness, emptiness, or depression. Nonbinary students (85.3%) reported the highest percentage as compared to other groups.
- More than one-quarter of students (26.2%) felt nervous, anxious, or on edge most days or every day in 2021.
- While most past year gambling activities significantly decreased between 2020 and 2021, loot box and skins purchases in video games significantly increased during the same time period.
- Despite the limitations to communication during the pandemic, 89.6% of students were still able to communicate with people or groups most days or every day during the pandemic. Most of these interactions were with family and friends.
- Despite the news about COVID-19, 42.9% of students reported receiving reassurance from their parents about their safety most days or every day during the pandemic.

The COVID-19 pandemic changed the way students interacted with one another and attended school. Literature has suggested that the combination of sustained disruptions to daily life as a result of prolonged school closures, social distancing measures, and conditions during the pandemic has the potential to exacerbate existing mental health, substance use, and antisocial behavior issues in adolescents.[2,3,9,14,15]

Because the NJRPFS data collection period was extended until 2021, CREEHS had the unique opportunity to examine these issues before and during the pandemic. Consistent with national survey findings, results showed an overall decrease in substance use and antisocial behaviors, and an increase in mental health problems and online gambling activities.[2,3,9,11,33,34] Most of the 2021 data reflected perceptions about these issues early in the pandemic. It is also possible that social distancing conditions reduced opportunities to access substances, or engage with others who are using drugs or who engage in criminal or antisocial activities.

These findings underscore the need to continue surveillance of substance use and behavioral trends as they relate to the pandemic. They also emphasize the need to monitor adolescent mental health over time and re-examine its relationship with substance use, as well as its relationship with a variety of risk and protective factors.

TABLE OF CONTENTS

TABLE OF CONTENTS

List of Tables and Figures

Tables

Figures

TABLE OF CONTENTS

TABLE OF CONTENTS

INTRODUCTION

The *New Jersey Middle School Risk and Protective Factors Survey (NJRPFS)* is a student health survey that has been conducted by the New Jersey Department of Human Services (NJDHS) Division of Mental Health and Addiction Services (DMHAS) approximately once every three years since 1999. The survey is administered to seventh and eighth grade students across New Jersey (NJ) and includes questions about their use of alcohol, tobacco, and other drugs and the availability of these substances in their community, as well as factors that encourage or discourage substance use and antisocial behaviors.

Results from this survey are used by county- and municipal-level substance abuse coordinators, school and district leaders, parents, and a range of other constituents to inform prevention programming at both the local and State levels. These data are also used to inform funding for NJ State investments in prevention efforts that aim to reduce adolescent tobacco, alcohol, and drug use.

The current NJRPFS instrument is a revised and abbreviated version of the 121-item Communities That Care Youth Survey. The original survey was validated as a self-report instrument measuring risk and protective factors among students ages 11 to 18; it was designed to be used as a tool for assessing prevention needs in that population.[1] The current NJRPFS provides additional data related to core measures that are required by the Substance Abuse and Mental Health Services Administration for their Drug-Free Communities Grants.

The NJRPFS contains items assessing the risk and protective factors that show the strongest correlations to drug, alcohol, and tobacco use, such as students' feelings about school and their neighborhood, participation in extracurricular activities, and membership in gangs. The NJRPFS also measures students' self-reported use of tobacco, alcohol, and drugs; and engagement in antisocial behaviors, including being suspended from school.

In late 2018, DMHAS contracted with the Center for Research and Evaluation on Education and Human Services (CREEHS) at Montclair State University to administer this survey to seventh and eighth grade students in public and charter schools across the state during the 2019-2020 school year. Due to COVID-19 related school closures beginning March 2020, data collection activities were paused and then resumed in January 2021, concluding in March 2021. This report presents key findings on new and relevant issues that have emerged since the survey was last administered in 2015.

What's New?

The NJRPFS survey instrument was refined and revised in 2019 with recommendations from DMHAS, CREEHS, and more than 70 different prevention agencies and stakeholders across the state. CREEHS made five significant updates to the survey instrument:

- **ADDED** an "Other" gender response option for students who do not identify as male or female.
- **SEPARATED** the e-cigarettes (i.e., vapes) question into two, allowing students to report on their use of e-cigarettes with marijuana and without marijuana.
- **ADDED** questions on gambling and betting activities.
- **ADDED** questions regarding mental health.
- **ADDED** questions about common sources of substances.

The COVID-19 pandemic, which began mid-way through the administration of the current NJRPFS survey, posed many challenges for communities, families, and students. The effects of the pandemic were of significant concern to community prevention agencies and schools as it changed the way students interacted with one another and attended school. Literature suggests that prolonged school closures, social distancing measures, and conditions associated with the pandemic will put many youth at greater risk for mental health problems, substance use, and antisocial behaviors.[2,3]

As a response, CREEHS added a new block of questions to the end of the survey instrument to capture critical risk and protective factors related to prolonged school closures, lockdown, and social distancing measures. The new block of questions asked students about how their experiences have changed since March 2020, with respect to gambling and gaming behaviors, feelings of depression and anxiety, parents or guardians serving as essential workers, job loss in the household, media exposure, and parent reassurance, as well as connectedness with family, friends, school staff, and community groups. This enhanced version of the survey was administered to students in January 2021 through March 2021. This report presents the results from new analyses assessing how adolescents' substance use, antisocial behaviors, risk and protective factors, mental health, and gambling behaviors have changed since the emergence of COVID-19.

Understanding how risk and protective factors influence a student's chance of using substances or participating in antisocial behaviors helps prevention agencies to select appropriate interventions. This report also presents novel findings examining the probability of students' use of select substances or participation in certain antisocial behaviors, predicted based on risk and protective factor domain scores.

Report Structure

The 2021 Statewide Report is organized into six main chapters:

- Risk and Protective Factors
- Alcohol, Tobacco, and Other Drug Use
- Suspension and Antisocial Behaviors
- Mental Health
- Gambling or Betting
- Experiences during COVID-19

A summary of the design and methods used for data collection and the participating sample precedes these chapters. Each chapter begins with a brief description about the importance and relevance of the data, followed by how it was measured, and presents prevalence rates for three time periods: lifetime (ever), past year (any occasion within 12 months), and past month (any occasion within 30 days). Prevalence rates are broken down by demographic characteristics (grade, gender, race, ethnicity). No significance tests were performed on differences across demographic groups. Additionally, at the beginning of the first three chapters, data are presented showing 10-year trends from 2010 to 2021. At the end of these chapters, two additional "Closer Look" sections present findings from the pre-post emergence of COVID-19 comparative analysis, and predictions based on risk and protective factors. Data findings presented in this report represent data collected between November 2019 to March 2020 ("2020") and January to March 2021 ("2021").

There are superscripts throughout the report that refer to important information about the data and findings. Some superscripts (i.e., numbers) cite literature and can be found in the References section, while others (i.e., letters) provide definitions and special considerations about interpreting data; these can be found in the Endnotes section.

Four appendices conclude the report: Appendix A provides the school recruitment and student participation counts and rates by county. Data on substance use and antisocial behaviors by grade level are provided in Appendix B. Appendix C provides these data by county. Appendix D contains a table of comparisons to national benchmarks from *Monitoring the Future*. Appendix E provides each risk and protective factor with its corresponding survey questions. A separate *Supplementary Information* document is also referenced throughout this report. It provides more details about the methods used in different analyses, the 2021 NJRPFS survey instrument, and additional data tables by demographic characteristics.

STUDY DESIGN AND METHODS

In-person survey administrations began in November 2019 and were intended to continue through June 2020. On March 18, 2020, all NJ schools were closed due to the COVID-19 pandemic. As a result, all study and data collection activities were put on hold. Survey administrations resumed in January 2021 and concluded in March 2021 using a fully virtual administration design. The sections below summarize the sampling design, school and student recruitment process, administration protocols used, and overall school and student participation rates across two school years (2019-2020 and 2020-2021). The *Supplementary Information* that accompanies this report, as well as the *NJRPFS 2019-2021 Technical Report: Procedures, Challenges, and Recommendations* include further detail about these areas.

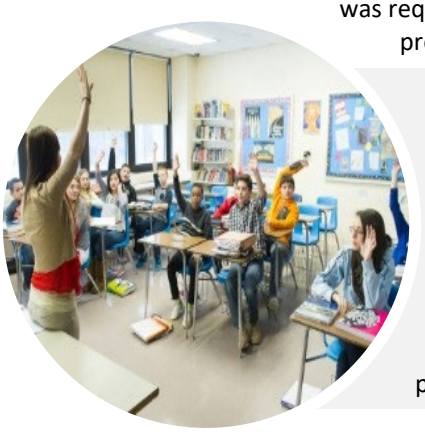
Sampling Design

All New Jersey public and charter schools with at least 40 students enrolled in grades seven and eight combined were eligible to participate, resulting in a pool of 709 eligible schools across the state. From the 709 eligible schools, a set of schools were randomly selected within each county. The number of selected schools ranged from four to 10, proportional to the number of eligible schools per county. The likelihood of any given school's selection increased with its enrollment size. In total, 110 schools were originally randomly sampled. When a school declined to participate, its spot was offered to another school within the same county.

Field Procedures

School recruitment started in September 2019 and continued through March 2020. Because of COVID-19 disruptions and school closures, CREEHS transitioned to an all virtual survey administration process to continue recruitment and data collection in the following school year. Overall, CREEHS successfully recruited 97 schools between 2019 and 2021. All 97 schools participated in the survey.

The NJRPFS survey was administered to students during a period or subject area designated by the school. CREEHS requested a list of all seventh and eighth grade classes that met during the specified period or subject and used this list to randomly select entire classrooms as opposed to individual students. This process ensured that all eligible students had an equal likelihood of being selected to participate. In accordance with NJ's active parental consent statute,[4] CREEHS staff distributed parental consent forms to students in selected classes at least two weeks prior to the survey administration date and provided schools with a copy of the survey instrument that could be made available to parents upon request. All parent materials were made available in English, Spanish, and Portuguese. Until March 2020, CREEHS created hard copies of the parent consent packets to distribute information to students and parents. After March 2020, recruitment and consent materials were converted to online videos and forms and distributed digitally in both English and Spanish (no Portuguese was requested) to fit the virtual needs of parents and students. All recruitment materials and procedures were approved by Montclair State University's Institutional Review Board.



Survey administrations took place between November 2019 and March 2021 in two separate waves: (1) November 2019 to March 2020 (prior to the pandemic) and (2) January to March 2021 (during the pandemic). Schools were offered the option of having students complete the survey using an online version or the standard paper or pencil version. In the first wave (i.e., up until March 2020), almost 90% of schools selected the online version of the survey and all survey administrations were conducted in-person at school facilities. In the second wave (i.e., in 2021), 100% of schools chose the online version of the survey and surveys were administered virtually but synchronously with students and proctors joining via video conferencing platforms.

STUDY DESIGN & METHODS

In all waves, CREEHS survey proctors followed a standardized protocol to administer the survey. All students who had received parental consent were asked to complete an assent form to indicate their own interest in and willingness to participate in the survey. Students who had not received parental consent were excused or asked to work on something else during the survey time. It was noted to students that the survey was both confidential and voluntary.

Participation Rates

In total, CREEHS collected 6,490 student surveys from 97 schools across all of NJ's 21 counties. Recruitment challenges were exacerbated by the COVID-19 pandemic and included lack of or minimal support from administration in hard to reach counties, demands of obtaining active parental consent and interrupting instructional time, and limited staff time and capacity to carry out student and parent reminders regarding consent. Despite these challenges, school participation targets were reached in more than half of counties in NJ (n=12). See Appendix A for recruitment and participation rates by county.

CREEHS completed recruitment and survey administrations in Monmouth and Warren counties before the March 2020 school shutdown. In Union County, survey administrations were scheduled to take place after school closures took effect, therefore, no students participated in the survey before the pandemic. All Union County schools and students were re-recruited in 2021 and completed the 2021 NJRPFS survey. As a result of this variation, differences across counties are not discussed in this report and should be interpreted with caution.

Participating Sample

Of the 6,490 surveys collected during 2020 and 2021, 6,190 (95%) surveys were eligible for analysis. Surveys were deemed ineligible if students answered less than 60% of the survey questions, reported using Xallapax (a fictitious drug), or if they were not in grades seven or eight. Overall, of the eligible surveys, 48.8% of eligible students were in seventh grade and 51.2% were in eighth grade.

More than half (53.3%) of students identified as female, less as male (44.3%), and 1.6% identified as "Other" gender (nonbinary).[NB] Based on the overall sample, 29.2% of students identified as Hispanic or Latino of any race. Because students could select more than one racial group, a "two or more races" category was calculated including students who reported more than one racial category. All racial groups are mutually exclusive from each other and include students also identifying as Hispanic. The majority of students identified as White (48.8%), followed by Other race (18.9%), two or more races (14.5%), Black or African American (8.3%), Asian (7.1%), Native American or Alaskan Native (0.5%),[SS] and Native Hawaiian or Pacific Islander (0.2%).[SS] 83% of students identifying as "Other race" were Hispanic or Latino.

Data presented in this report are not weighted. Publicly available student population race and ethnicity breakdowns from the NJ Department of Education did not match the way race and ethnicity was asked as two separate questions with multiple race response options in the NJRPFS survey. Additionally, statewide demographics data for students did not provide nonbinary gender data by county for the sample year. DMHAS and CREEHS decided not to weight the data in an effort to maintain the integrity of the race and ethnicity data and represent all gender categories (female, male, nonbinary) in the reports.

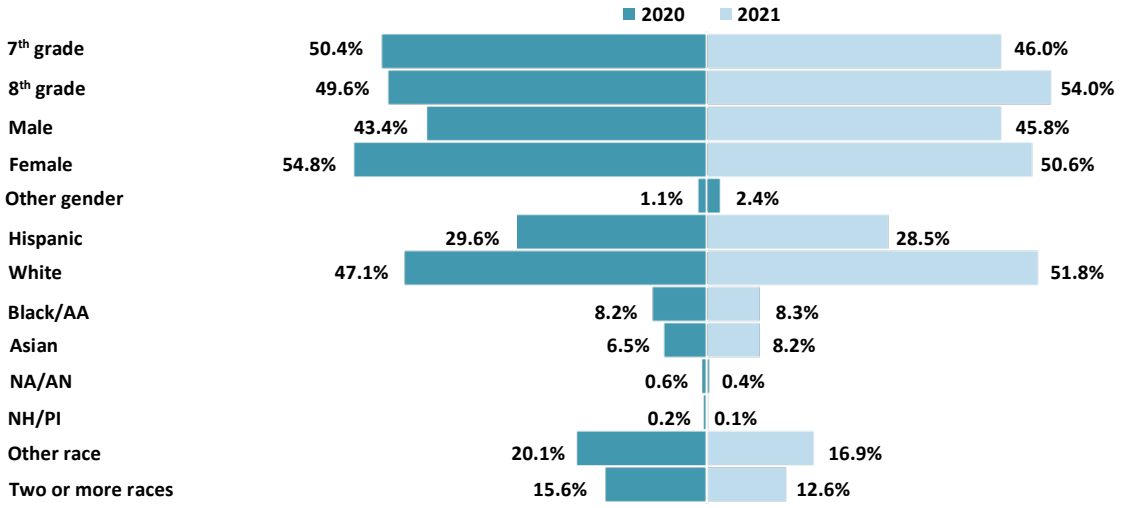
STUDY DESIGN & METHODS

Table 1. Profile of Participating Eligible Sample

	n	%
Overall	**6,190**	**100.0**
7th grade	3,020	48.8
8th grade	3,170	51.2
Male	2,740	44.3
Female	3,299	53.3
Other gender	99	1.6
Hispanic or Latino ("Hispanic")	1,807	29.2
White	3,022	48.8
Black or African American ("Black/AA")	511	8.3
Asian	441	7.1
Native American or Alaskan Native ("NA/AN")	31	0.5
Native Hawaiian or Pacific Islander ("NH/PI")	11	0.2
Other race	1,171	18.9
Two or more races	898	14.5

CREEHS performed two one-sided t-tests for each demographic characteristic to establish equivalence between the 2020 sample and the 2021 sample. Figure 1 presents the results from this analysis. The two samples were statistically equivalent on all demographic characteristics, which removed the issue of pre-post COVID-19 comparison variations as a result of demographic differences.

Figure 1. Equivalence of the Participating Sample, 2020 to 2021

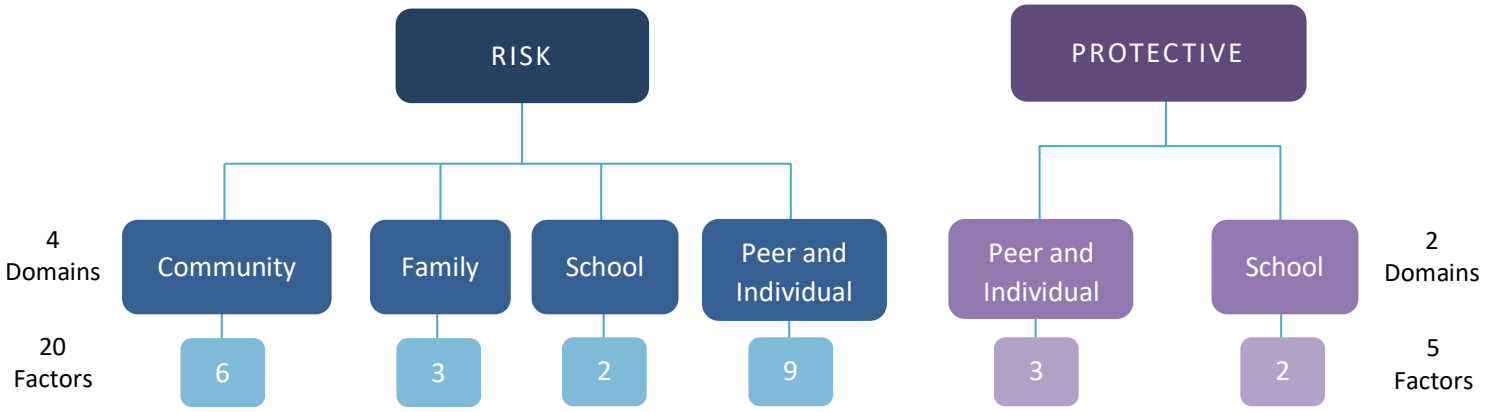


CHAPTER 1: RISK AND PROTECTIVE FACTORS

Previous research has identified underlying factors related to community, family, school, and peer relationships that contribute to a student's risk for using alcohol, tobacco, and drugs and participating in antisocial behaviors. These are known as "risk" and "protective" factors. Researchers Michael Arthur and J. David Hawkins, drawing on prior work by others, such as John Coie, have provided evidence for the factors with the strongest correlations to drug use and antisocial behaviors among youth. Through their work, the factors included in the current NJRPFS were conceived, thereby facilitating prevention needs assessment. [1,5]

Risk factors are grouped into four domains, or settings, where interventions can take place,[6,7] and protective factors are grouped into two domains as shown in Figure 2. The more risk factors students are exposed to, the more likely they are to engage in substance use or antisocial behaviors. Protective factors do the opposite. They represent characteristics in the student's environment that protect them against these behaviors. Certain risk factors are also associated with higher depressive symptoms among adolescents.[8] Efforts to prevent substance use and antisocial behaviors generally aim to reduce the influence of risk factors and to enhance the effectiveness of protective factors.

Figure 2. Risk and Protective Domains



Looking Back: 10-Year Trends

This section presents trends data for risk and protective factors and their related domains. Multiple survey questions make up each factor. See *Appendix D Risk and Protective Factors Composition* for a detailed list of questions that make up each factor. Scores on these factors have been standardized to a 0 to 1 scale. Higher risk factor scores indicate a greater likelihood of engaging in substance use or antisocial behaviors. Higher protective factor scores indicate more protection against substance use or antisocial behaviors. See *Supplementary Information* for how these scores were calculated. 2021 data represents an aggregate of data collected across two school years; changes across years should be interpreted with caution.

The overall mean risk factor score for 2021 was 0.19, compared to 0.15 in 2015. The overall mean protective factor score for 2021 was 0.53, which remained stable from 2015.

Please disregard rates reported in RED and reference the Updates section at the beginning of the report.

RISK & PROTECTIVE FACTORS

Table 2. Risk Factor Trends, 2010–2021

Please disregard rates reported in RED and reference the Updates section at the beginning of the report.

Risk Domains and Factors	2010	2012	2015	2021
Community Risk domain	**0.24**	**0.24**	**0.22**	**0.28**
Laws and norms favorable to drug use	0.34	0.33	0.29	0.33
Community transitions and mobility	0.27	0.26	0.26	0.40
Low neighborhood attachment	0.28	0.28	0.27	0.35
Perceived availability of drugs	0.26	0.24	0.21	0.27
Community disorganization	0.22	0.21	0.20	0.24
Perceived availability of handguns	0.11	0.11	0.11	0.10
Family Risk domain	**0.13**	**0.12**	**0.11**	**0.19**
Poor family management	0.21	0.20	0.18	0.24
Parental attitudes favorable toward antisocial behavior	0.13	0.13	0.10	0.19
Parental attitudes favorable toward drug use	0.05	0.05	0.04	0.13
School Risk domain	**0.32**	**0.30**	**0.32**	**0.35**
Low commitment to school	0.36	0.34	0.37	0.42
Academic failure	0.30	0.27	0.28	0.27
Peer and Individual Risk domain	**0.11**	**0.10**	**0.09**	**0.11**
Perceived risks of drug use	0.21	0.22	0.24	0.20
Favorable attitudes toward antisocial behavior	0.18	0.16	0.12	0.21
Rewards for antisocial behavior	0.15	0.15	0.15	0.21
Favorable attitudes toward drug use	0.09	0.09	0.07	0.15
Early initiation of drug use	0.09	0.08	0.05	0.05
Friends' use of drugs	0.10	0.09	0.06	0.05
Early initiation of antisocial behavior	0.06	0.05	0.04	0.05
Gang involvement	0.03	0.02	0.02	0.02
Interaction with antisocial peers	0.05	0.05	0.04	0.03
Risk factors (overall mean)	**0.17**	**0.17**	**0.15**	**0.19**

Table 3. Protective Factor Trends, 2010–2021

Please disregard rates reported in RED and reference the Updates section at the beginning of the report.

Protective Domains and Factors	2010	2012	2015	2021
School Protective domain	**0.61**	**0.61**	**0.62**	**0.66**
School opportunities for prosocial involvement	0.64	0.63	0.65	0.72
School rewards for prosocial involvement	0.59	0.58	0.59	0.61
Peer and Individual Protective domain	**0.46**	**0.47**	**0.47**	**0.44**
Interaction with prosocial peers	0.62	0.64	0.63	0.57
Rewards for prosocial involvement	0.45	0.46	0.47	0.44
Prosocial involvement	0.30	0.31	0.30	0.31
Protective factors (overall mean)	**0.52**	**0.52**	**0.53**	**0.53**

Risk Factors

Please disregard rates reported in RED and reference the Updates section at the beginning of the report.

Community Risk Domain

How was this measured?

Students were asked questions related to six Community Risk factors: low neighborhood attachment; community disorganization; community transitions and mobility; perceived availability of drugs; perceived availability of handguns; and laws and norms favorable to drug use.

Summary of Findings

Figure 3. Community Risk Factor Scores by Grade

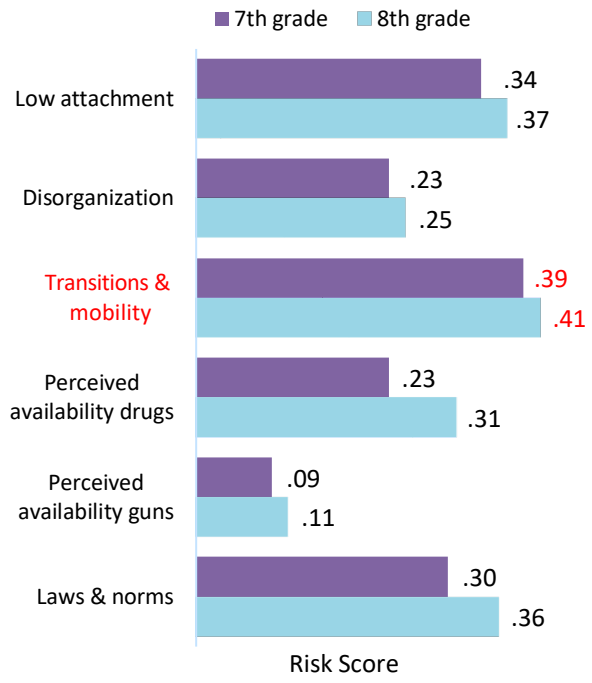
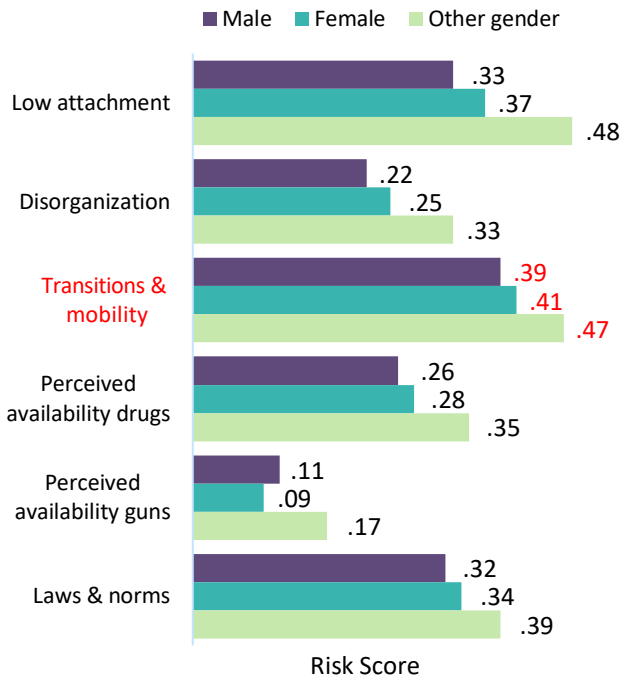


Figure 4. Community Risk Factor Scores by Gender



Eighth grade students had higher risk scores for all community-related risk factors as compared to seventh grade students.[NT]

Nonbinary[NB] student responses indicated higher risk compared to other gender groups for all community-related factors.[NT] Nonbinary refers to students identifying as "other gender" (i.e., not female or male) in the survey.

Black or African American, Native American or Alaskan Native,[SS] and Other race student responses indicated higher risk scores for issues related to community transitions and mobility as well as low neighborhood attachment compared to other racial and ethnic groups.[NT]

Table 4. Community Risk Factor Scores by Race and Ethnicity

	Hispanic	White	Black/AA	Asian	NA/AN	NH/PI	Other race	Two or more races
Low attachment	0.40	0.32	0.41	0.32	0.41	0.28	0.40	0.39
Disorganization	0.30	0.20	0.31	0.19	0.27	0.30	0.30	0.27
Transitions & mobility	0.44	0.37	0.45	0.36	0.40	0.45	0.45	0.43
Perceived availability drugs	0.28	0.26	0.27	0.24	0.32	0.33	0.27	0.30
Perceived availability handguns	0.10	0.10	0.10	0.07	0.13	0.10	0.10	0.12
Laws & norms	0.35	0.33	0.35	0.30	0.32	0.30	0.35	0.35

Please disregard rates reported in RED and reference the Updates section at the beginning of the report.

Family Risk Domain

How was this measured?

Students were asked questions related to three Family Risk factors: poor family management; parental attitudes favorable toward drug use; and parental attitudes favorable toward antisocial behaviors.

Summary of Findings

Figure 5. Family Risk Factor Scores by Grade

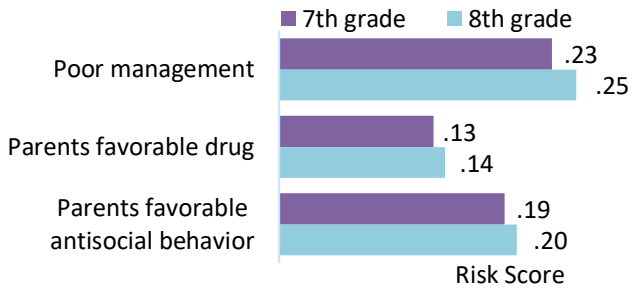
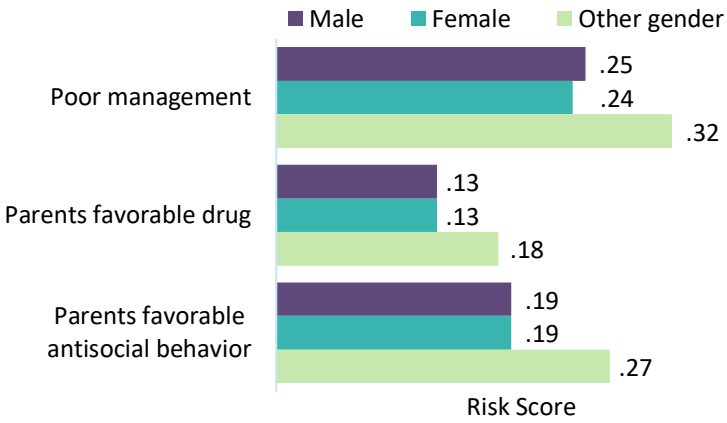


Figure 6. Family Risk Factor Scores by Gender



Eighth grade students had higher risk scores for all family-related risk factors as compared to seventh grade students.[NT]

Nonbinary[NB] student responses indicated higher risk compared to other gender groups for all family-related factors.NT

Responses from Hispanic students, students indicating Other race, and those selecting two or more races indicated higher risk for issues related to poor family management compared to other racial and ethnic groups.[NT]

Table 5. Family Risk Factor Scores by Race and Ethnicity

	Hispanic	White	Black/AA	Asian	NA/AN	NH/PI	Other race	Two or more races
Poor management	0.25	0.24	0.24	0.24	0.23	0.22	0.25	0.25
Parents favorable drug	0.13	0.13	0.13	0.13	0.15	0.10	0.13	0.14
Parents favorable antisocial behavior	0.20	0.19	0.18	0.18	0.16	0.14	0.19	0.21

School Risk Domain

Please disregard rates reported in RED and reference the Updates section at the beginning of the report.

How was this measured?

Students were asked questions related to two School Risk factors: academic failure; and low commitment to school.

Summary of Findings

Figure 7. School Risk Factor Scores by Grade

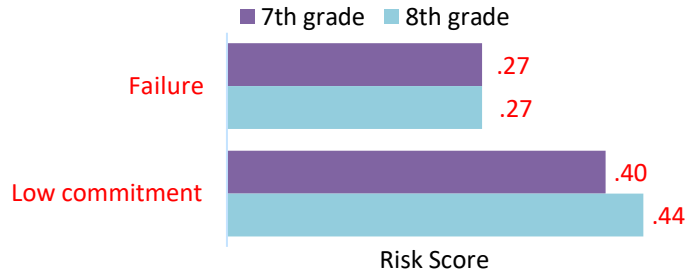
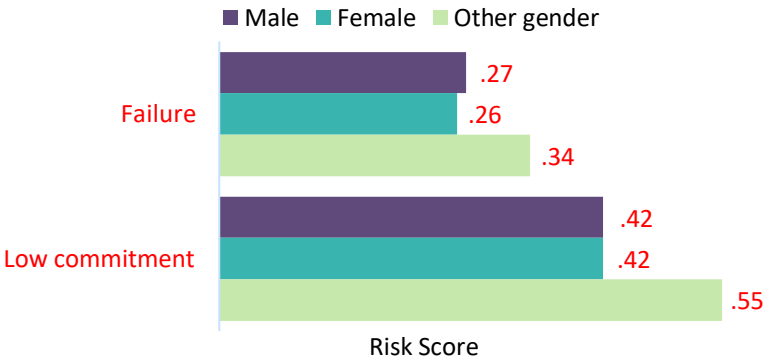


Figure 8. School Risk Factor Scores by Gender



Eighth grade students had higher risk scores for low commitment to school compared to seventh grade students.[NT]

Nonbinary student responses indicated higher risk compared to other gender groups for issues related to academic failure and low commitment to school.[NT]

Responses from Native American or Alaskan Native students and students selecting two or more races indicated higher risk for issues related to low commitment to school compared to other racial and ethnic groups.[NT]

Table 6. School Risk Factor Scores by Race and Ethnicity

	Hispanic	White	Black/AA	Asian	NA/AN	NH/PI	Other race	Two or more races
Failure	0.32	0.24	0.33	0.18	0.29	0.29	0.33	0.28
Low commitment	0.42	0.42	0.42	0.39	0.45	0.40	0.41	0.44

Peer and Individual Risk Domain

Please disregard rates reported in RED and reference the Updates section at the beginning of the report.

How was this measured?

Students were asked questions related to nine Peer and Individual Risk factors: gang involvement; perceived risks of drug use; early initiation of drug use; early initiation of antisocial behaviors; favorable attitudes toward drug use; favorable attitudes toward antisocial behaviors; rewards for antisocial behaviors; friends' use of drugs; and interaction with antisocial peers.

Summary of Findings

Figure 9. Peer and Individual Risk Factor Scores by Grade

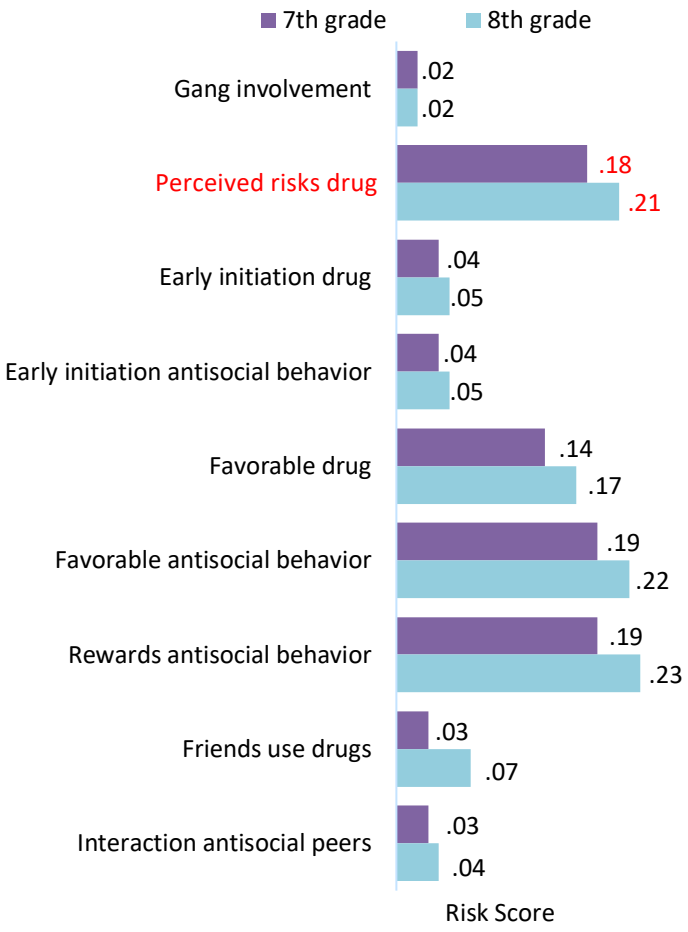
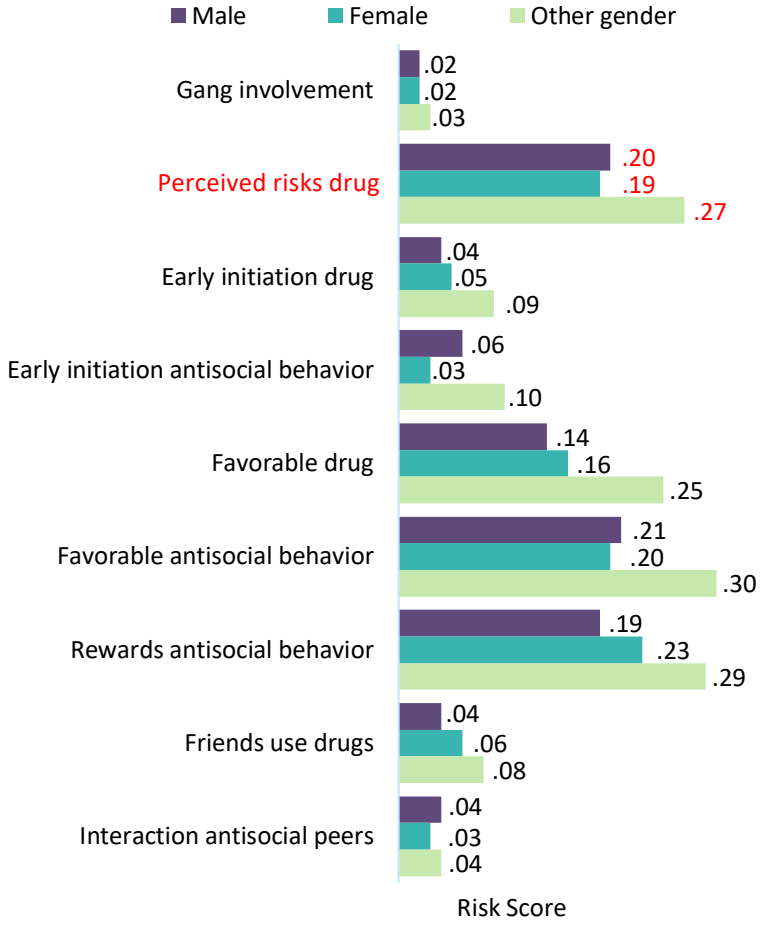


Figure 10. Peer and Individual Risk Factor Scores by Gender



Eighth grade students had higher risk scores for most Peer and Individual Risk factors compared to seventh grade students. Risk scores for gang involvement were equivalent across grades.[NT] Nonbinary student responses indicated higher risk on all peer and individual related factors compared to other gender groups.[NT]

RISK & PROTECTIVE FACTORS

Responses from students identifying as two or more races, Hispanic, and Native American or Alaskan Native indicated higher risk for issues related to favorable attitudes toward antisocial behaviors compared to other racial and ethnic groups.[NT] Black or African American and Other race student responses indicated higher risk based on their perceptions about the risks of drug use compared to other racial and ethnic groups.[NT]

Table 7. Peer and Individual Risk Factor Scores by Race and Ethnicity

	Hispanic	White	Black/AA	Asian	NA/AN	NH/PI	Other race	Two or more races
Gang involvement	0.02	0.01	0.02	0.01	0.02	0.00	0.03	0.02
Perceived risks drug	0.23	0.18	0.25	0.14	0.19	0.16	0.24	0.21
Early initiation drug	0.06	0.04	0.05	0.02	0.06	0.03	0.06	0.06
Early initiation antisocial behavior	0.06	0.03	0.10	0.02	0.07	0.09	0.06	0.06
Favorable drug	0.17	0.15	0.16	0.13	0.17	0.13	0.17	0.17
Favorable antisocial behavior	0.22	0.20	0.21	0.19	0.22	0.15	0.21	0.23
Rewards antisocial behavior	0.22	0.20	0.24	0.18	0.20	0.19	0.22	0.24
Friends use drugs	0.06	0.04	0.06	0.02	0.06	0.05	0.06	0.07
Interaction antisocial peers	0.04	0.02	0.06	0.01	0.03	0.00	0.04	0.05

Please disregard rates reported in RED and reference the Updates section at the beginning of the report.

Protective Factors

Peer and Individual Protective Domain

How was this measured?

Students were asked questions related to three Peer and Individual Protective factors: interaction with prosocial peers; prosocial involvement; and peer rewards for prosocial involvement.

Summary of Findings

Figure 11. Peer and Individual Protective Factor Scores by Grade

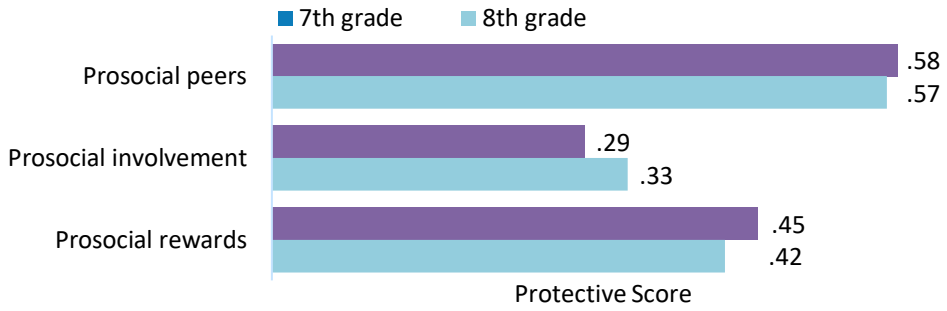
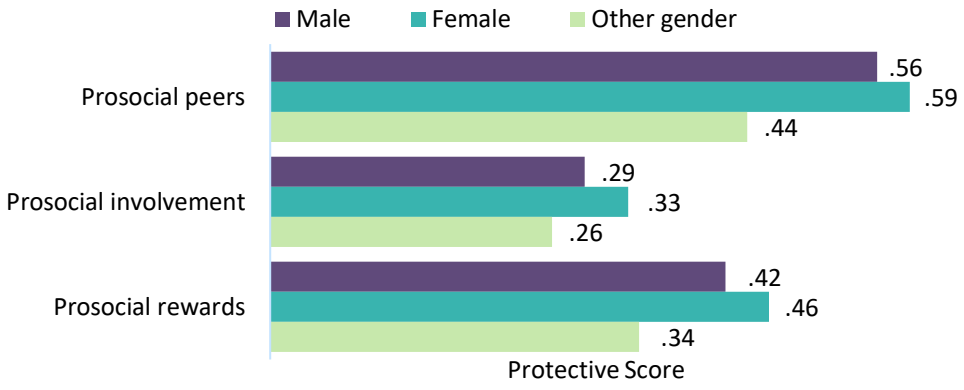


Figure 12. Peer and Individual Protective Factor Scores by Gender



Seventh grade students had slightly higher protective scores for interaction with prosocial peers and rewards for prosocial involvement compared to eighth grade students.[NT]

Female student responses indicated higher protection on all Peer and Individual Protective factors compared to other gender groups.[NT]

Table 8. Peer and Individual Protective Factor Scores by Race and Ethnicity

	Hispanic	White	Black/AA	Asian	NA/AN	NH/PI	Other race	Two or more races
Prosocial peers	0.52	0.60	0.54	0.63	0.52	0.62	0.51	0.58
Prosocial involvement	0.25	0.34	0.26	0.35	0.37	0.24	0.24	0.32
Prosocial rewards	0.43	0.44	0.43	0.49	0.43	0.46	0.42	0.43

School Protective Domain

Please disregard rates reported in RED and reference the Updates section at the beginning of the report.

How was this measured?

Students were asked questions related to two School Protective factors: school opportunities for prosocial involvement; and school rewards for prosocial involvement.

Summary of Findings

Figure 13. School Protective Factor Scores by Grade

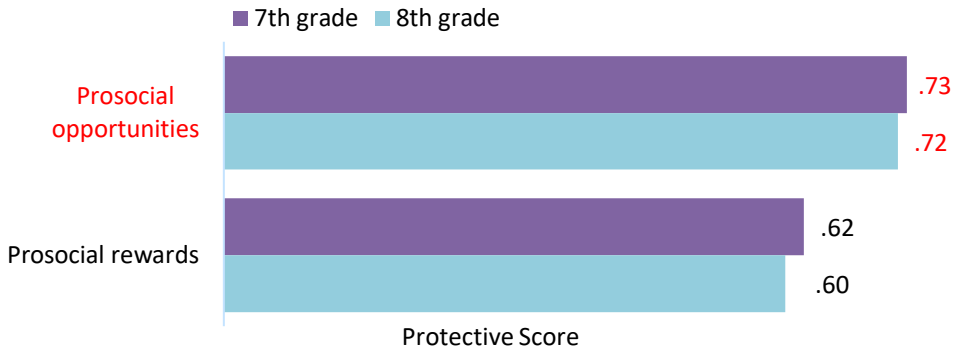
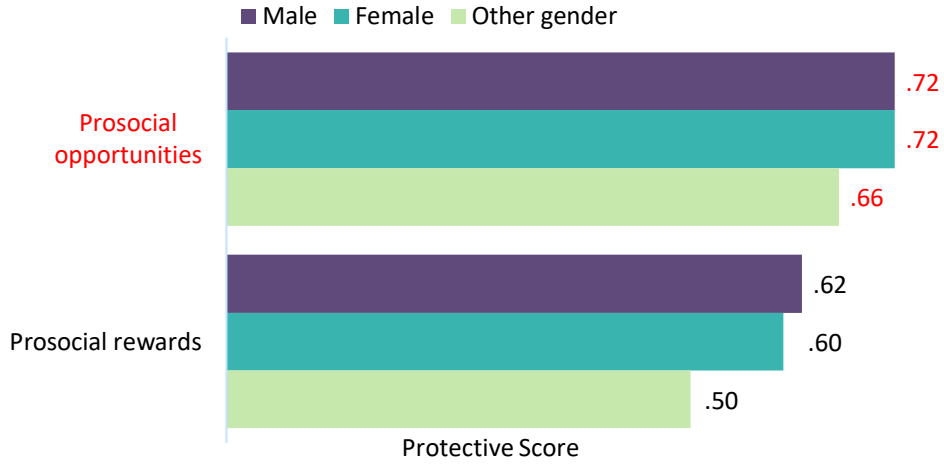


Figure 14. School Protective Factor Scores by Gender



Seventh grade students had slightly higher protective scores for school related factors compared to eighth grade students.[NT]

Male and female student responses indicated similarly higher protection than nonbinary students because they were more frequently involved in prosocial activities ("prosocial opportunities").[NT]

RISK & PROTECTIVE FACTORS

Native Hawaiian or Pacific Islander, White, Asian, and Native American or Alaskan Native student responses indicated higher protection compared to other racial and ethnic groups because they were more frequently involved in prosocial activities ("prosocial opportunities").[NT]

Table 9. School Protective Factor Scores by Race and Ethnicity

	Hispanic	White	Black/AA	Asian	NA/AN	NH/PI	Other race	Two or more races
Prosocial opportunities	0.72	0.73	0.70	0.73	0.73	0.75	0.72	0.71
Prosocial rewards	0.60	0.62	0.61	0.62	0.59	0.54	0.61	0.59

Please disregard rates reported in RED and reference the Updates section at the beginning of the report.

PRE-POST EMERGENCE OF COVID-19

This section compares risk and protective factor scores prior to (i.e., surveyed through March 2020) and after the emergence of the COVID-19 pandemic (i.e., surveyed in 2021). For information about the statistical significance tests performed, please see *Supplementary Information.*

Risk Factors

Summary of Findings

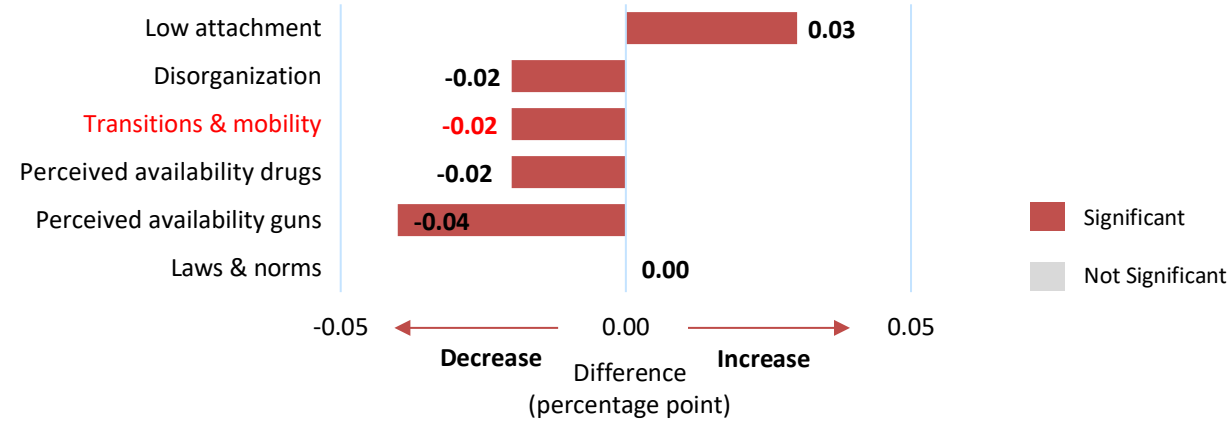
Students perceived significantly lower community risk during the pandemic (2021) than before the pandemic (2020).

Community Risk scores significantly decreased for:

- Community disorganization
- Community transitions and mobility
- Perceived availability of drugs
- Perceived availability of handguns

Low neighborhood attachment was the only risk factor that significantly increased from 2020 to 2021. Students reported less attachment to the community during the pandemic than before the pandemic.

Figure 15. Changes in Community Risk Perceptions and Behaviors, 2020 to 2021

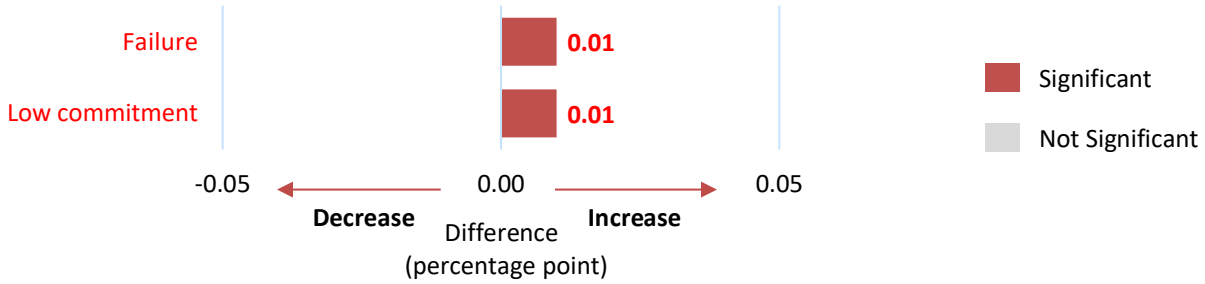


Of the 16 factors with pre-post COVID-19 statistically significant differences identified in the report, the likelihood of detecting significant differences may have been artificially higher for five factors due to the reduced size of standard errors around the factor means.

RISK & PROTECTIVE FACTORS

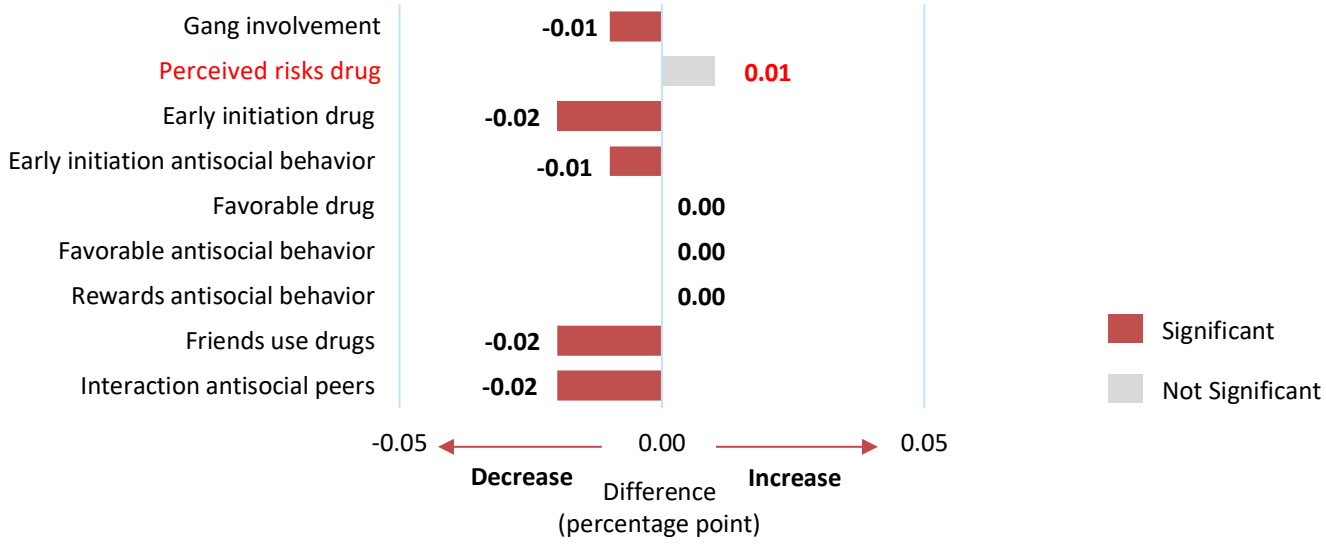
School-related risks significantly increased during the pandemic (2021), compared to before the pandemic (2020), with slightly increased reports of academic failure and low commitment to school (i.e., not liking school, seeing schoolwork as irrelevant, or skipping or cutting class).

Figure 16. Changes in School Risk Perceptions and Behaviors, 2020 to 2021



Students reported significantly lower use of drugs at an early age, friends' use of drugs, and interactions with peers participating in antisocial behaviors during the pandemic (2021), compared to before the pandemic (2020). Student perceptions about the risk of drug use and antisocial behaviors remained unchanged from 2020 to 2021.

Figure 17. Changes in Peer and Individual Risk Perceptions and Behaviors, 2020 to 2021



Of the 16 factors with pre-post COVID-19 statistically significant differences identified in the report, the likelihood of detecting significant differences may have been artificially higher for five factors due to the reduced size of standard errors around the factor means.

Protective Factors

Summary of Findings

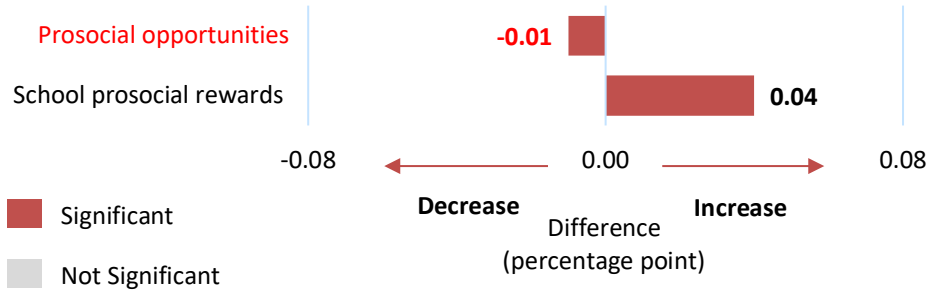
Students reported lower protective attitudes about their school and peer relationships during the pandemic, compared to before the pandemic.

Protective Factor scores significantly decreased for:

- School opportunities for prosocial involvement
- Interacting with prosocial peers
- Prosocial involvement

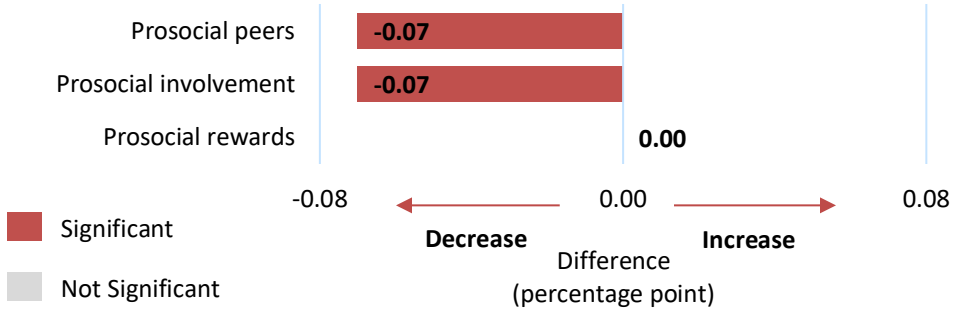
Despite these declines, students more often reported receiving school rewards for prosocial involvement during the pandemic, compared to before the pandemic.

Figure 18. Changes in School Protective Perceptions and Behaviors, 2020 to 2021



Of the 16 factors with pre-post COVID-19 statistically significant differences identified in the report, the likelihood of detecting significant differences may have been artificially higher for five factors due to the reduced size of standard errors around the factor means.

Figure 19. Changes in Peer and Individual Protective Perceptions and Behaviors, 2020 to 2021



Changes in risk and protective factor scores may be due to a number of COVID-19 related experiences, such as social distancing conditions which could have reduced opportunities to access drugs and handguns, to move from one place to another, or to engage with friends. COVID-19 also changed the way students attended school and interacted with peers. Of note, 2021 data reflects students' perceptions about these issues during the first year of the pandemic.

CHAPTER 2: ALCOHOL, TOBACCO, AND OTHER DRUG USE

Alcohol, tobacco, and other drug use among adolescents is a major public health concern. It is associated with higher rates of physical and mental illnesses, difficulty at school, addiction, and legal problems.[3,9,10,11] In 2019, the NJRPFS survey instrument was revised to capture students who use e-cigarettes *without* marijuana separately from students using e-cigarettes *with* marijuana.

This chapter displays trends from 2010 to 2021, followed by prevalence rates for each commonly reported substance, pre-post emergence of COVID-19 comparative analysis, and predictions based on risk and protective factors. For a table with all common substances by grade, please see Appendix B. Appendix C provides county-by-county data for these substances.

Looking Back: 10-Year Trends

Trends data for each substance is presented below for three time periods: lifetime (at least once during their lifetime), past year (any occasion within 12 months), and past month (any occasion within 30 days). Because question wording on e-cigarettes differs across survey years, and because 2021 data represents an aggregate of data collected across two school years, changes across years should be interpreted with caution.

Similar to eighth grade students surveyed nationwide as part of the *Monitoring the Future* study (see Appendix D), seventh and eighth grade students who participated in this survey in 2020 and 2021 used alcohol more than any other drug, followed by e-cigarettes (i.e., vapes), and marijuana.

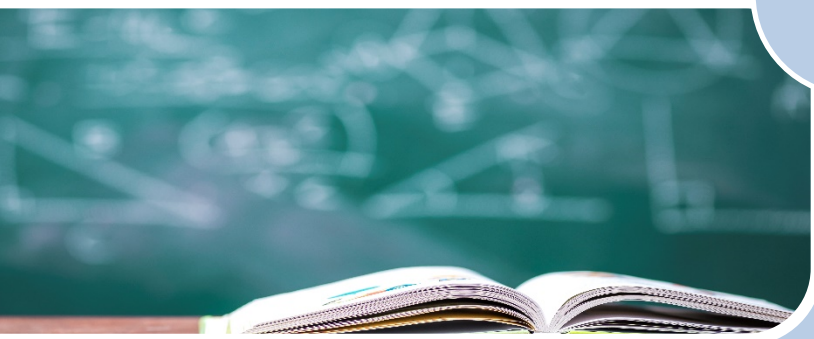
Table 10. Substance Use Trends, 2010–2021

Substance	2010 (%)	2012 (%)	2015 (%)	2021 (n)	2021 (%)
Alcohol					
Lifetime	27.0	23.1	14.3	1,006	16.5
Early onset use (11 years or younger)	8.6	7.8	4.5	401	6.6
Past year	20.4	17.3	8.4	632	10.4
Past month	10.7	9.0	4.4	362	5.9
Binge drinking					
Lifetime	9.5	7.6	3.2	248	4.1
Past year	7.6	6.3	2.6	171	2.8
E-cigarettes					
Lifetime	-	-	10.5	589	9.6
Early onset use *without* marijuana	-	-	-	101	1.6
Early onset use *with* marijuana	-	-	-	25	0.4
Past year	-	-	8.8	403	6.6
Past month	-	-	5.5	241	3.9
Marijuana					
Lifetime	5.7	5.4	4.8	194	3.2
Early onset use (11 years or younger)	0.5	0.6	0.5	34	0.6
Past year	5.0	4.9	2.6	153	2.5
Past month	3.1	3.3	1.8	104	1.7

Table 10. Substance Use Trends, 2010–2021 (continued)

Substance	2010 (%)	2012 (%)	2015 (%)	2021 (n)	2021 (%)
Prescription drugs not prescribed to them					
Lifetime	5.8	5.6	3.2	149	2.5
Early onset use (11 years or younger)	2.6	2.7	1.3	68	1.1
Past year	4.2	3.9	2.2	107	1.8
Past month	2.7	2.0	1.3	51	0.8
Cigarettes					
Lifetime	9.5	7.6	4.2	112	1.8
Early onset use (11 years or younger)	3.0	2.7	1.0	50	0.8
Past year	7.4	5.7	3.2	65	1.1
Past month	4.4	3.2	2.4	27	0.4
Inhalants					
Lifetime	4.8	4.1	1.4	83	1.4
Early onset use (11 years or younger)	1.6	1.6	0.5	38	0.6
Past year	3.4	2.7	0.7	47	0.8
Past month	1.9	1.6	0.5	32	0.5
Other Illicit Drugs					
Lifetime	2.4	2.5	1.4	63	1.1
Early onset use (11 years or younger)	0.8	0.9	0.6	34	0.6
Past year	1.4	1.6	0.8	34	0.6

Between 2010 and 2021, prevalence rates for most substances other than marijuana (early onset only) decreased by at least 0.1 percentage points. Although alcohol use gradually declined from 2010 to 2015, there was an increase in use between 2015 and 2021 for alcohol use and binge drinking. Prevalence rates for inhalants remained constant for lifetime and past month use, but increased slightly for early onset and past year use.[NT]



Underage Drinking

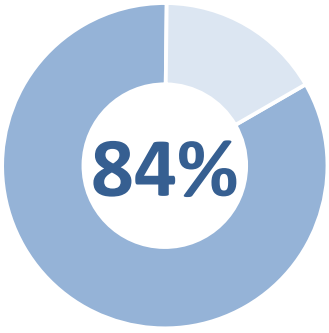
Alcohol Use

How was this measured?

Alcohol is the substance most often used by young people in New Jersey and nationwide. Youth who drink alcohol are more likely to engage in behaviors that harm themselves and others. "Early initiation of drinking is associated with development of alcohol use disorder later in life."[9,12] Seventh and eighth grade students were asked about their consumption of alcohol, specifically "beer, wine or hard liquor (for example, vodka, whiskey or gin) other than a few sips," for three time periods: lifetime (ever), past year, and past month.

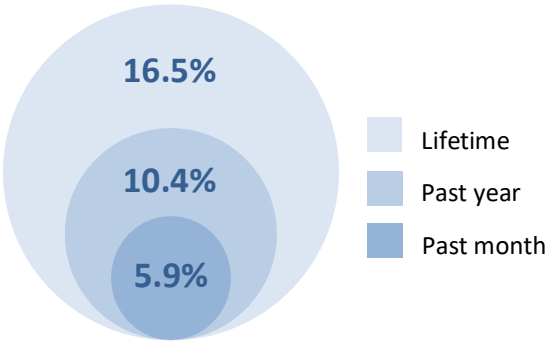
Summary of Findings

Figure 20



of students never used alcohol

Figure 21. Lifetime, Past Year, and Past Month Use of Alcohol



EARLY ONSET

6.6%

first used alcohol before age 12

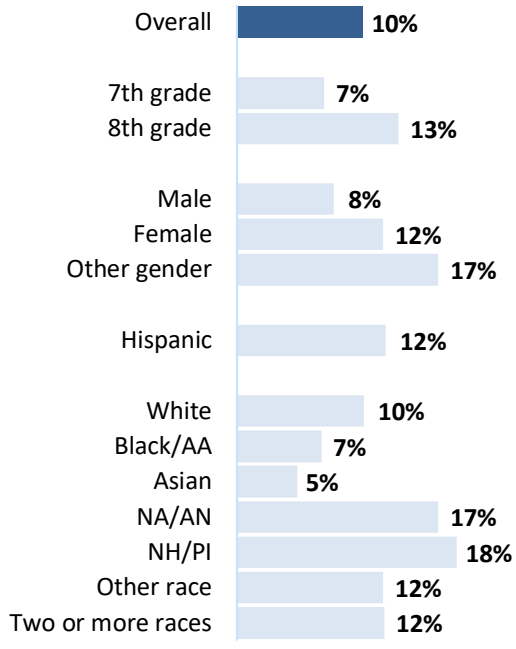
Overall, 16.5% (n=1,006) of students consumed alcohol during their lifetime, 10.4% (n=632) within the past year, and 5.9% (n=362) within the past month.

Past year alcohol use was above the state average (10.4%) for:[NT]

- eighth grade students (13.4%),
- nonbinary (16.7%) and female (12.1%) students,
- students identifying as Native Hawaiian or Pacific Islander (18.2%),[SS] Native American or Alaskan Native (16.7%),[SS] Hispanic (12.3%), two or more races (12.2%), Other race (12.1%), and White (10.5%).

These findings are consistent with national studies that have also found higher prevalence rates of recent alcohol use among nonbinary and female students compared to male students.[13,14]

Figure 22. Past Year Use of Alcohol



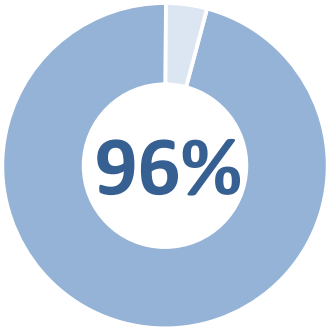
Binge Drinking

How was this measured?

Students were asked about their binge drinking behavior, specifically if they "had 3 or more drinks of beer, wine or hard liquor (for example, vodka, whiskey or gin) in a row within a couple of hours," for three time periods: lifetime (ever), past year (any occasion), and past month (any occasion).

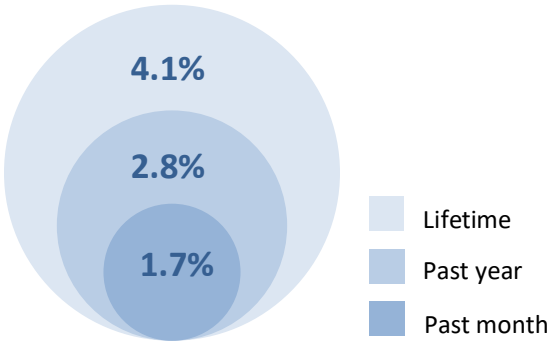
Summary of Findings

Figure 23



of students have never engaged in binge drinking

Figure 24. Lifetime, Past Year, and Past Month Binge Drinking



EARLY ONSET

0.9%

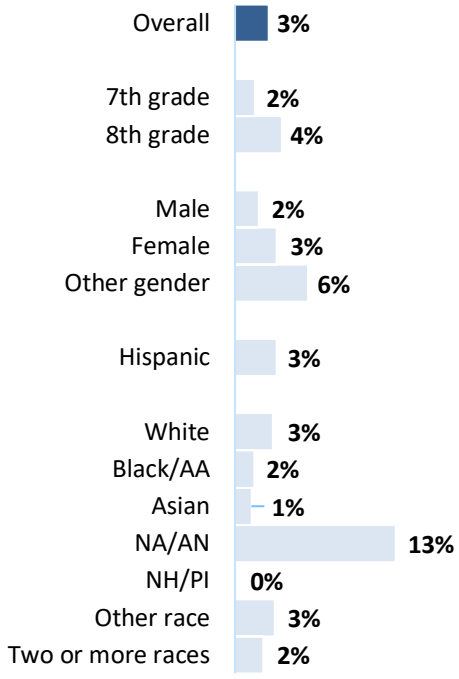
first binge drank before age 12

Overall, 4.1% (n=248) of students reported binge drinking during their lifetime, 2.8% (n=171) within the past year, and 1.7% (n=102) within the past month.

Past year binge drinking was above the state average (2.8%) for:[NT]

- eighth grade students (3.9%),
- nonbinary (6.1%) and female (3.4%) students,
- students identifying as Native American or Alaskan Native (13.3%), Hispanic (3.4%), Other race (3.3%), and White (3.1%).

Figure 25. Past Year Binge Drinking



Common Sources of Alcohol

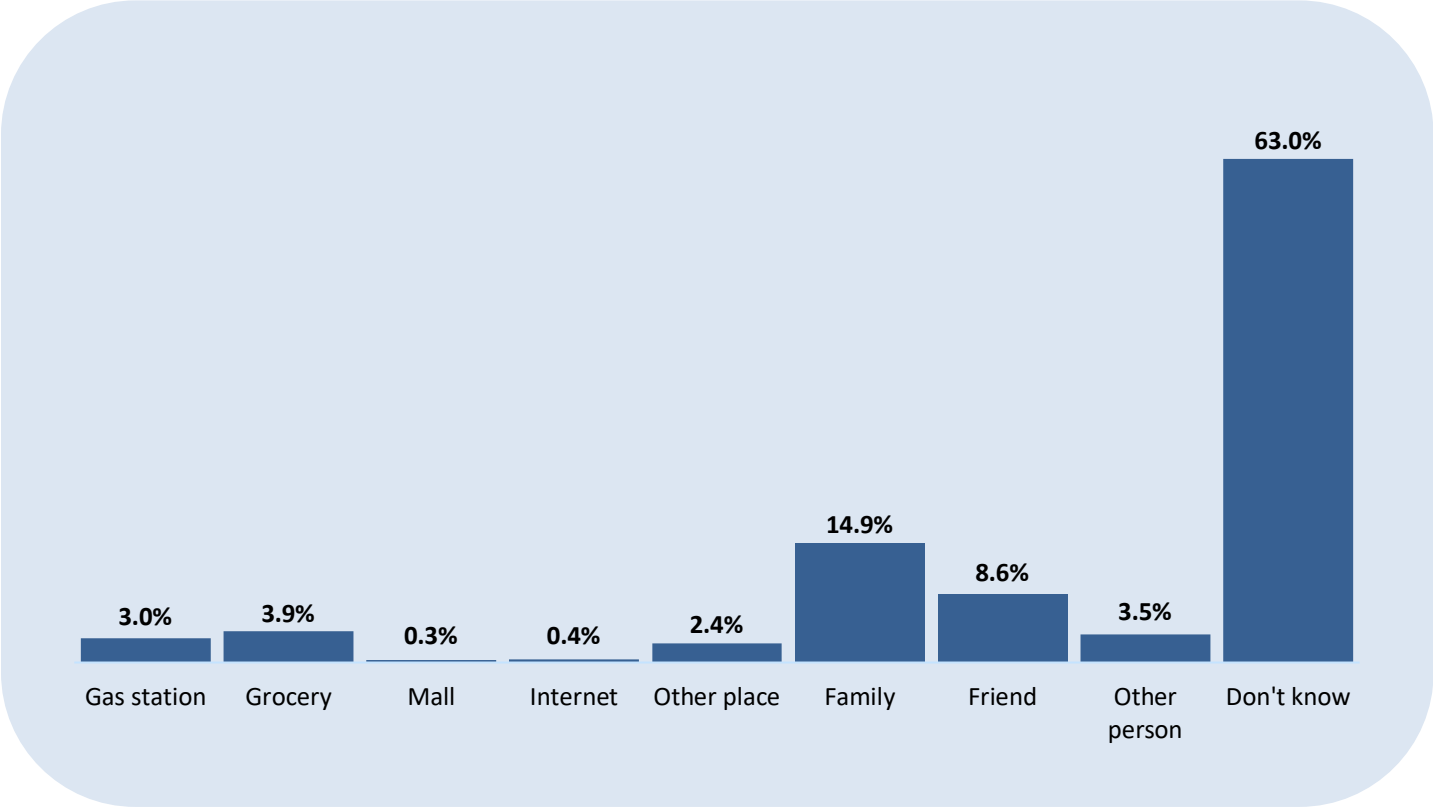
How was this measured?

Students were asked “Where do kids your age usually get or buy beer, wine, or hard liquor (for example, vodka, whiskey, gin)?” to determine common sources of alcohol.

Summary of Findings

The top three most common sources for obtaining alcohol were a family member (14.9%), followed by a friend (8.6%), and a grocery store or drug store (3.9%).

Figure 26. Common Sources to Get or Buy Alcohol



Cigarettes

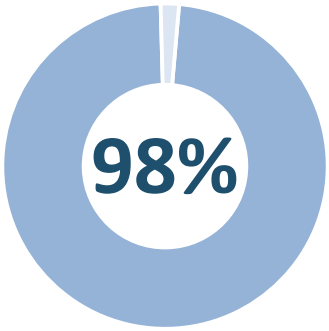
Cigarette Use

How was this measured?

Nearly all tobacco products contain nicotine. They can cause harm to the brain, impact learning, memory, and attention.[11] Seventh and eighth grade students were asked if they had smoked cigarettes for three time periods: lifetime (ever), past year (any occasion), and past month (any occasion).

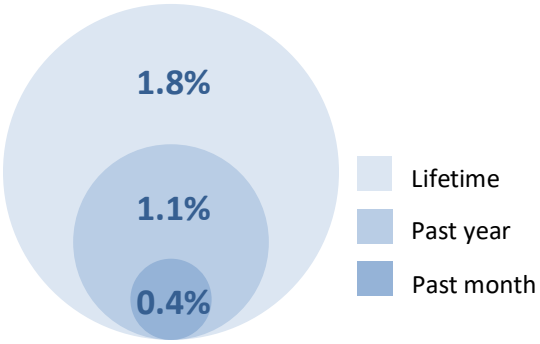
Summary of Findings

Figure 27



of students never smoked cigarettes

Figure 28. Lifetime, Past Year, and Past Month Use of Cigarettes



EARLY ONSET

0.8%

first smoked cigarettes before age 12

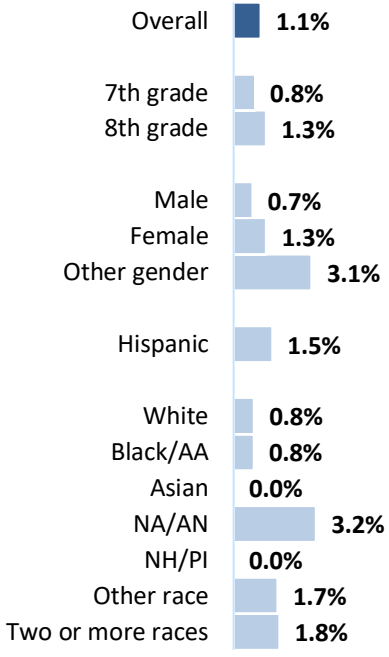
Overall, 1.8% (n=112) of students smoked cigarettes during their lifetime, 1.1% (n=65) within the past year, and 0.4% (n=27) within the past month.

Past year cigarette smoking was above the state average (1.1%) for:[NT]

- eighth grade students (1.3%),
- nonbinary (3.1%) and female (1.3%) students,
- students identifying as Native American or Alaskan Native (3.2%) students, two or more races (1.8%), Other race (1.7%), and Hispanic (1.5%).

These findings are consistent with previous research which suggest that nonbinary students are at greater odds for using cigarettes than students that identify as male or female only (also known as cisgender).[13]

Figure 29. Past Year Use of Cigarettes



Common Sources of Cigarettes

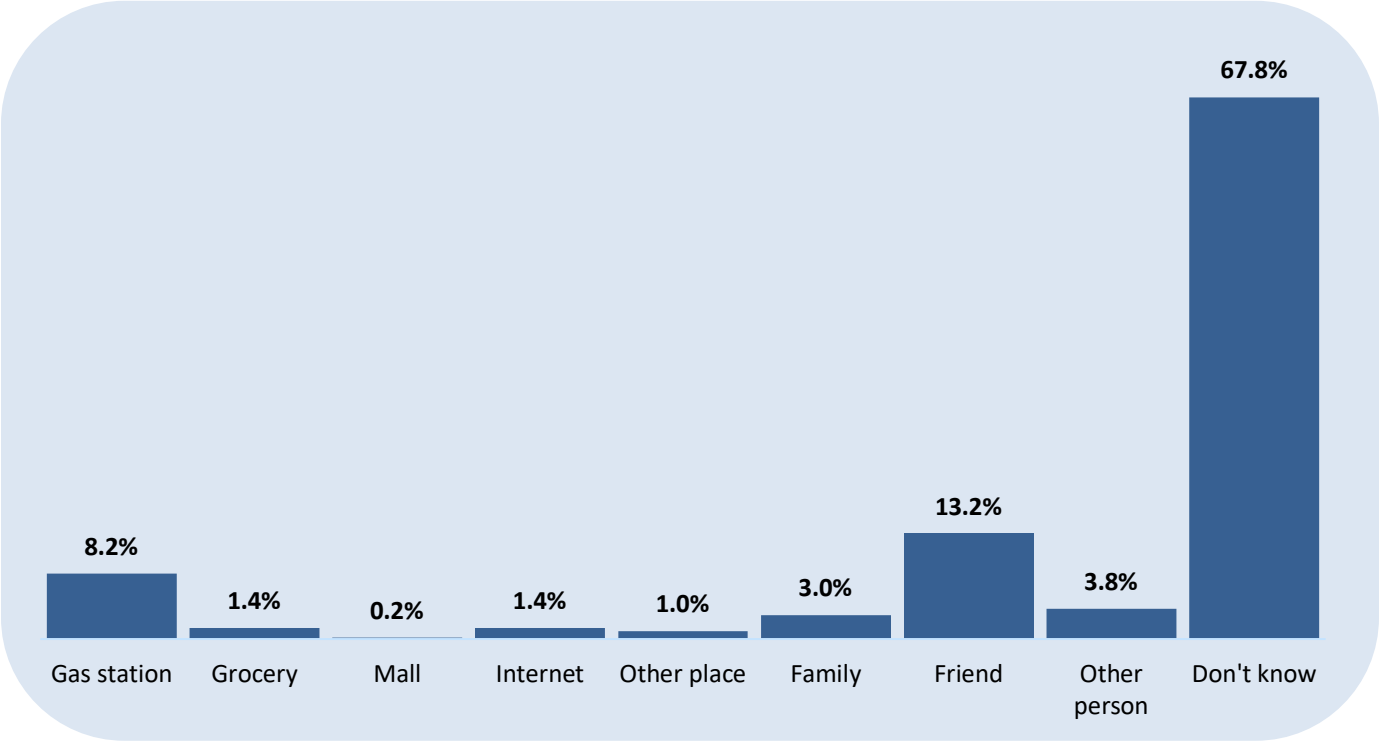
How was this measured?

Students were asked “Where do kids your age usually get or buy cigarettes?” to determine the common sources of cigarettes.

Summary of Findings

The top three most common sources for obtaining cigarettes were a friend (13.2%), followed by a gas station or convenience store (8.2%), and some other person that is not a family member or friend (3.8%).

Figure 30. Common Sources to Get or Buy Cigarettes



E-cigarettes

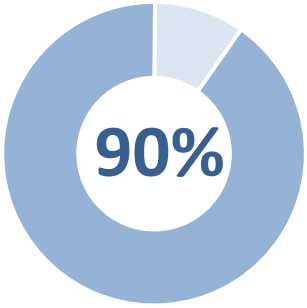
E-cigarette Use

How was this measured?

E-cigarette use is becoming increasingly popular among teens and young adults. "Young people who use e-cigarettes may be more likely to smoke cigarettes in the future."[10,15] Students were asked separate questions about their use of e-cigarette, vape pen, e-liquid rig (JUUL, N2, Joyetech)" with or without marijuana for three time periods: lifetime (ever), past year (any occasion), and past month (any occasion). The following section is a combined report of students indicating use of e-cigarettes without marijuana and with marijuana.

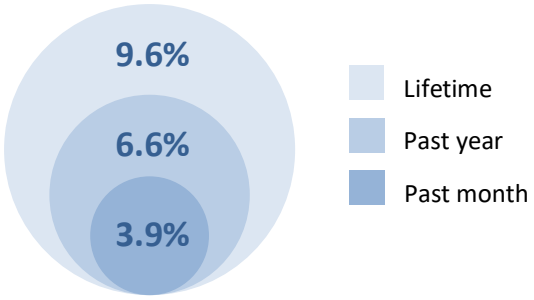
Summary of Findings

Figure 31



of students never used e-cigarettes

Figure 32. Lifetime, Past Year, and Past Month Use of E-cigarettes



EARLY ONSET

1.8%

first used e-cigarettes before age 12

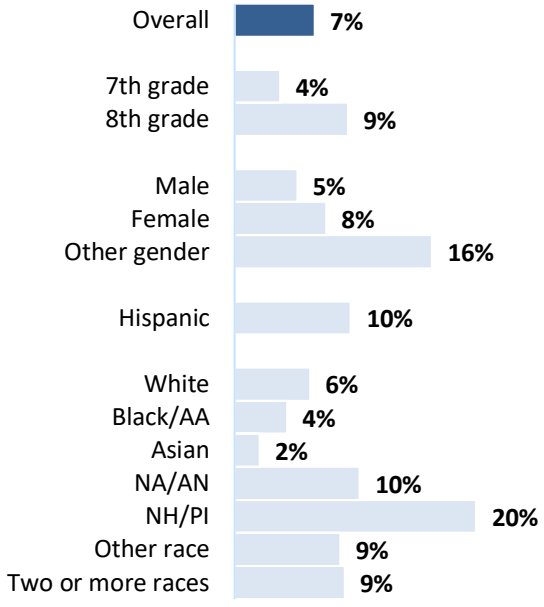
Nearly 1 in 10 (9.6%, n=589) students used e-cigarettes (i.e., vapes)[EC] during their lifetime, 6.6% (n=403) within the past year, and 3.9% (n=241) within the past month.

Past year e-cigarette use was above the state average (6.6%) for:[NT]

- eighth grade students (9.4%),
- nonbinary (16.3%) and female (7.6%) students,
- students identifying as Native Hawaiian or Pacific Islander (20.0%), Native American or Alaskan Native (10.3%), Hispanic (9.6%), two or more races (9.1%), and Other race (8.8%).

According to the 2021 National Youth Tobacco Survey, females had higher prevalence rates of smoking e-cigarettes compared to male students. The most cited reasons for using e-cigarettes were feelings of anxiety, stress, or depression and the "high or buzz" associated with nicotine use.[11]

Figure 33. Past Year Use of E-Cigarettes



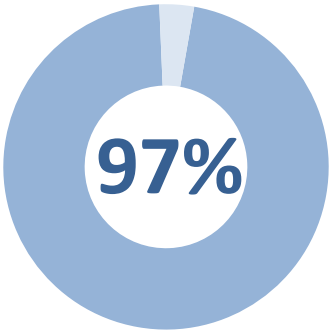
E-cigarettes with Marijuana Use

How was this measured?

Students were asked if they specifically "... used an e-cigarette, vape pen, e-liquid rig (JUUL, N2, Joyetech) with marijuana?" for three time periods: lifetime (ever), past year (any occasion), and past month (any occasion).

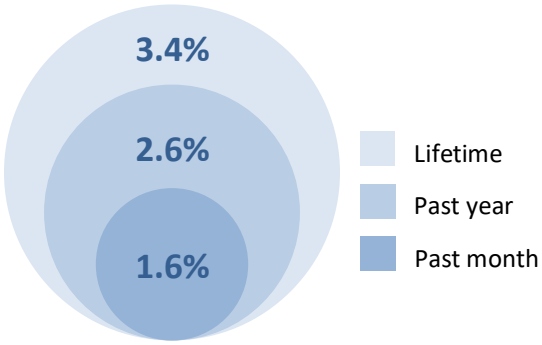
Summary of Findings

Figure 34



of students never used e-cigarettes with marijuana

Figure 35. Lifetime, Past Year, and Past Month Use of E-cigarettes with Marijuana



EARLY ONSET

0.4%

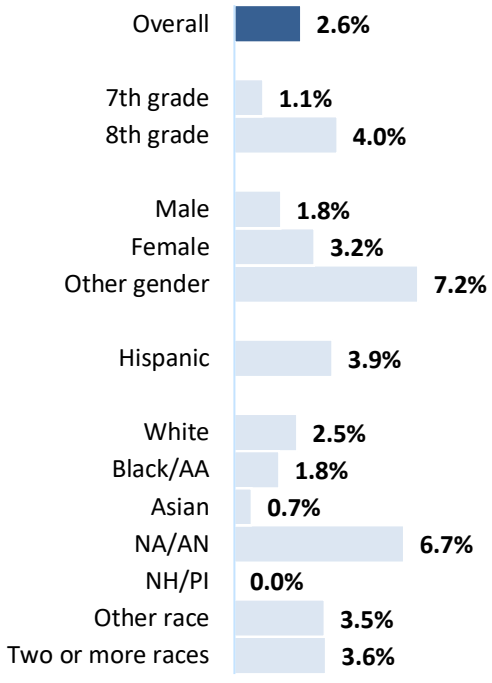
first used e-cigarettes with marijuana before age 12

Overall, 3.4% (n=211) of students used e-cigarettes with marijuana during their lifetime, 2.6% (n=161) within the past year, and 1.6% (n=96) within the past month.

Past year use of e-cigarettes with marijuana was above the state average (2.6%) for:[NT]

- eighth grade students (4.0%),
- nonbinary (7.2%) and female (3.2%) students,
- students identifying as Native American or Alaskan Native (6.7%), Hispanic (3.9%), two or more races (3.6%), and Other race (3.5%).[NT]

Figure 36. Past Year Use of E-cigarettes with Marijuana



Common Sources of E-cigarettes

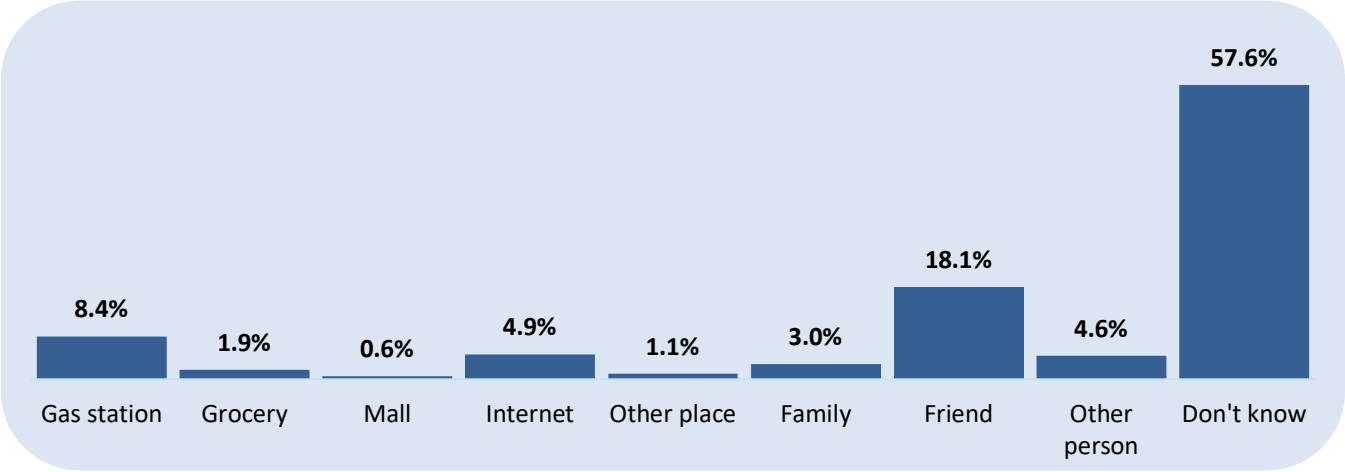
How was this measured?

Students were asked "Where do kids your age usually get or buy e-cigarettes, vape pen, e-liquid rig (JUUL, N2, Joyetech) *without* marijuana?" and "Where do kids your age usually get or buy e-cigarettes, vape pen, e-liquid rig (JUUL, N2, Joyetech) *with* marijuana?" to determine the common sources of e-cigarettes.

Summary of Findings

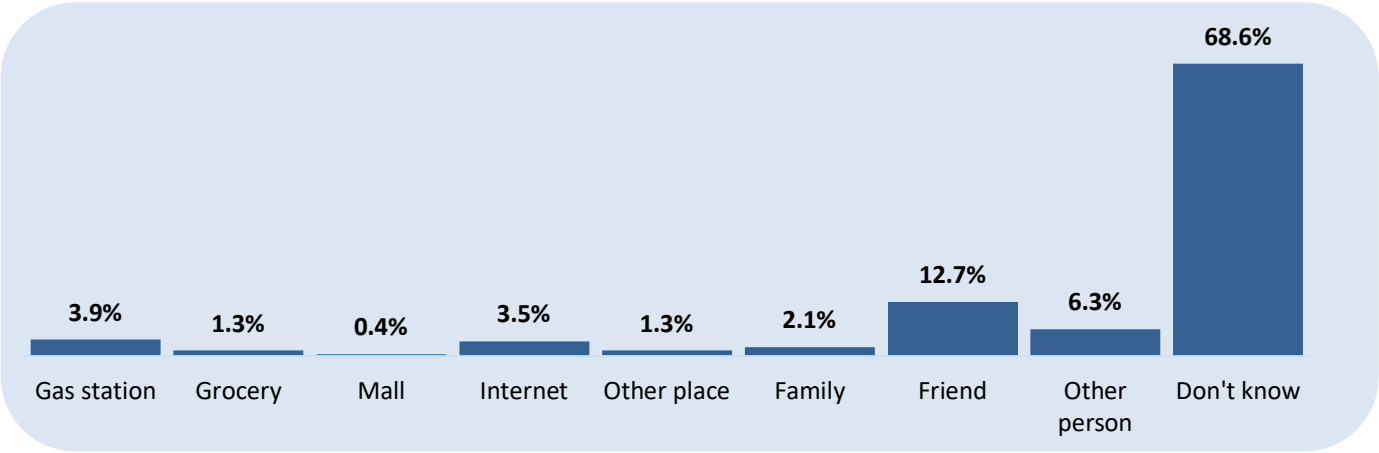
The top three most common sources for obtaining e-cigarettes without marijuana were a friend (18.1%), followed by a gas station or convenience store (8.4%), and the internet (4.9%).

Figure 37. Common Sources to Get or Buy E-cigarettes without Marijuana



A friend (12.7%), a person that is not a family member or friend (6.3%), and gas station or convenience store (3.9%) were the top three most likely sources for obtaining e-cigarettes with marijuana.

Figure 38. Common Sources to Get or Buy E-cigarettes with Marijuana



Marijuana

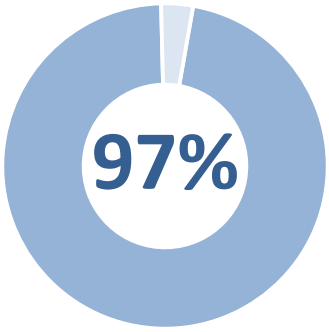
Marijuana Use

How was this measured?

Marijuana was the third most commonly used substance among students surveyed. Students were asked if they had "used marijuana (pot, hash, weed)" across three time periods: lifetime (ever), past year (any occasion), and past month (any occasion).

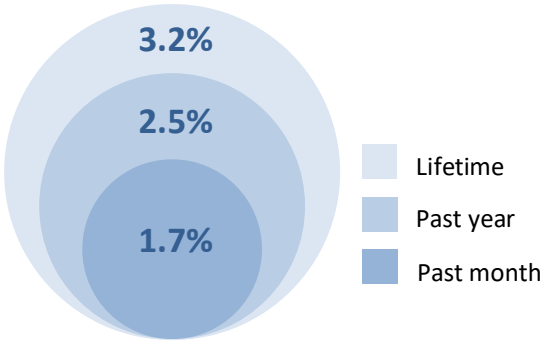
Summary of Findings

Figure 39



of students never used marijuana

Figure 40. Lifetime, Past Year, and Past Month Use of Marijuana



EARLY ONSET

0.6%

first used marijuana before age 12

Overall, 3.2% (n=194) of students used marijuana during their lifetime, 2.5% (n=153) within the past year, and 1.7% (n=104) within the past month.

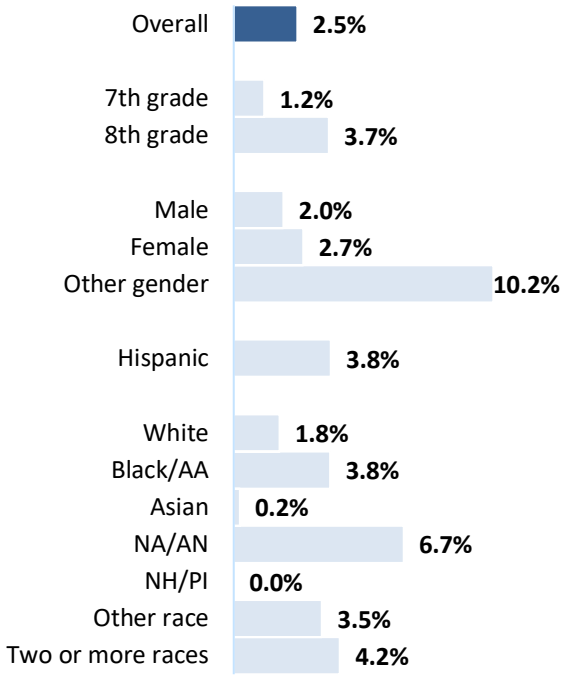
Past year marijuana use was above the state average (2.5%) for:[NT]

- eighth grade students (3.7%),
- nonbinary (10.2%) and female (2.7%) students,
- students identifying as Native American or Alaskan Native (6.7%), two or more races (4.2%), Hispanic (3.8%), Black or African American (3.8%), and Other race (3.5%).

These findings are consistent with previous research which suggest that nonbinary students are at greater odds for using marijuana than cisgender sexual minority adolescents.[13]

Among adolescents aged 12 to 17 in the US, Native American or Alaska Native and two or more races also had the highest marijuana use in comparison to other racial groups.[16]

Figure 41. Past Year Use of Marijuana



Common Source of Marijuana

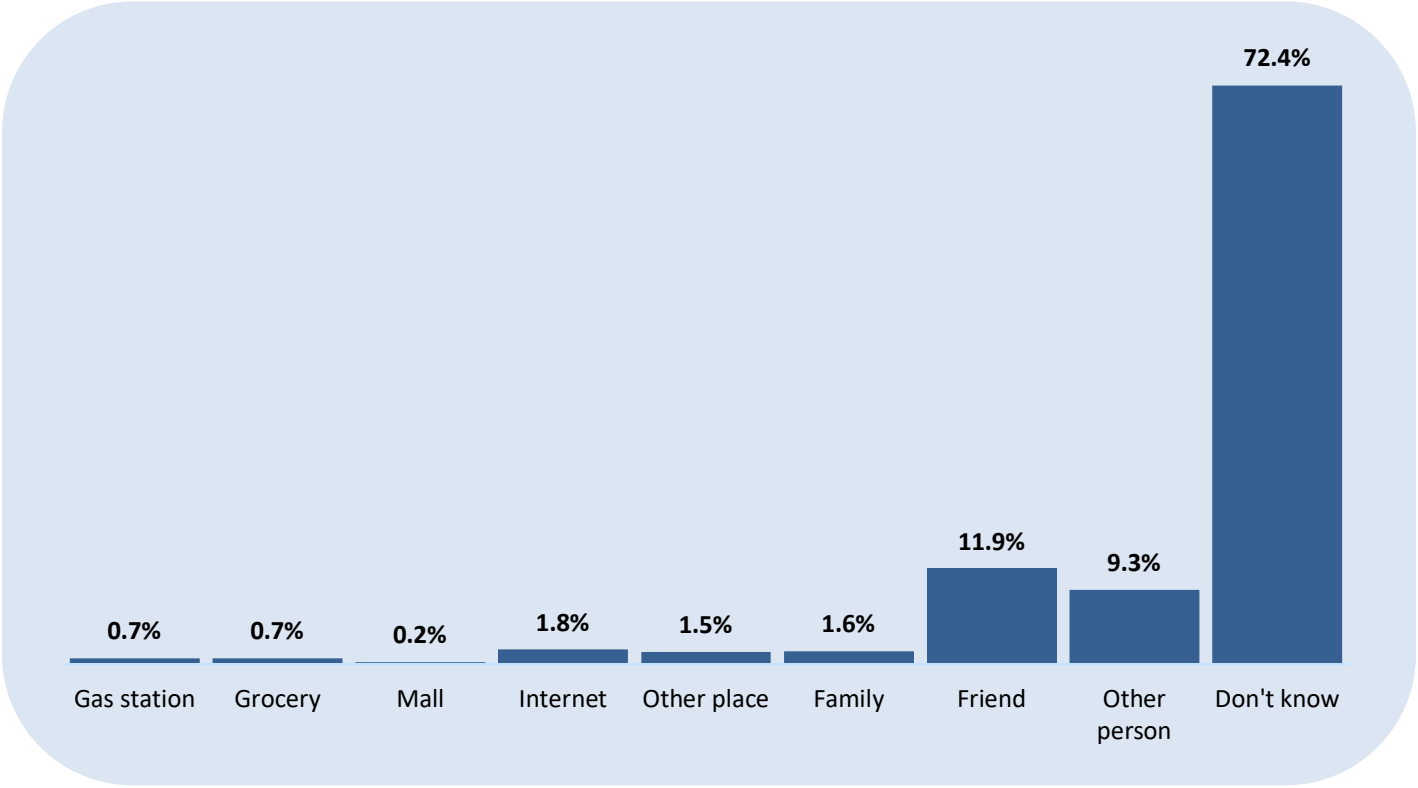
How was this measured?

Students were asked “Where do kids your age usually get or buy marijuana (pot, hash, weed)?” to determine the common sources of marijuana.

Summary of Findings

The top three most common sources for obtaining marijuana were a friend (11.9%), followed by some other person that is not a family member or friend (9.3%), and the internet (1.8%).

Figure 42. Common Sources to Get or Buy Marijuana



Prescription Drugs Not Prescribed to Them

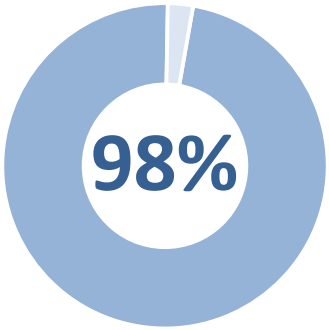
Prescription Drug Use

How was this measured?

Students were asked if they had "used prescription drugs not prescribed to [them]" for three time periods: lifetime (ever), past year (any occasion), and past month (any occasion).

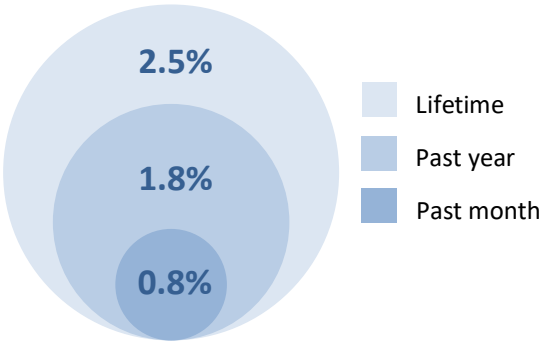
Summary of Findings

Figure 43



of students never used prescriptions drugs

Figure 44. Lifetime, Past Year, and Past Month Use of Prescription Drugs



EARLY ONSET

1.1%

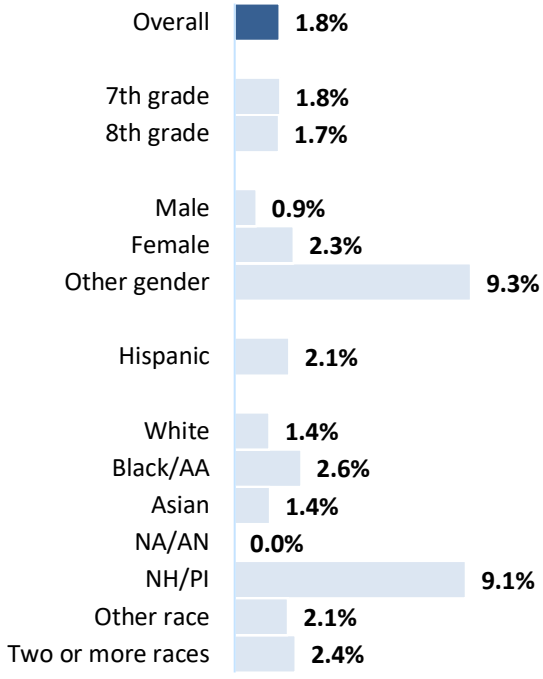
first misused prescription drugs before age 12

Overall, 2.5% (n=149) of students used prescription drugs that were not prescribed to them during their lifetime, 1.8% (n=107) within the past year, and 0.8% (n=51) within the past month.

Past year misuse of prescription drugs was above the state average (1.8%) for:[NT]

- nonbinary (9.3%) and female (2.3%) students,
- students identifying as Native Hawaiian or Pacific Islander (9.1%), Black or African American (2.6%), two or more races (2.4%), Hispanic (2.1%), and Other race (2.1%).

Figure 45. Past Year Use of Prescription Drugs



Common Sources of Prescription Drugs

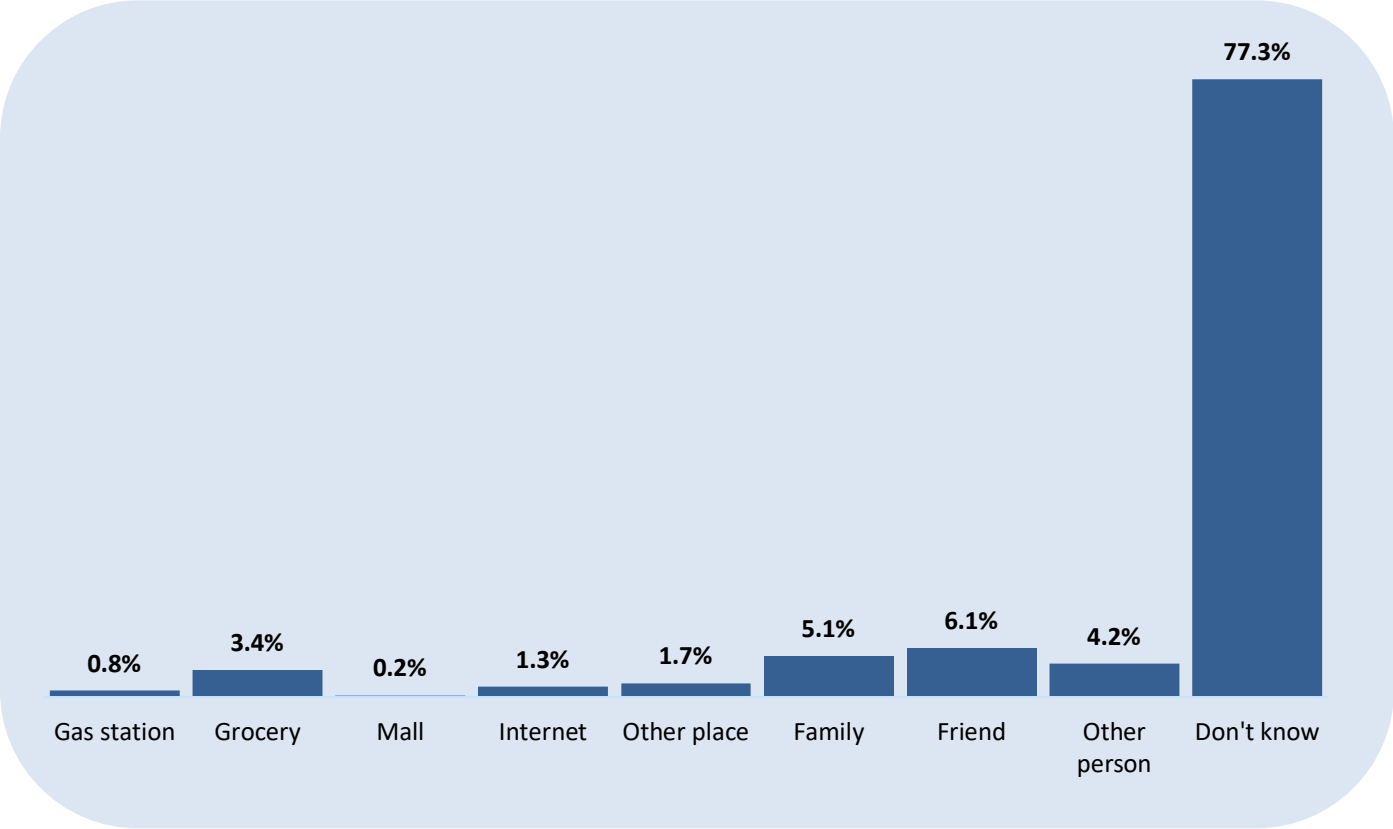
How was this measured?

Students were asked “Where do kids your age usually get or buy prescription drugs not prescribed to them to get high?” to determine the common sources of prescription drugs.

Summary of Findings

The top three most common sources for obtaining prescription drugs to get high were from a friend (6.1%), followed by a family member (5.1%), and some other person that is not a family member or friend (4.2%).

Figure 46. Common Sources to Get or Buy Prescription Drugs



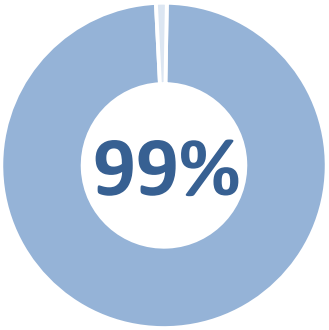
Other Illicit Drugs

How was this measured?

Other illicit drugs include the following: cocaine or crack, heroin (opiates), hallucinogens (PCP, LSD), crystal meth (ice, crank), ecstasy (MDMA, Molly), other club drugs (ketamine, GHB, Rohypnol), uppers (amphetamines), downers (tranquilizers, sedatives), anabolic steroids, or OxyContin. Students were asked if they had used other illicit drugs for two time periods: lifetime (ever) and past year (any occasion).

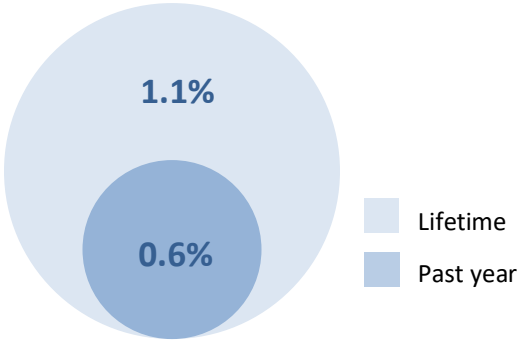
Summary of Findings

Figure 47



of students never used other illicit drugs

Figure 48. Lifetime and Past Year Use of Other Illicit Drugs



EARLY ONSET

0.6%

first used other illicit drugs before age 12

Overall, 1.1% (n=63) of students used other illicit drugs during their lifetime and 0.6% (n=34) within the past year.

Compared to the other substances described in this report, fewer students indicted using other illicit drugs.

Past year use of other illicit drugs was above the state average (0.6%) for:[NT]

- eighth grade students (0.7%),
- nonbinary students (2.1%),
- students identifying as Other race (1.1%) and Hispanic (1.1%).

Table 11. Past Year Use of Other Illicit Drugs

	Never		Any occasion	
	n	%	n	%
Overall	**5,899**	**99.4**	**34**	**0.6**
7th grade	2,876	99.6	12	0.4
8th grade	3,023	99.3	22	0.7
Male	2,624	99.4	15	0.6
Female	3,129	99.5	17	0.5
Other gender	94	97.9	2	2.1
Hispanic	1,696	99.0	18	1.1
White	2,914	99.5	14	0.5
Black/AA	475	99.4	3	0.6
Asian	426	100.0	0	0.0
NA/AN	29	100.0	0	0.0
NH/PI	10	100.0	0	0.0
Other race	1,092	98.9	12	1.1
Two or more races	853	99.4	5	0.6

Inhalants and Cough Medicine

Inhalant Use

How was this measured?

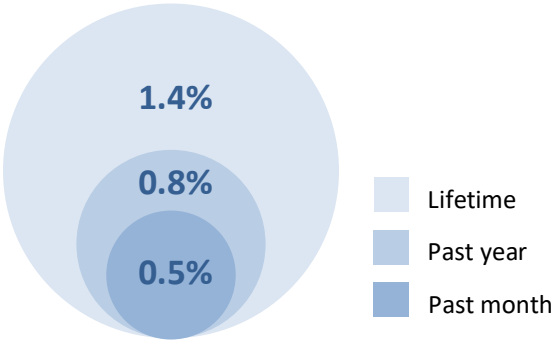
Inhalants are considered a high-risk substance according to the Centers for Disease Control and Prevention. Inhalant use is most common among younger adolescents and tends to decline with age.[9] Students were asked if they had "used inhalants to get high (glue, gas, Whippits)" for three time periods: lifetime (ever), past year (any occasion), and past month (any occasion).

Summary of Findings

Figure 49

of students never used inhalants

Figure 50. Lifetime, Past Year, and Past Month Use of Inhalants



EARLY ONSET

0.6%

first misused inhalants before age 12

Overall, 1.4% (n=83) of students used inhalants during their lifetime, 0.8% (n=47) within the past year, and 0.5% (n=32) within the past month.

Past year use of inhalants was above the state average (0.8%) for:[NT]

- nonbinary (5.2%) students,
- students identifying as Native American or Alaskan Native (3.3%), two or more races (1.2%), Black or African American (1.0%), and Hispanic (0.9%).

Table 12. Past Year Use of Inhalants

	Never		Any occasion	
	n	%	n	%
Overall	**6,110**	**99.2**	**47**	**0.8**
7th grade	2,984	99.3	22	0.7
8th grade	3,126	99.2	25	0.8
Male	2,715	99.5	15	0.6
Female	3,251	99.2	27	0.8
Other gender	92	94.9	5	5.2
Hispanic	1,777	99.1	16	0.9
White	2,996	99.3	21	0.7
Black/AA	501	99.0	5	1.0
Asian	436	99.8	1	0.2
NA/AN	29	96.7	1	3.3
NH/PI	11	100.0	0	0.0
Other race	1,148	99.3	8	0.7
Two or more races	885	98.8	11	1.2

Cough Medicine Use

How was this measured?

Taken in excess, cough medication can produce hallucinations and potentially dangerous consequences.[3] Students were asked "Within the past year (12 months), how often have you… used cough medication to get high?".

Summary of Findings

Consistent with national prevalence rates,[3] 0.9% (n=56) of students used cough medication to get high within the past year.[NS] Past year use of cough medication to get high was above the state average for:[NT]

- eighth grade students (1.1%),
- nonbinary (5.1%) and female (1.0%) students,
- students identifying as Native American or Alaskan Native (3.3.%), Hispanic (1.2%), Other race (1.1%), and two or more races (1.1%).[NT]

Table 13. Past Year Use of Cough Medicine

	Never		Any occasion	
	n	%	n	%
Overall	**6,109**	**99.1**	**56**	**0.9**
7th grade	2,987	99.3	21	0.7
8th grade	3,122	98.9	35	1.1
Male	2,707	99.3	19	0.7
Female	3,256	99.0	32	1.0
Other gender	94	95.0	5	5.1
Hispanic	1,771	98.8	22	1.2
White	2,990	99.1	27	0.9
Black/AA	501	99.4	3	0.6
Asian	438	99.6	2	0.5
NA/AN	29	96.7	1	3.3
NH/PI	11	100.0	0	0.0
Other race	1,149	98.9	13	1.1
Two or more races	887	98.9	10	1.1

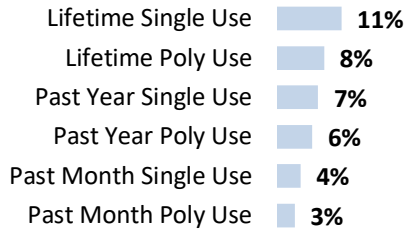
Polysubstance Use

How was this measured?

The use of more than one type of substance (or "polysubstance use") is an emerging topic of interest for the prevention community. Concurrent users (i.e., using two substances within the same time period) are more likely to experience problematic drug use, early depressive symptoms, and problem behaviors (e.g., violence, criminal activity) than single-drug users.[17,18] Student respondents for the substance use questions were grouped under two categories: single users (i.e., reported use of only one substance) and poly users (i.e., reported use of more than one substance).

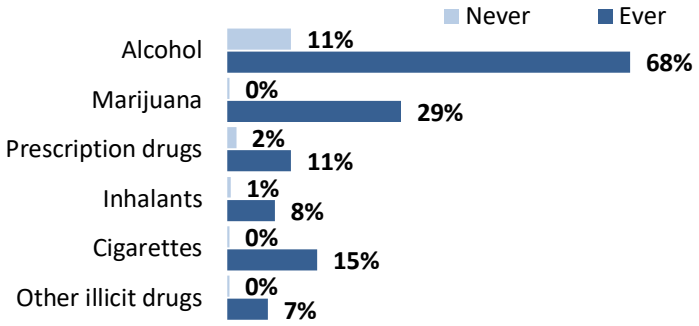
Summary of Findings

Figure 51. Lifetime, Past Year, and Past Month Single Substance and Polysubstance Use



8.4% of students have used more than one substance during their lifetime, 5.9% during the past year, and 3.5% within the past month.

Figure 52. Lifetime Co-Use of E-cigarettes and Other Substances

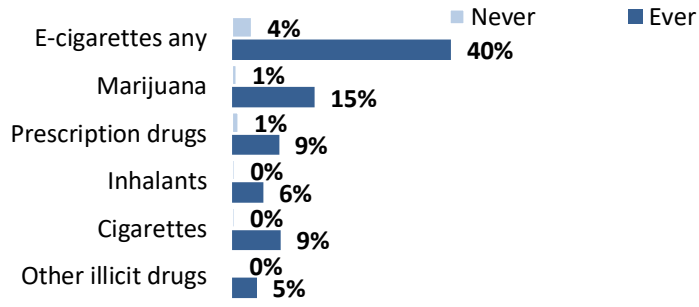


Among students who used *e-cigarettes* during their lifetime,

- 68.2% also used alcohol
- 29.4% also used marijuana
- 15.2% also smoked cigarettes
- 10.8% also used prescription drugs

These findings are consistent with recent literature that has found polysubstance use to be highly prevalent among adolescents who use e-cigarettes.[19]

Figure 53. Lifetime Co-Use of Alcohol and Other Substances



Among students who used *alcohol* during their lifetime,

- 39.8% also used e-cigarettes
- 15.0% also used marijuana
- 8.9% also smoked cigarettes

Pre-Post Emergence of COVID-19

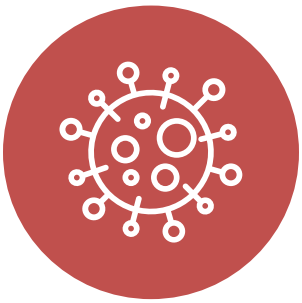
Consistent with national survey data,[9] significant declines in adolescent use of alcohol, tobacco, and other illicit drugs were noticed between 2020 and 2021. This section highlights the percentage point difference in reported substance use, polysubstance use, and common sources for obtaining substances. For information about the statistical significance tests performed, please see *Supplementary Information*.

Substance Use Summary of Findings

Students reported less past year (12 months) use of alcohol, binge drinking, e-cigarettes, cigarettes, marijuana, prescription drugs during the pandemic (2021), compared to before the pandemic (2020) as shown in Figure 54.

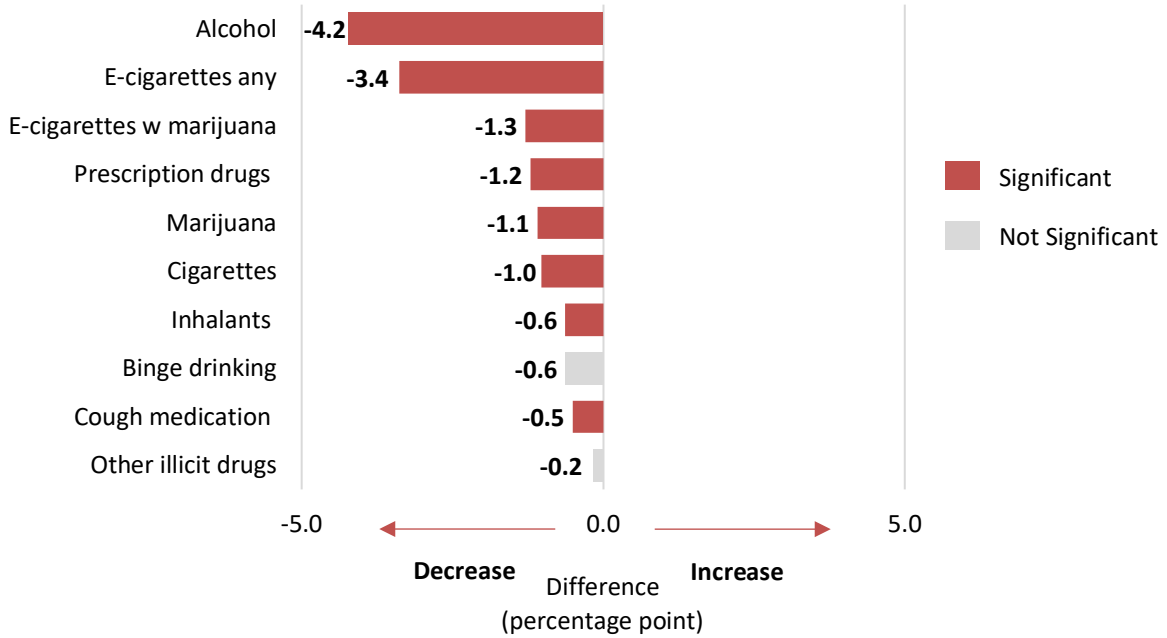
Substance use significantly decreased from:

- **11.9% to 7.7%** for alcohol
- **7.9% to 4.5%** for e-cigarettes any (with or without marijuana)
- **3.1% to 1.8%** for e-cigarettes with marijuana
- **2.9% to 1.8%** for marijuana
- **2.2% to 1.0%** for prescription drugs not prescribed to them
- **1.4% to 0.4%** for cigarettes



Binge drinking and use of other illicit drugs among students during the past year remained stable from 2019-2020 to 2021. Lifetime and past month use significantly decreased for all substances between 2020 and 2021. Overall, access to alcohol, tobacco, and drugs during the pandemic (2021) may have been limited (acting as a protective factor), giving youth fewer opportunities to use substances regardless of their desire or intent to use them.[3]

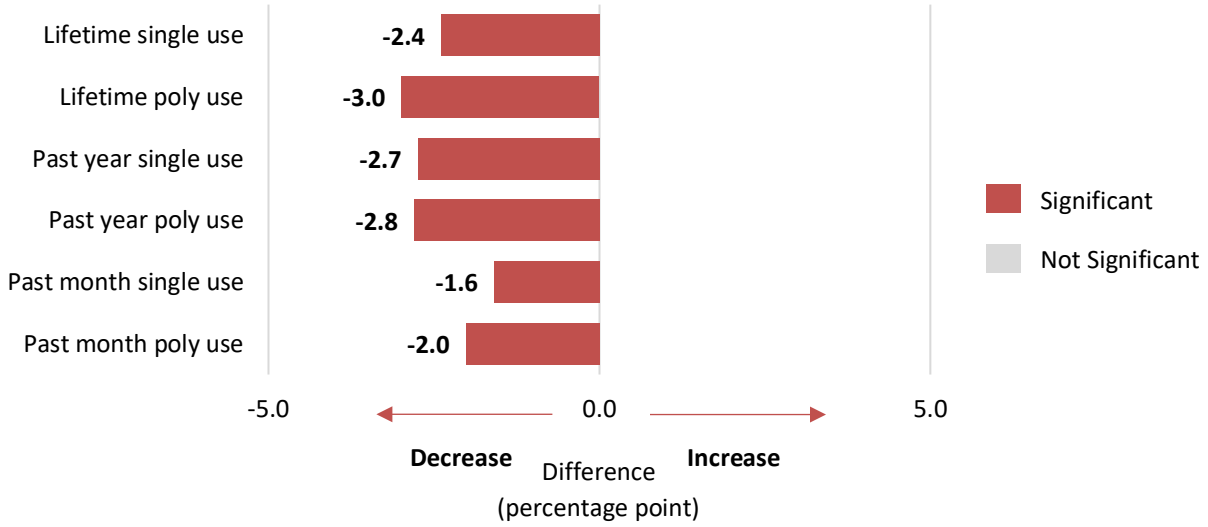
Figure 54. Changes in Past Year Substance Use, 2020 to 2021



Polysubstance Use Summary of Findings

Similar to the patterns of single-drug use, students reported significantly less use of multiple drugs during the pandemic (2021) compared to before the pandemic (2020) as shown in Figure 55. Of the six categories displayed in Figure 55, the largest declines were to lifetime and past year poly users, by 3.0 and 2.8 percentage points, respectively.

Figure 55. Changes in Single Substance and Polysubstance Use, 2020 to 2021



Common Sources Summary of Findings

Students more often reported not knowing where kids their age usually get or buy any substance during the pandemic (2021) compared to before the pandemic (2020). No corresponding figure is provided for these findings. Students less often identified friends or family as a common source for kids their age to get or buy any substance during the pandemic (2021) compared to before the pandemic (2020). Gas stations were the only source that saw a significant increase between 2020 and 2021 for getting e-cigarettes with marijuana, from 3.4% to 4.7%, respectively.

A Closer Look: Risk and Protective Factors Probabilities

This section examines the relationship of four commonly reported substances (i.e., alcohol, e-cigarettes,[EC] marijuana, and cigarettes) with risk and protective factors. Of four risk domains, we present two here: "Community" and "Peer and Individual." Both protective domains – "School" and "Peer and Individual" – are presented here as well. Each risk or protective domain was entered into a separate logistic regression as a continuous predictor (ranging from 0 to 1) of each substance use outcome (used/not). For a complete table with substance use probabilities as a function of all four risk and two protective domains, please see *Supplementary Information.*

Risk Factors

Figure 56. Probability of Substance Use by Community Risk Score

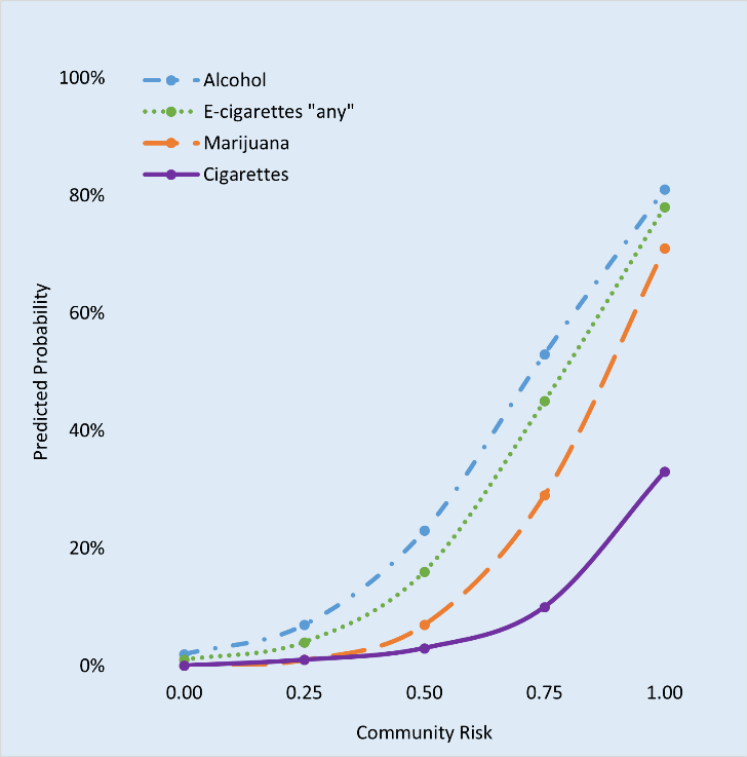


Figure 56 presents the probability of substance use in the past year as a function of the Community Risk score.
As the Community Risk score increased from 0 to 1, predicted substance use increased for the four substances displayed: alcohol, e-cigarettes, marijuana, and cigarettes. At an average level of community risk, the probability of substance use ranged from 3% for cigarettes to 23% for alcohol. Students with the highest levels of community risk had probabilities of alcohol, marijuana, and e-cigarette use that exceed 70%. At the lowest levels of risk, probabilities for all substances approached 0%.

The probabilities reported in RED may have been slightly affected by the miscalculation of a factor in this domain.

ALCOHOL, TOBACCO & OTHER DRUGS

Figure 57. Probability of Substance Use by Peer and Individual Risk Score

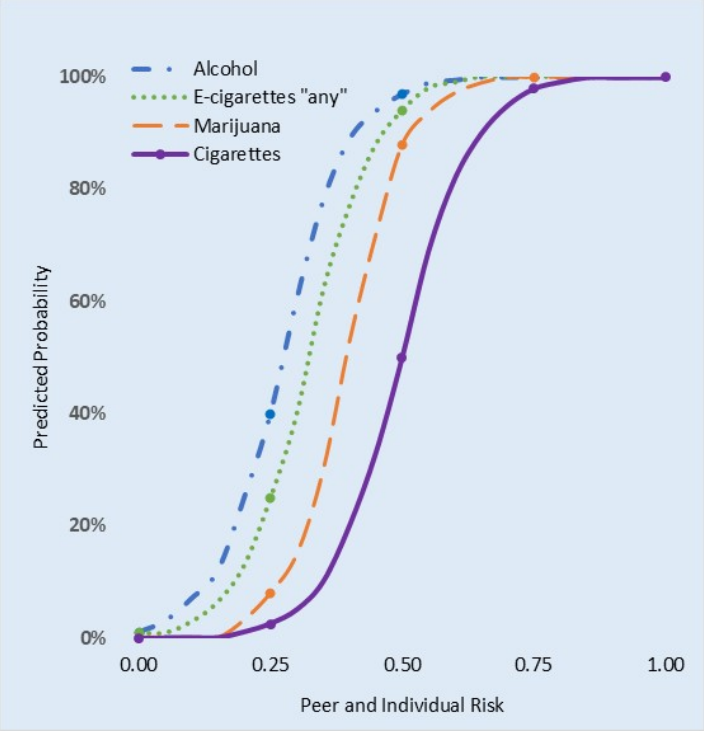


Figure 57 presents the probability of substance use in the past year as a function of the Peer and Individual Risk domain score. The dramatic increase in use at relatively low risk levels, combined with the very high probabilities of use predicted at mid and high-risk levels, reveal that the relationship between substance use and Peer and Individual factors was stronger than with the Community, School, or Family domains. For example, students at an average level of Peer and Individual Risk were almost certain to have consumed alcohol, while students with even the highest level of Community Risk had an 81% probability of consuming alcohol (and 23% at an average level of Community Risk).[PP]

The probabilities reported in RED may have been slightly affected by the miscalculation of a factor in this domain.

Protective Factors

Figure 58. Probability of Substance Use by School Protective Score

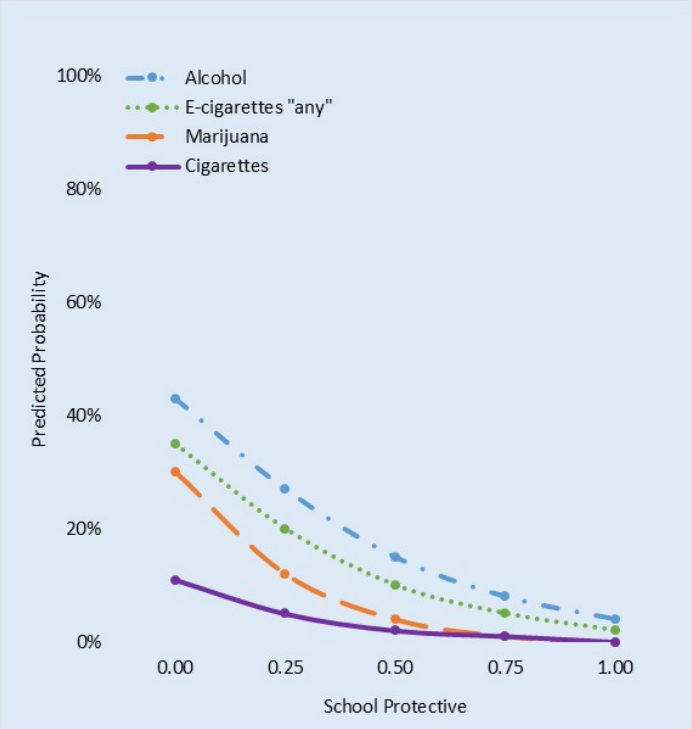


Figure 58 presents the probability of substance use in the past year as a function of the School Protective domain score. Increasing protection was associated with a lower probability of use for each of the four substances. For students with the lowest levels of school protective factors, the probability of using one of these substances in the past year ranged from 11% for cigarettes to 43% for alcohol. For students with the highest school-related protection, the probabilities approached 0%; alcohol remained the highest, at 4%.

The probabilities reported in RED may have been slightly affected by the miscalculation of a factor in this domain.

Figure 59. Probability of Substance Use by Peer and Individual Protective Score

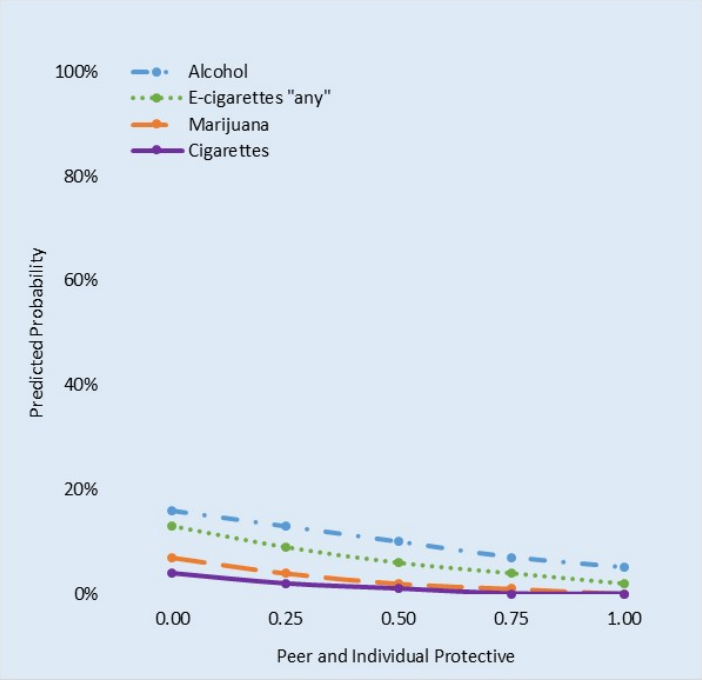


Figure 59 presents the probability of substance use in the past year as a function of the Peer and Individual Protective domain score. The relationship between the level of Peer and Individual protection and the probability of substance use resembled the School Protective domain, with predicted use increasing as protection decreased, for each of the four substances. However, there is less variability in the probabilities predicted from the Peer and Individual Protective domain, both across substances and across protection levels.

CHAPTER 3: SUSPENSION & ANTISOCIAL BEHAVIORS

Along with drug use, youth violence and other antisocial behaviors continue to be a major concern for the prevention community.[20] These behaviors are defined as behaviors that go against the cultural norms, rules, or laws. Examples include attacking someone with the intent to harm, belonging to a gang, being arrested, carrying a handgun, and selling drugs.[21] Suspension, although not an antisocial behavior, is also presented in this section because of its traditional use as a management tool for addressing antisocial behaviors and precursor for subsequent antisocial behaviors.[22,23]

This chapter displays trends from 2010 to 2021, followed by prevalence rates for each commonly reported antisocial behavior, pre-post emergence of COVID-19 comparative analysis, and predictions based on risk and protective factors. For a table with these prevalence rates by grade, please see Appendix B. Appendix C also provides county-by-county data for these behaviors.

Looking Back: 10-Year Trends

Trends data for suspension and antisocial behaviors are presented for two time periods: lifetime (ever) and past year (any occasion). Questions related to being drunk or high at school, taking a handgun to school, selling drugs, and stealing or trying to steal a motor vehicle were asked only for the past year. The most frequently reported antisocial behaviors for 2021 were getting suspended (8.1%), attacking someone with the intent to harm (5.6%), and carrying a handgun (2.5%). Because 2021 data represents an aggregate of data collected across two school years, changes across years should be interpreted with caution.

Table 14. Suspension and Antisocial Behaviors Trends, 2010–2021

Behavior	2010 (%)	2012 (%)	2015 (%)	2021 (n)	2021 (%)
Past year					
Getting suspended	11.4	9.6	7.2	498	8.1
Attacking someone with intent to harm	9.5	7.9	7.0	347	5.6
Carrying a handgun	1.9	1.6	2.3	152	2.5
Being drunk or high at school	3.9	3.3	1.8	135	2.2
Getting arrested	2.8	2.0	1.5	62	1.0
Taking a handgun to school	0.5	0.3	0.7	53	0.9
Selling drugs	1.3	1.3	0.8	51	0.8
Stealing or trying to steal a motor vehicle	0.9	0.5	0.8	45	0.7

Past year prevalence rates for most antisocial behaviors decreased by at least 0.1 percentage points between 2010 and 2021. Carrying a handgun and taking a handgun to school increased slightly within this same time period. Although getting suspended declined from 2010 to 2015, there was an increase in reported suspensions between 2015 and 2021. Carrying a handgun, being drunk or high at school, and taking a handgun to school also increased between 2015 and 2021.[NT]

SUSPENSION & ANTISOCIAL BEHAVIORS

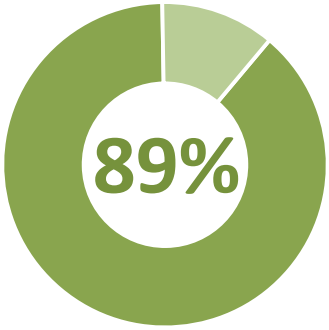
Getting Suspended

How was this measured?

School suspension is associated with school dropout, as well as alcohol and drug use. It can be a result of serious behavioral problems or minor infractions, such as profanity or dress code violations.[22,23] Students were asked if they had "[been] suspended from school" for two time periods: lifetime (ever) and past year (any occasion).

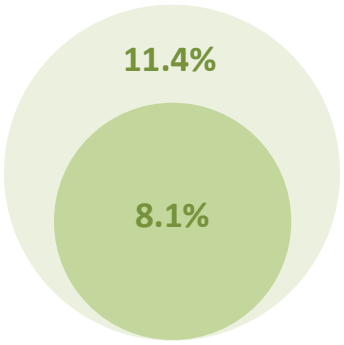
Summary of Findings

Figure 60



of students had never been suspended

Figure 61. Lifetime and Past Year Suspension



EARLY ONSET

6.4%

first got suspended before age 12

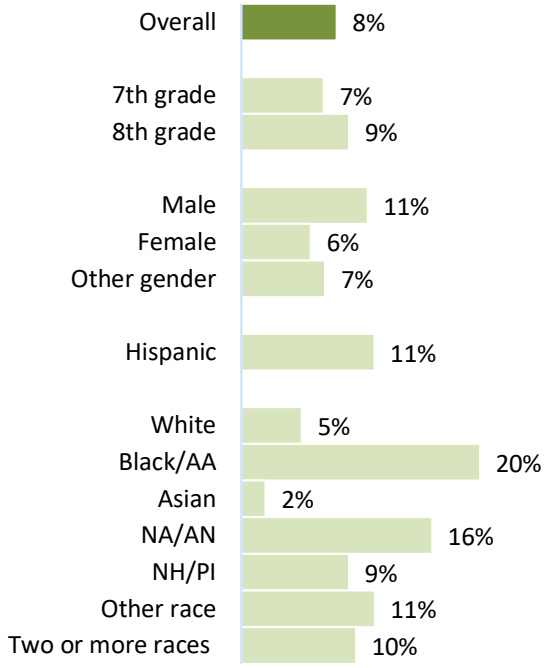
Overall, 11.4% (n=701) of students had been suspended during their lifetime and 8.1% (n=498) within the past year.

Past year getting suspended was above the state average (8.1%) for:[NT]

- eighth grade students (9.1%),
- male (10.7%) students,
- students identifying as Black or African American (20.2%), Native American or Alaskan Native (16.1%),[SS] Other race (11.3%), Hispanic (11.3%), two or more races (9.7%), and Native Hawaiian or Pacific Islander (9.1%)[SS].

Consistent with these findings, the NJ Department of Education reported an alarming increase in student suspensions in their 2020 annual report with continued disproportionate impact on Black students.[24]

Figure 62. Past Year Suspension



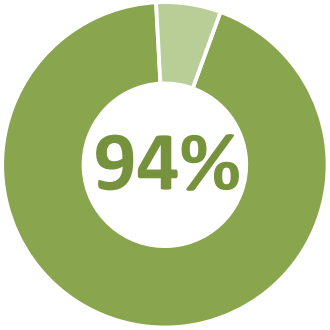
Attacking Someone with Intent to Harm

How was this measured?

Attacking someone with the intent to harm was the most frequently reported antisocial behavior among students. Students were asked if they had "attacked someone with the idea of seriously hurting them" for two time periods: lifetime (ever) and past year (any occasion).

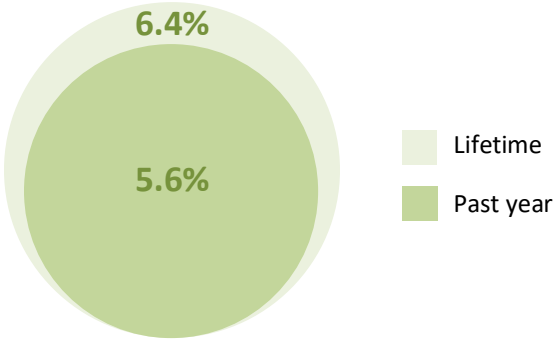
Summary of Findings

Figure 63



of students never attacked someone with intent to harm

Figure 64. Lifetime and Past Year Attacking Someone with Intent to Harm



EARLY ONSET

3.2%

first attacked someone with intent to harm before age 12

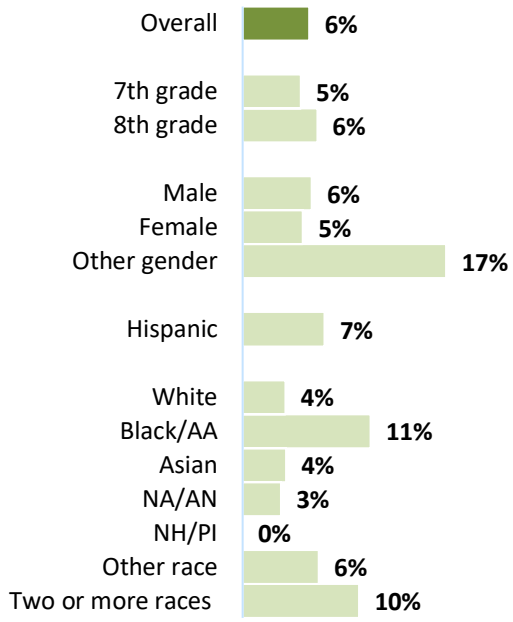
Overall, 6.4% (n=395) of students reported they had attacked someone with intent to harm during their lifetime and 5.6% (n=347) within the past year.

Past year attacking someone with the intent to harm was above the state average (5.6%) for:[NT]

- eighth grade students (6.3%),
- nonbinary students (17.2%) and male (5.8%) students,
- students identifying as Black or African American (10.8%), two or more races (9.8%), Hispanic (6.9%), and Other race (6.4%).

National survey data and previous studies have found that males are more likely than females to report delinquency and physical fights.[25,26]

Figure 65. Past Year Attacking Someone with Intent to Harm



Other Antisocial Behaviors

How was this measured?

This section presents data on less frequently reported antisocial behaviors. Students were asked if, during their lifetime (ever), they had carried a handgun, been arrested, belonged to a gang, or belonged to a gang with a name. Students were also asked how many times they had carried a handgun, sold illegal drugs, stolen or tried to steal a motor vehicle, been arrested, been drunk or high at school, or taken a handgun to school within the past year (any occasion).

Summary of Findings

During their lifetime, 2.4% (n=147) of students carried a handgun and 0.9% (n=55) were arrested.

Table 15. Lifetime Participation in Other Antisocial Behaviors

	Never		Ever	
Lifetime	n	%	n	%
Carrying a handgun	5,983	97.6	147	2.4
Belonging to a gang	5,903	97.7	142	2.4
Belonging to a gang with name	6,067	98.9	66	1.1
Getting arrested	6,096	99.1	55	0.9

EARLY ONSET

1.2%

carried a handgun before age 12

During the past year, 2.5% (n=152) of students reported carrying a handgun and 2.2% (n=135) reported being drunk or high at school.

Table 16. Past Year Participation in Other Antisocial Behaviors

	Never		Any occasion	
Past year	n	%	n	%
Carrying a handgun	6,022	97.5	152	2.5
Being drunk or high at school	6,044	97.8	135	2.2
Getting arrested	6,106	99.0	62	1.0
Taking a handgun to school	6,114	99.1	53	0.9
Selling drugs	6,107	99.2	51	0.8
Stealing or trying to steal a motor vehicle	6,135	99.3	45	0.7

EARLY ONSET

0.4%

got arrested before age 12

Pre-Post Emergence of COVID-19

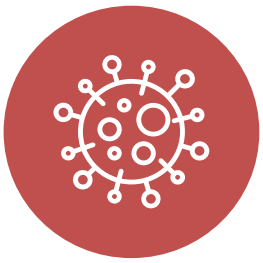
The COVID-19 pandemic has changed the way students interact with one another and attend school. The combination of individual, peer, family, and community risk factors have the potential to exacerbate involvement in youth violence.[8] This section highlights the percentage point difference in reported suspension and antisocial behaviors from 2020 to 2021. For information about the statistical significance tests performed, please see *Supplementary Information*.

Summary of Findings

Overall, students less frequently engaged in antisocial behaviors over the past year during the pandemic (2021) compared to before the pandemic (2020).

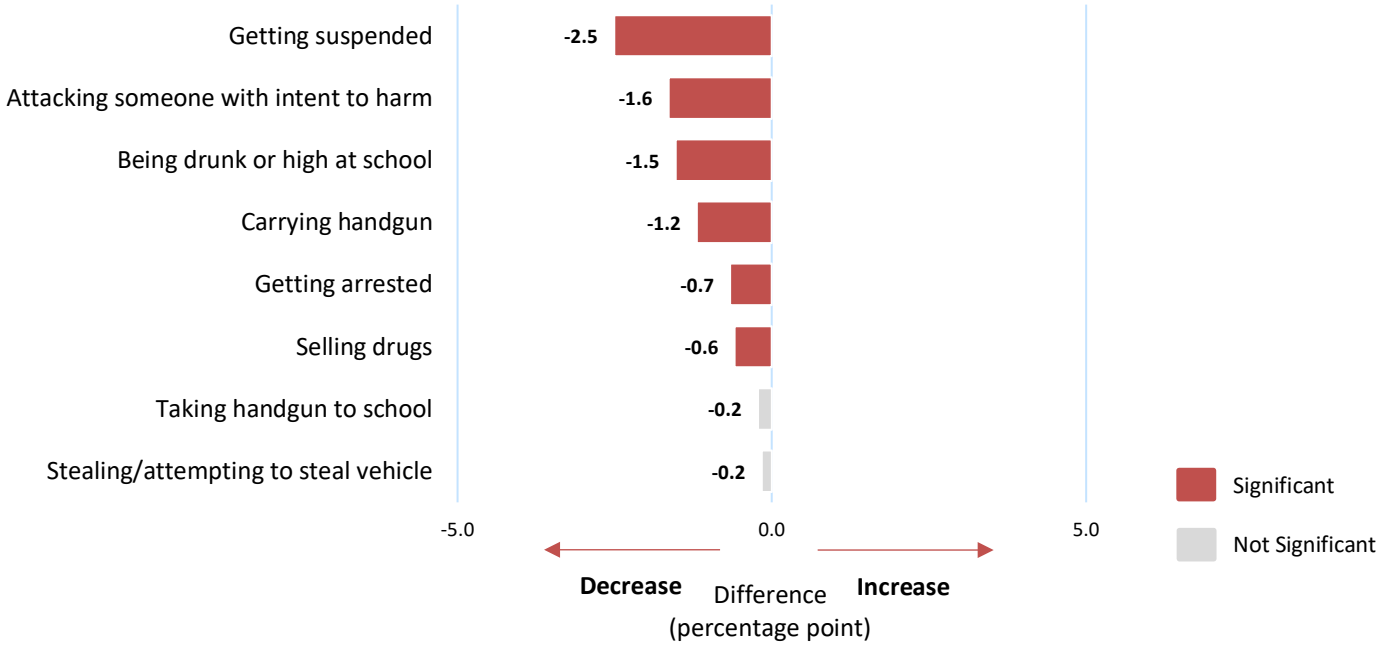
Antisocial behaviors significantly decreased from:

- **9.0% to 6.5%** for getting suspended
- **6.2% to 4.6%** for attacking someone with the idea of seriously hurting them
- **2.9% to 1.7%** for carrying a handgun
- **2.7% to 1.2%** for being drunk or high at school



No significant changes were detected for taking a handgun to school or for stealing [or trying to steal] a motor vehicle. It is possible that some behaviors were suppressed as a result of COVID-19 pandemic restrictions, such as: quarantine, school closures, virtual classrooms, sports cancellations, and social distancing policies.

Figure 66. Changes in Past Year Antisocial Behaviors, 2020 to 2021



A Closer Look: Risk and Protective Factors Probabilities

This section examines the relationships of four antisocial behaviors (getting suspended, attacking someone with the intent to harm, getting drunk or high at school, and selling drugs)[AB] with risk and protective factors. Of four risk domains, we present two here: "Community" and "Peer and Individual." Both protective domains – "School" and "Peer and Individual" – are presented here as well**.** Each risk or protective domain was entered into a separate logistic regression as a continuous predictor (ranging from 0 to 1) of each behavior. For a complete table with antisocial behaviors probabilities as a function of risk and protective domains, please see *Supplementary Information*.

Risk Factors

Figure 67. Probability of Antisocial Behaviors by Community Risk Score

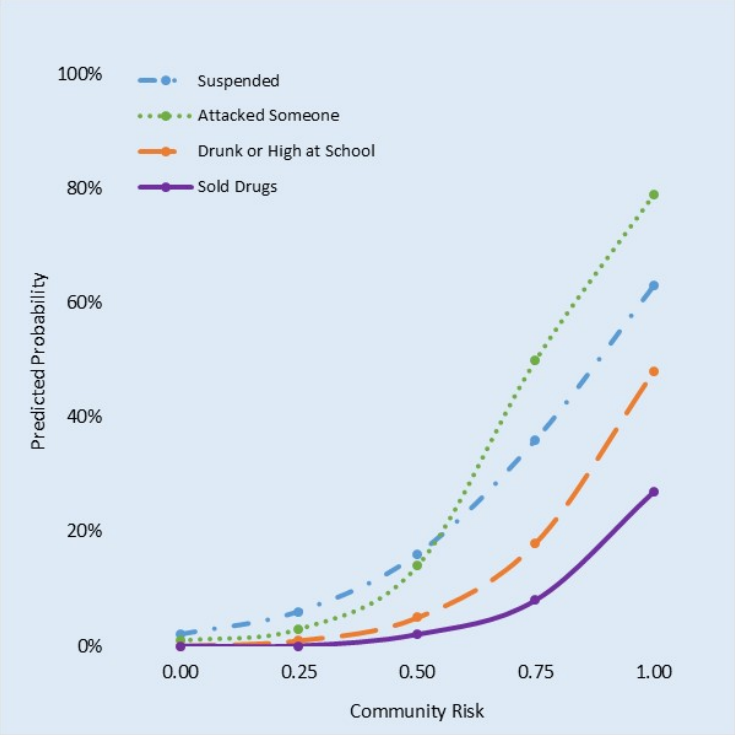


Figure 67 presents the probability of antisocial behaviors in the past year as a function of the Community Risk domain score. Similar to the patterns observed between community risk levels and substance use, the likelihood of engaging in each of the four antisocial behaviors increased across the entire range of the 0 to 1 risk level spectrum. Among students with below-average levels of community risk, suspension had a higher probability of occurrence than the other three behaviors; at above-average levels of community risk, attacking someone with intent to harm had the highest predicted probability.

The probabilities reported in this graph may have been slightly affected by the miscalculation of a factor in this domain.

SUSPENSION & ANTISOCIAL BEHAVIORS

Figure 68. Probability of Antisocial Behaviors by Peer and Individual Risk Score

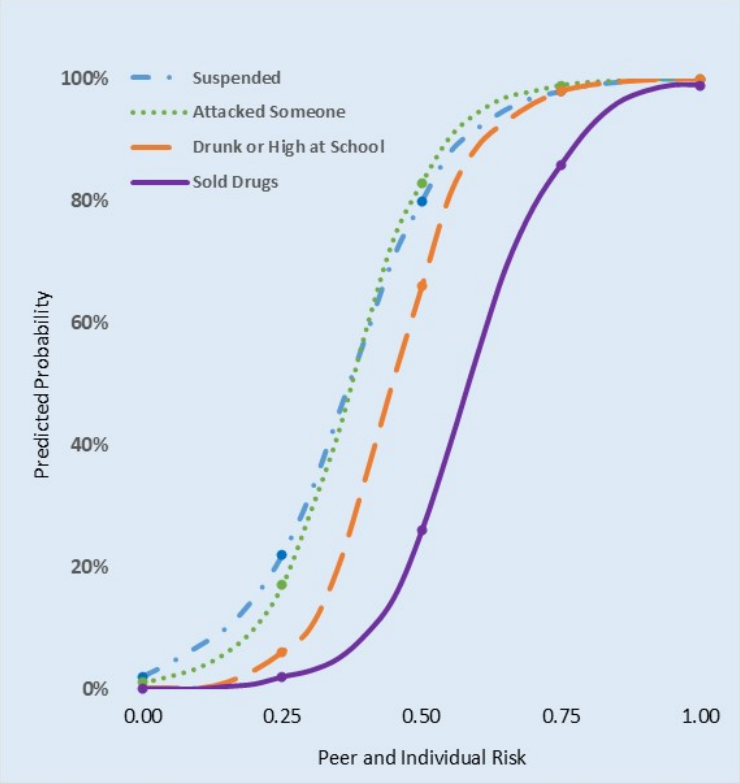


Figure 68 presents the probability of antisocial behaviors in the past year as a function of the Peer and Individual Risk domain score. Among all four risk domains, Peer and Individual Risk had the strongest relationship with the antisocial behaviors displayed here, as it did for substance use. The likelihood of students engaging in any of the antisocial behaviors is negligible at the lowest levels of Peer and Individual Risk, but reaches very high probability at the highest risk levels.[PP] The probability increases fastest for suspension from school and for attacking someone, followed by being drunk or high at school, and selling drugs.

The probabilities reported in this graph may have been slightly affected by the miscalculation of a factor in this domain.

Protective Factors

Figure 69. Probability of Antisocial Behaviors by School Protective Score

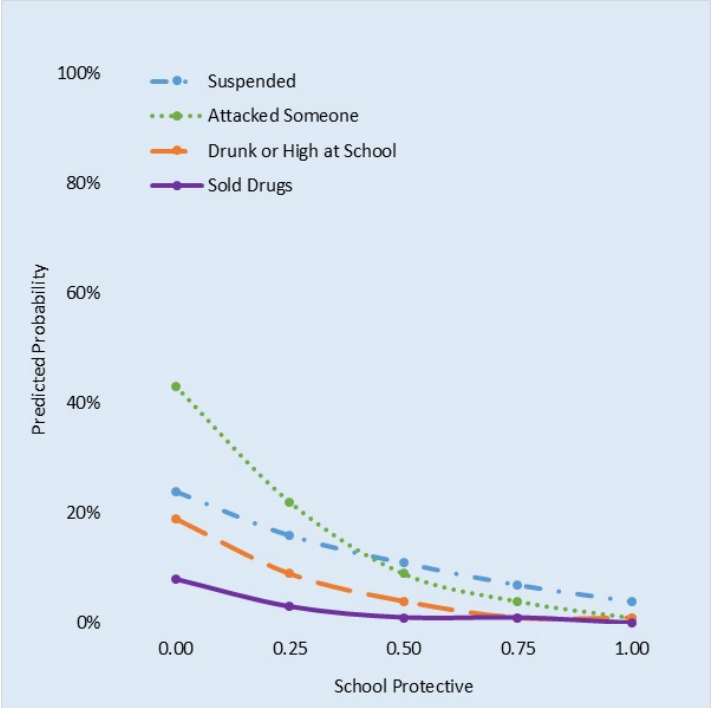


Figure 69 presents the probability of antisocial behaviors in the past year as a function of the School Protective domain score. As the School Protective domain score increased from 0 to 1, the probability of engaging in each of the four behaviors decreased. Attacking someone with intent to harm was particularly sensitive to school protective factors: it decreased from a high of 43% to a low of 1%, as students reported more school opportunities and rewards for prosocial involvement.

The probabilities reported in RED may have been slightly affected by the miscalculation of a factor in this domain.

Figure 70. Probability of Antisocial Behaviors by Peer and Individual Protective Score

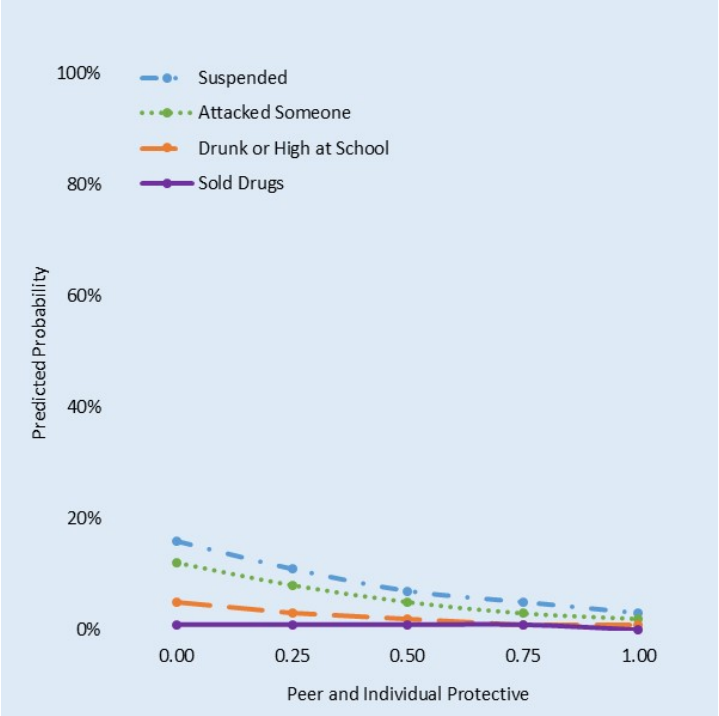


Figure 70 presents the probability of antisocial behaviors in the past year as a function of the Peer and Individual Protective domain score. Compared to the School Protective domain, peer and individual factors were not as strongly associated with changes in antisocial behaviors. This pattern resembled what was observed in the prediction of substance use by these same factors. It is in contrast to the strong influence of Peer and Individual Risk factors on antisocial behaviors.

CHAPTER 4: MENTAL HEALTH

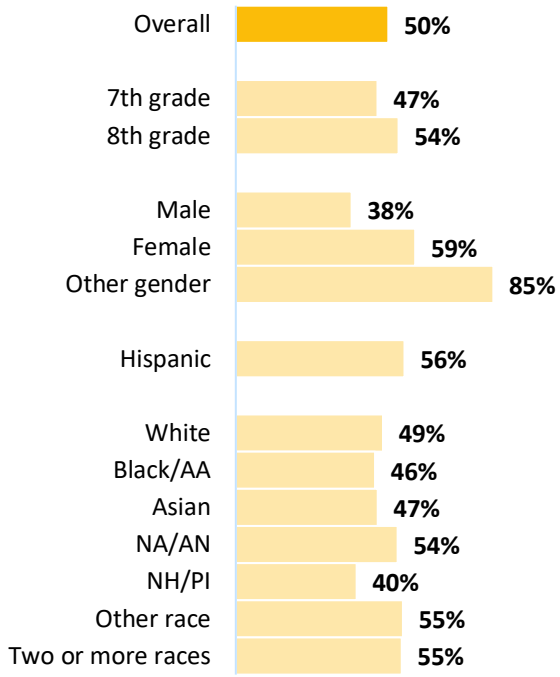
Prior research suggests that substance use and mental health challenges frequently co-occur among youth.[27] This is of great concern as the number of adolescents struggling with anxiety and depression continues to rise.[3] As with substance use, rates of mental health disorder vary by gender. For example, evidence suggests that female and nonbinary youth are more susceptible to anxiety and depression than males.[28,29]

How was this measured?

In both 2020 and 2021, students were asked if they have "had a period of time lasting several days or longer when most of the day [they] felt sad, empty or depressed" during the past year.

Summary of Findings

Figure 71. Feeling Sad, Empty, or Depressed in the Past Year



50.5%

of students reported struggling with feelings of sadness, emptiness, or depression.

Overall, 50.5% (1 in 2) students responding to the survey reported experiencing a period of time lasting several days or longer when most of the day they felt sad, empty, or depressed in the past year. Recently published data shows that 44% of high school students in the US reported persistent feelings of sadness or hopelessness during the pandemic.

Past year feelings of sadness, emptiness, or depression were above the state average for:[NT]

- eighth grade students (53.9%),
- nonbinary (85.3%) and female (59.4%) students,
- students identifying as Hispanic (55.8%), Other race (55.3%), two or more races (54.9%), and Native American or Alaskan Native (53.6%).

MENTAL HEALTH

Alcohol and e-cigarettes were the top two most frequently used substances among students reporting feelings of sadness, emptiness, or depression (24.1% and 14.3% used, respectively).

Figure 72. Substance Use for Students Reporting Feeling Sad, Empty, or Depressed

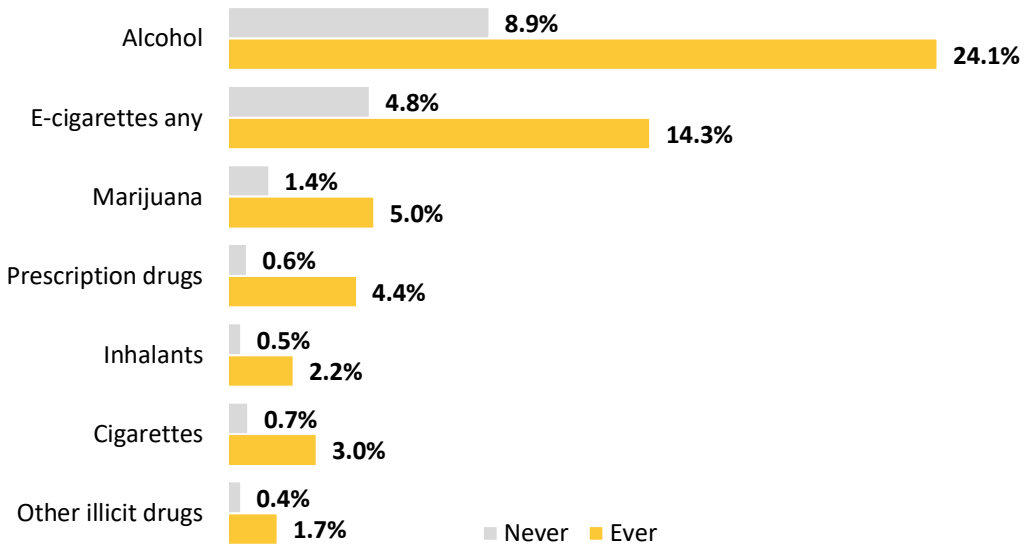
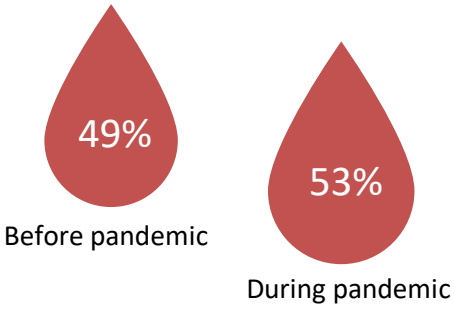


Figure 73. Changes in Past Year Feeling Sad, Empty, or Depressed, 2020 to 2021



Students surveyed during the pandemic (2021) were significantly more likely to experience extended periods when most of the day they felt sad, empty, or depressed than were students surveyed before the pandemic (53.5% in 2021; 48.8% in 2020).

CHAPTER 5: GAMBLING OR BETTING

Engaging in gambling or betting behaviors at an early age puts adolescents at higher risk for gambling problems or addictions later in life. Gambling behaviors have also been associated with tobacco, alcohol, and illicit drug use.[30,31]

How was this measured?

In both 2020 and 2021, students were asked whether they "bet or gambled anything of value (e.g., money, a watch, soda) at least once during the past year." Gambling or betting included betting on sports (e.g., NCAA March Madness), betting on fantasy sports, playing e-sports (e.g., FIFA or Madden) for money or something of value, purchasing a loot box or skins in a video game (e.g., in Fortnite or Overwatch), buying a lottery or instant scratch off lottery ticket, and playing dice or cards for money or something of value.

Summary of Findings

Figure 74. Gambling or Betting Something at least once in the Past Year

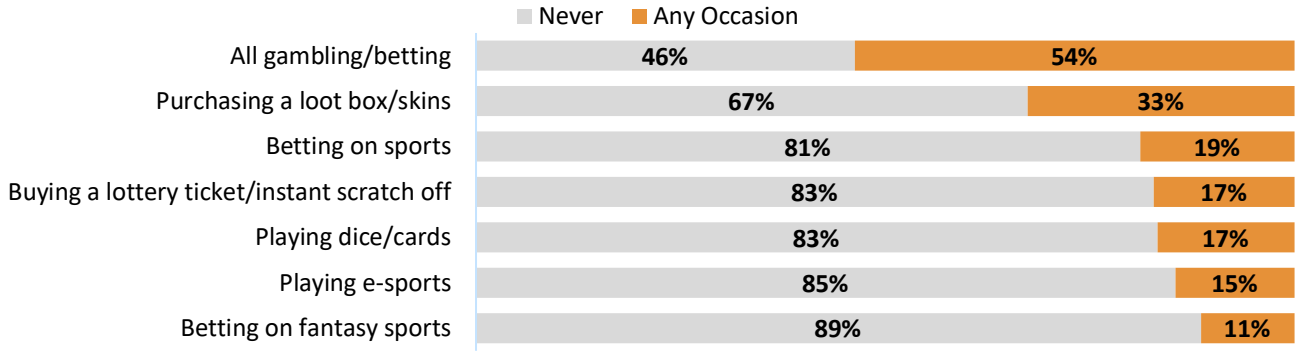
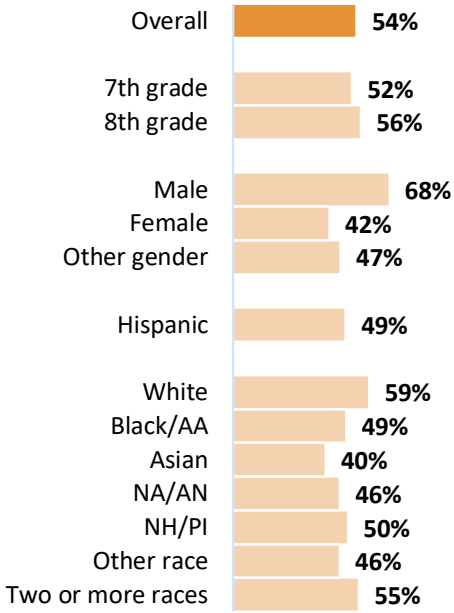


Figure 75. Past year Gambling or Betting Activities



More than half (53.7%) of all students engaged in gambling or betting activities during 2020 or 2021.

Past year gambling or betting activities were above the state average for:[NT]

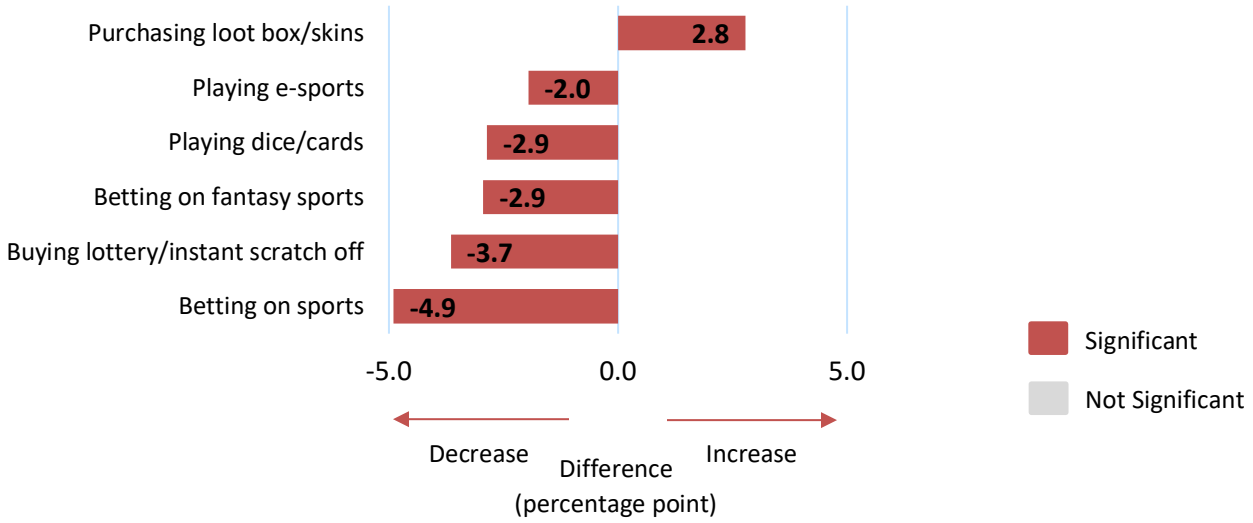
- eighth grade students (55.6%),
- male (68.0%) students,
- students identifying as White (59.2%) and two or more races (54.7%).

GAMBLING OR BETTING

While most specific past year gambling activities significantly decreased from 2020 and 2021, loot box and skins purchases in video games significantly increased over this time period. See Figure 77 for the percentage point differences. Loot boxes and skins are common features in video games, especially in mobile platforms.[32]

Except for e-sports, all other gambling activities that declined in prevalence rates involve in-person activities. It is possible that COVID-19 pandemic restrictions, such as quarantines and the cancellation of professional sports, reduced opportunities for students to engage in some gambling activities.

Figure 76. Changes in Past Year Gambling or Betting Activities, 2020 to 2021



CHAPTER 6: EXPERIENCES DURING COVID-19

The COVID-19 pandemic caused life-altering disruptions for school-aged youth. It changed the way students interacted with one another and attended school. Literature suggests that the combination of sustained disruptions to daily life as a result of prolonged school closures, social distancing measures, and conditions during the pandemic has the potential to exacerbate existing substance use issues, mental health issues, and gambling behaviors.[2,25,33,34]

A subset of students were asked about their "experiences since March 2020 (since schools were closed because of coronavirus COVID-19)". These questions were newly added in 2020-2021. Data presented below reflect the experiences of 2,032 students who completed the survey in 2021.

Mental Health during COVID-19

How was this measured?

In 2021, students also were asked how often they had been bothered by "feeling nervous, anxious, or on edge," "not being able to stop or control worrying," "feeling down, depressed, or hopeless," and having "little interest or pleasure in doing things" since March 2020 (since schools were closed because of COVID-19).

Summary of Findings

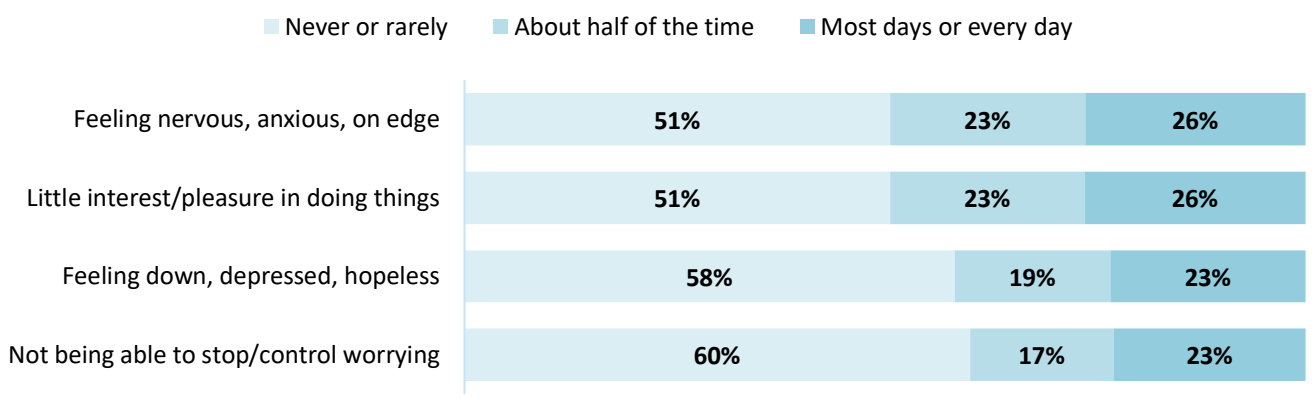
More than a quarter (26.3%) of students completing a survey in 2021 felt little interest or pleasure in doing things most days or every day since March 2020.

26.2% (n=533) of students felt nervous, anxious, or on edge most days or every day.

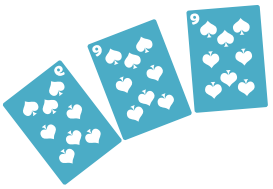
23.2% (n=471) of students felt down, depressed, or hopeless most days or every day.

22.8% (n=462) of students said they were not able to stop or control worrying most days or every day.

Figure 77. Mental Health Status since March 2020



Gambling or Betting during COVID-19



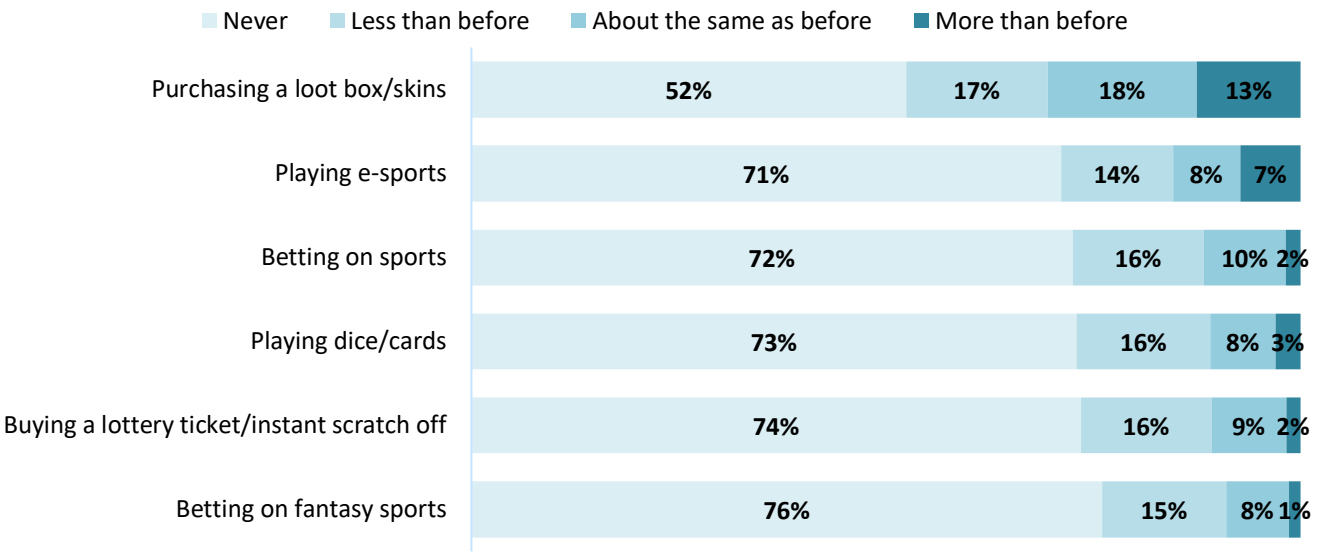
How was this measured?

In 2021, students were also asked if they had engaged in gambling or betting activities more than, the same, or less than before March 2020.

Summary of Findings

12.5% (n=254) of students completing a survey in 2021 said they purchased a loot box or skin in a video game more often since March 2020 than before. 7.3% (n=147) of students played e-sports for money (or something of value) more often since March 2020 than before. Betting on fantasy sports was the least reported activity during the pandemic (2021). Again, this may be related to the cancellation of professional sports due to COVID-19 restrictions.

Figure 78. Gambling or Betting Activities since March 2020



Household

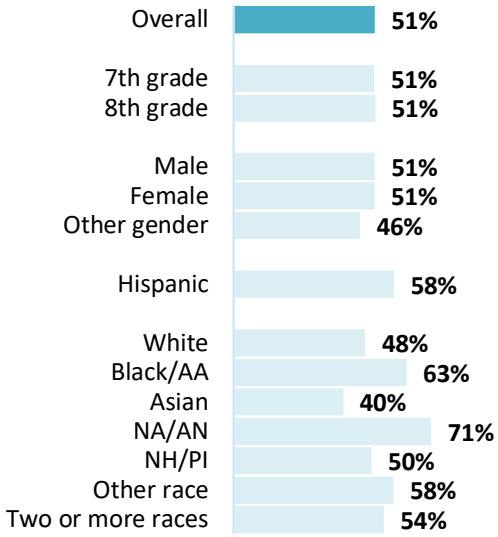
Research on traumatic experiences show that economic instability in the household caused by unemployment or living with a first responder puts children at a higher risk for experiencing depression, anxiety, or stress, which may predispose them to substance use.[35,36]

How was this measured?

In 2021, students were asked if their parent(s) or guardian(s) ("parent") had served as an essential worker (e.g., a nurse, police officer, worked in a supermarket, or any job that was necessary to leave the house). They were also asked if their parent(s) had lost their job since March 2020.

Summary of Findings

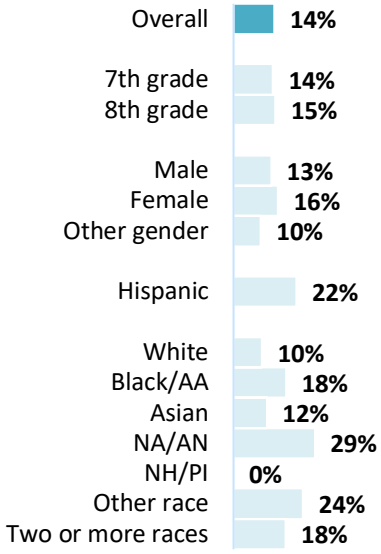
Figure 79. Parents or Guardians Serving as Essential Workers since March 2020



More than half (51.2%) of students completing the survey in 2021 had a parent that served as an essential worker during the pandemic in 2021.

The percentage of students with a parent as an essential worker was above the state average for students identifying as Native American or Alaskan Native students (71.4%), Black or African American (62.6%), Hispanic (58.1%), Other race (57.9%), and two or more races (54.4%).[NT]

Figure 80. Parents or Guardians Losing their Job since March 2020



14.3% (n=286) of students had a parent who lost their job during the pandemic in 2021.

The percentage of students reporting parent job loss was above the state average for:[NT]

- eighth grade students (14.7%),
- female (15.7%) students,
- students identifying as Native American or Alaskan Native students (28.6%), Other race (24.5%), Hispanic (22.1%), Black or African American (18.4%), and two or more races (18.3%).

Communication

Continued engagement in social support networks during the pandemic is hypothesized to be a protective net against substance abuse and poor mental health indicators, such as anxiety and depression.[37,38,39]

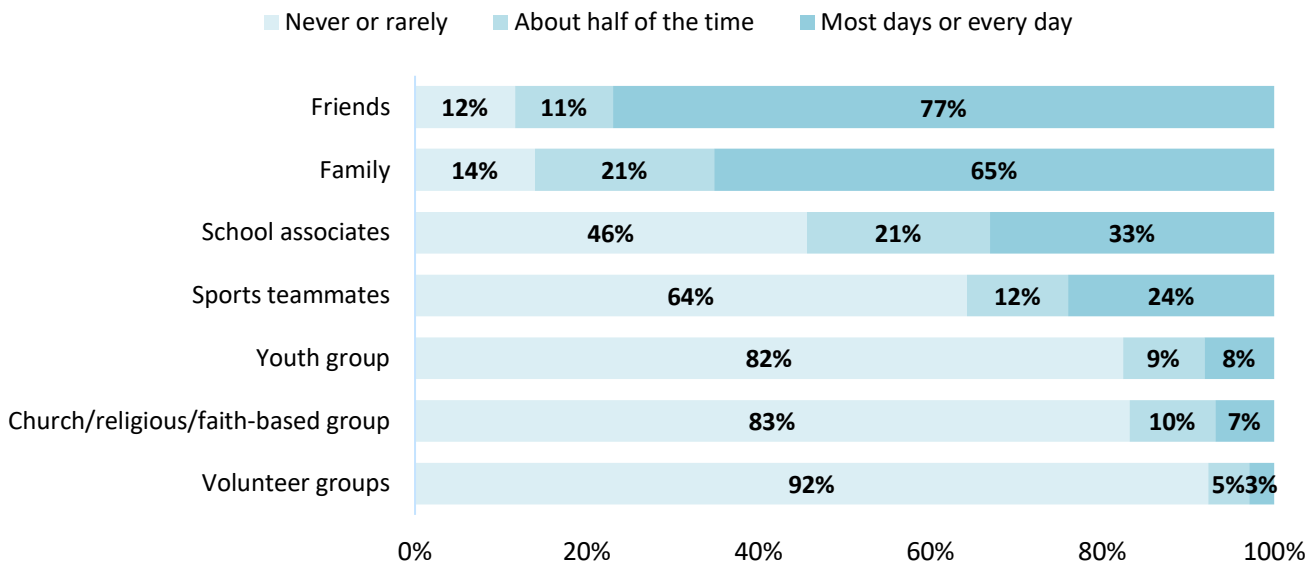
How was this measured?

In 2021, students were asked how often they had connected with the following people or groups since March 2020: family, friends, school associates (teachers, school counselors, classmates), sports teammates, church or faith group, youth group (e.g., Girl/Boy Scouts, theater, extracurricular activities), or volunteer groups. Response options included: every day, most days, about half of the time, rarely, and never.

Summary of Findings

Overall, 89.6% (n=1,818) of students completing the survey in 2021, engaged in some form of communication (by phone, text, video, gaming, etc.) with people or groups most days or every day during the pandemic. 77.0% of students reported communicating with friends and 65.2% with family most days or every day during the pandemic. Approximately one-third of students (33.1%) were able to communicate with school associates, such as teachers, school counselors, and classmates most days or every day during the pandemic.

Figure 81. Communicating with People or Groups since March 2020



Media Exposure

Studies have found that children's exposure to news increases during times of national crisis and that the frequency of exposure is associated with incidence of anxiety, post-traumatic stress symptoms, and depression.[40,41] The CDC recommends that parents and guardians play an active role as caregivers to deal with pandemic-related stressors in a calm and confident way, providing reassurance to others around them, especially children.[42]

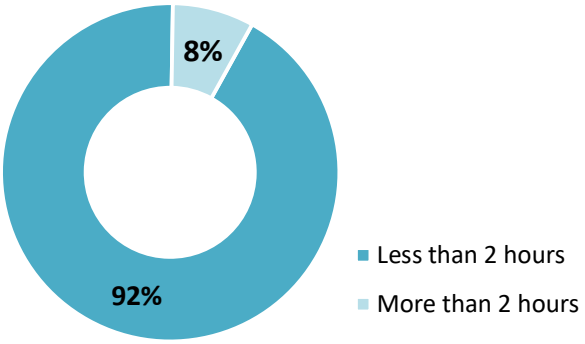
Exposure to Media

How was this measured?

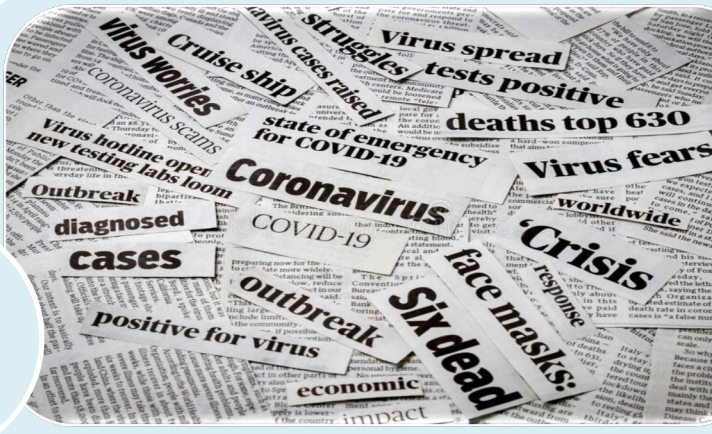
In 2021, students were asked, "On average, since March 2020…, how much time have you spent looking at information about coronavirus/COVID-19 on TV, the internet, or in print media?" Response options were collapsed to create two categories: more than 2 hours or less than 2 hours per day.

Summary of Findings

Figure 82. Time Spent Looking at Information about COVID-19 since March 2020



7.8% (n=155) of students completing the survey in 2021 reported spending an average of two or more hours per day looking at information about COVID-19 on TV, the internet, or in print media.



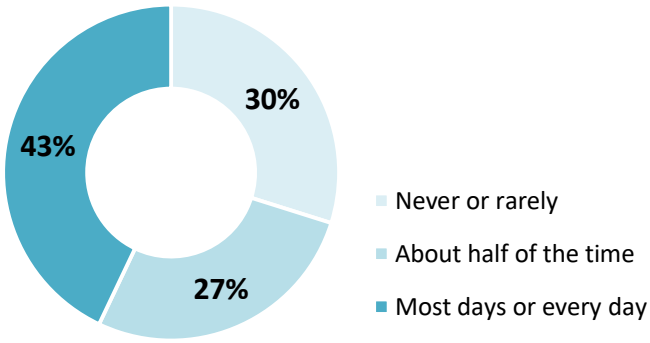
Parent Reassurance

How was this measured?

In 2021, students were asked, "Since March 2020…, how often has your parent(s) or guardian(s) ("parents") reassured you that you are safe despite the news about coronavirus/COVID-19?"

Summary of Findings

Figure 83. Parents or Guardians Providing Reassurance about Safety since March 2020



42.9% (n=857) of students completing the survey in 2021 reported receiving reassurance about safety from their parents most days or every day during the pandemic.

More than a quarter (29.9%, n=596) of students reported never receiving reassurance about safety from their parents during the pandemic.

Appendix A: School and Student Participation Rates by County

Overall, CREEHS collected 6,490 surveys from 97 participating schools. Survey administrations took place between November 2019 and March 2021 in two separate waves: (1) November 2019 to March 2020 (prior to the pandemic) and (2) January to March 2021 (during the pandemic). Table A-1 presents the school recruitment and student participation counts and rates by county.

CREEHS aimed to sample 12,568 students statewide, assuming a 60% response rate in order to meet the overall target sample of 7,541 students. CREEHS determined targets within each county and school in order to achieve this goal, often oversampling classrooms in successfully recruited schools to reach the number of students needed in each county.

In total, CREEHS selected 718 classrooms from the 97 recruited schools, reaching a potential total of 16,220 selected students (higher than the sample goal of 12,568 students). While the overall consent form return rate was 58%, the consent form return rate in Phase One alone was 67% and in Phase Two 49%.

Lower consent form return rates during Phase Two could be attributed to ineffective communication with parents and students during remote learning, the added responsibility of consent distribution and reminders on school staff, and greater rates of classroom oversampling within schools. Re-recruited schools (i.e., agreed to participate in Phase One but survey administrations were canceled due to COVID-19) noted having a harder time reaching the same consent form return rates as in Phase One despite providing incentives, sending reminders, and encouraging participation.

APPENDICES

Table A-1. School and Student Participation Rates by County

County	Target Sample			Total Participating Sample				Student Participation Rates	
	Schools	Students (Targeted)	Students (Sampled)	Schools Agreed	Schools Completed	Students Selected	Students Completed	Target Goal Met (Completed/Targeted)	Participation Rate (Completed/Selected)
Atlantic	4	363	605	4	4	752	314	87%	42%
Bergen	9	377	628	7	7	981	436	116%	44%
Burlington	4	371	618	3	3	517	261	70%	50%
Camden	6	372	620	4	4	934	204	55%	22%
Cape May	4	312	520	4	4	531	227	73%	43%
Cumberland	4	349	582	5	5	1,112	217	62%	20%
Essex	9	377	628	7	7	752	469	124%	62%
Gloucester	4	365	608	4	4	736	212	58%	29%
Hudson	7	373	622	7	7	807	354	95%	44%
Hunterdon	4	339	565	4	4	696	336	99%	48%
Mercer	4	368	613	4	4	798	331	90%	41%
Middlesex	5	377	628	3	3	756	288	76%	38%
Monmouth	6	375	625	6	6	814	424	113%	52%
Morris	5	372	620	3	3	591	230	62%	39%
Ocean	4	371	618	4	4	753	297	80%	39%
Passaic	8	373	622	6	6	1,090	409	110%	38%
Salem	4	293	488	5	5	730	231	79%	32%
Somerset	4	368	613	3	3	688	281	76%	41%
Sussex	4	340	567	4	4	669	358	105%	54%
Union	7	374	623	6	6	816	258	69%	32%
Warren	4	332	553	4	4	697	353	106%	51%
TOTAL	**110**	**7,541**	**12,568**	**97**	**97**	**16,220**	**6,490**	**86%**	**40%**

Appendix B: Prevalence Summaries by Grade

Table B-1 provides prevalence rates by grade for substance use across the three time periods collected (lifetime, past year, and past month). Table B-2 provides prevalence rates by grade for antisocial behaviors across the two time periods collected (lifetime and past year).

Table B-1. Prevalence Summaries of Substance Use by Grade

	Lifetime						Past Year						Past Month					
	7th		8th		Overall		7th		8th		Overall		7th		8th		Overall	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Alcohol	375	12.6	631	20.2	1,006	16.5	215	7.2	417	13.4	632	10.4	135	4.5	227	7.2	362	5.9
Binge drinking	79	2.7	169	5.4	248	4.1	49	1.6	122	3.9	171	2.8	33	1.1	69	2.2	102	1.7
E-cigarettes	181	6.1	408	13.0	589	9.6	112	3.8	291	9.4	403	6.6	67	2.2	174	5.5	241	3.9
E-cigarettes w marijuana	52	1.7	159	5.1	211	3.4	34	1.1	127	4.0	161	2.6	25	0.8	71	2.3	96	1.6
Marijuana	49	1.6	145	4.6	194	3.2	36	1.2	117	3.7	153	2.5	21	0.7	83	2.6	104	1.7
Prescription drugs	71	2.5	78	2.5	149	2.5	53	1.8	54	1.7	107	1.8	29	1.0	22	0.7	51	0.8
Cigarettes	43	1.4	69	2.2	112	1.8	25	0.8	40	1.3	65	1.1	11	0.4	16	0.5	27	0.4
Other Illicit Drugs	21	0.7	42	1.4	63	1.1	12	0.4	22	0.7	34	0.6	-	-	-	-	-	-
Inhalants	39	1.3	44	1.4	83	1.4	22	0.7	25	0.8	47	0.8	16	0.5	16	0.5	32	0.5
Cough Medicine	-	-	-	-	-	-	21	0.7	35	1.1	56	0.9	-	-	-	-	-	-

- Data not collected

Table B-2. Prevalence Summary of Antisocial Behavior by Grade

	Lifetime						Past Year					
	7th		8th		Overall		7th		8th		Overall	
	n	%	n	%	n	%	n	%	n	%	n	%
Getting suspended	301	10.0	400	12.7	701	11.4	210	7.0	288	9.1	498	8.1
Attacking someone with intent to harm	166	5.5	229	7.3	395	6.4	148	4.9	199	6.3	347	5.6
Carrying a handgun	64	2.1	83	2.6	147	2.4	67	2.2	85	2.7	152	2.5
Getting arrested	19	0.6	36	1.1	55	0.9	17	0.6	45	1.4	62	1.0
Belonging to a gang	70	2.4	72	2.3	142	2.4	-	-	-	-	-	-
Belonging to a gang with name	32	1.1	34	1.1	66	1.1	-	-	-	-	-	-
Being drunk or high at school	-	-	-	-	-	-	43	1.4	92	2.9	135	2.2
Taking a handgun to school	-	-	-	-	-	-	27	0.9	26	0.8	53	0.9
Selling drugs	-	-	-	-	-	-	17	0.6	34	1.1	51	0.8
Stealing or trying to steal a motor vehicle	-	-	-	-	-	-	18	0.6	27	0.9	45	0.7

Appendix C: County-Level Statistics

Tables C-1 to C-5 provide prevalence rates by county for substance use and antisocial behaviors. Tables C-6 and C-7 present risk and protective factor scores by county. Data represented in all of these tables are an aggregate of two data collection waves (2019-2020 and 2020-2021) with some counties only participating in 2019-2020 and others only participating in 2020-2021. Differences across counties should be interpreted with caution.

Table C-1. Lifetime Prevalence Summaries of Substance Use by County

	Atlantic (N=300)	Bergen (N=416)	Burlington (N=254)	Camden (N=198)	Cape May (N=224)	Cumberland (N=204)	Essex (N=429)	Gloucester (N=210)	Hudson (N=335)	Hunterdon (N=320)	Mercer (N=316)
Lifetime use											
Ever used (at least once)											
Alcohol	15.1	18.5	13.1	11.7	22.6	21.9	16.9	14.4	14.7	12.3	21.1
Binge drinking	4.4	3.9	2.0	2.6	5.9	6.9	4.2	3.4	2.1	4.7	4.3
E-cigarettes	10.4	8.0	4.0	5.2	14.5	12.8	11.6	6.3	10.0	5.0	11.0
E-cigarettes w/o marijuana	9.7	7.0	3.9	5.1	14.4	10.8	11.0	6.3	9.3	4.7	9.7
E-cigarettes w marijuana	4.4	2.6	1.6	1.0	6.8	4.9	2.6	1.9	3.0	1.3	4.5
Marijuana	4.0	1.0	2.0	1.0	6.3	7.4	3.8	1.9	3.0	1.9	4.8
Prescription drugs	4.6	2.0	3.3	1.5	1.4	3.5	2.2	2.0	4.1	2.3	2.6
Cigarettes	4.0	1.5	0.8	1.5	3.6	3.0	1.4	0.5	2.4	1.6	3.5
Inhalants	1.4	2.0	0.4	1.0	1.3	1.5	1.4	0.0	0.9	0.6	2.6
Other illicit drugs	1.4	1.3	0.0	0.5	0.9	1.0	0.5	1.0	0.0	0.7	1.7
Early onset use (11 years or younger)											
Alcohol	6.0	7.1	4.0	5.6	6.8	10.5	8.6	5.3	7.8	2.9	8.4
E-cigarettes w/o marijuana	2.0	0.7	0.4	1.5	2.7	1.5	2.1	0.5	1.8	0.6	2.6
Prescription drugs	3.2	0.8	1.2	1.0	0.0	0.5	1.0	1.5	2.5	1.0	1.0
Cigarettes	2.0	0.5	0.4	1.0	0.5	0.5	0.7	0.5	1.5	0.0	1.3
Marijuana	0.7	0.2	0.0	0.0	1.4	1.0	0.5	1.0	0.3	0.0	1.3

Table C-1. Lifetime Prevalence Summaries of Substance Use by County (continued)

	Middlesex (N=276)	Monmouth (N=415)	Morris (N=225)	Ocean (N=288)	Passaic (N=384)	Salem (N=211)	Somerset (N=273)	Sussex (N=332)	Union (N=240)	Warren (N=336)	New Jersey (N=6,175)
Lifetime use											
Ever used (at least once)											
Alcohol	11.4	18.7	15.3	20.7	15.8	24.5	12.3	13.2	12.3	19.3	16.5
Binge drinking	2.2	4.4	5.0	5.0	4.8	4.4	2.6	4.6	2.1	5.9	4.1
E-cigarettes	4.4	12.2	6.7	12.6	14.0	12.6	6.6	6.7	6.7	16.3	9.6
E-cigarettes w/o marijuana	4.4	11.5	6.3	11.9	13.2	11.5	5.9	6.4	6.3	15.8	9.0
E-cigarettes w marijuana	2.2	4.1	4.0	4.6	6.0	4.4	2.2	2.1	1.3	6.1	3.4
Marijuana	1.5	2.7	2.2	4.2	4.0	3.9	1.9	1.8	2.1	6.0	3.2
Prescription drugs	1.5	2.2	0.9	3.4	4.0	3.6	1.1	1.2	1.3	3.2	2.5
Cigarettes	0.0	1.0	0.5	2.8	2.4	2.4	1.1	0.6	2.5	1.8	1.8
Inhalants	0.7	0.7	0.4	3.5	0.3	1.9	1.8	2.1	1.3	2.1	1.4
Other illicit drugs	0.0	1.0	2.3	2.7	1.1	3.1	0.4	1.6	0.9	1.3	1.1
Early onset use (11 years or younger)											
Alcohol	4.0	6.8	5.0	9.5	5.8	11.1	6.3	3.7	3.4	9.0	6.6
E-cigarettes w/o marijuana	1.1	0.5	2.2	5.6	2.4	2.4	1.1	0.3	0.8	2.1	1.7
Prescription drugs	0.7	0.8	0.5	1.2	1.9	2.1	0.4	0.0	1.3	1.6	1.1
Cigarettes	0.0	0.5	0.5	1.8	1.3	0.5	0.4	0.0	2.1	1.2	0.8
Marijuana	0.0	0.0	0.0	1.8	0.3	1.0	0.4	0.0	0.8	1.8	0.6

Table C-2. Past Year Prevalence Summaries of Substance Use by County

	Atlantic (N=300)	Bergen (N=416)	Burlington (N=254)	Camden (N=198)	Cape May (N=224)	Cumberland (N=204)	Essex (N=429)	Gloucester (N=210)	Hudson (N=335)	Hunterdon (N=320)	Mercer (N=316)
Past year use											
Alcohol	8.1	10.8	8.3	5.1	15.1	11.1	9.8	10.1	8.4	10.1	12.4
Binge drinking	3.0	2.7	0.4	1.5	4.5	5.9	3.3	2.9	1.2	2.8	2.6
E-cigarettes	7.1	5.9	3.2	2.6	12.2	8.1	6.9	3.4	5.2	4.1	8.1
E-cigarettes w/o marijuana	5.4	5.2	3.2	2.6	11.0	6.1	6.5	3.4	4.8	4.1	7.1
E-cigarettes w marijuana	3.7	1.9	1.2	0.5	5.4	3.9	1.9	1.4	2.1	1.3	4.1
Marijuana	3.1	0.7	1.2	0.5	4.5	5.9	2.8	1.4	2.7	1.9	4.5
Prescription drugs	3.7	1.8	2.0	1.0	1.4	2.0	1.4	1.4	3.0	1.3	1.9
Other illicit drugs	1.1	0.5	0.0	0.5	0.9	1.0	0.3	1.0	0.0	0.0	1.0
Cigarettes	2.7	1.0	0.4	0.0	3.2	1.5	1.2	0.5	0.9	1.3	1.9
Cough medication	2.7	0.7	0.4	0.0	0.9	0.5	0.7	0.5	0.6	0.3	1.6
Inhalants	1.0	1.2	0.4	0.5	0.5	0.5	0.9	0.0	0.0	0.6	1.6

Table C-2. Past Year Prevalence Summaries of Substance Use by County (continued)

	Middlesex (N=276)	Monmouth (N=415)	Morris (N=225)	Ocean (N=288)	Passaic (N=384)	Salem (N=211)	Somerset (N=273)	Sussex (N=332)	Union (N=240)	Warren (N=336)	New Jersey (N=6,175)
Past year use											
Alcohol	7.4	14.2	13.1	12.0	9.2	14.9	9.0	8.6	7.2	12.7	10.4
Binge drinking	1.5	3.7	4.5	3.2	3.2	3.4	2.2	2.4	1.3	3.0	2.8
E-cigarettes	3.3	10.4	5.8	9.6	8.5	6.3	5.2	4.9	3.4	11.4	6.6
E-cigarettes w/o marijuana	2.6	9.7	4.9	8.6	8.2	6.3	4.1	4.6	3.4	10.8	6.0
E-cigarettes w marijuana	1.5	3.1	4.0	3.2	3.7	1.9	1.5	1.8	1.3	5.1	2.6
Marijuana	1.5	1.9	2.3	3.5	3.4	2.9	0.7	1.2	1.3	4.8	2.5
Prescription drugs	0.7	1.5	0.9	2.2	2.6	2.9	0.7	0.9	0.8	2.1	1.8
Other illicit drugs	0.0	0.3	1.4	1.8	0.3	1.6	0.0	0.6	0.4	0.6	0.6
Cigarettes	0.0	1.0	0.5	1.1	0.8	1.9	0.4	0.3	1.3	0.9	1.1
Cough medication	1.1	0.5	1.8	1.4	0.8	1.9	1.1	1.2	0.4	0.3	0.9
Inhalants	0.4	0.2	0.0	2.1	0.0	1.4	0.4	1.5	1.3	1.2	0.8

Table C-3. Past Month Prevalence Summaries of Substance Use by County

	Atlantic (N=300)	Bergen (N=416)	Burlington (N=254)	Camden (N=198)	Cape May (N=224)	Cumberland (N=204)	Essex (N=429)	Gloucester (N=210)	Hudson (N=335)	Hunterdon (N=320)	Mercer (N=316)
Past 30 day use											
Alcohol	4.0	6.3	4.3	2.0	10.3	9.8	5.8	5.3	3.6	5.3	7.9
Binge drinking	1.3	0.5	0.8	0.5	3.6	3.5	2.1	2.4	0.9	1.3	1.9
E-cigarettes	5.0	1.7	1.6	1.5	7.7	6.9	4.2	3.9	2.4	1.6	5.8
E-cigarettes w/o marijuana	4.4	1.7	0.8	1.5	6.7	5.9	4.2	3.9	2.1	1.3	5.1
E-cigarettes w marijuana	2.0	0.5	0.8	0.5	5.0	2.5	0.7	0.5	1.5	1.3	2.9
Marijuana	2.4	0.2	0.4	0.5	3.6	4.9	1.4	0.5	0.9	0.9	3.2
Prescription drugs	1.7	0.7	1.2	0.0	0.0	1.0	0.7	1.0	1.5	0.3	1.3
Inhalants	0.3	1.0	0.0	0.0	0.5	1.0	0.9	0.0	0.0	0.6	1.6
Cigarettes	0.7	0.0	0.0	0.0	1.8	1.0	0.7	0.5	0.3	0.0	1.3

Table C-3. Past Month Prevalence Summaries of Substance Use by County (continued)

	Middlesex (N=276)	Monmouth (N=415)	Morris (N=225)	Ocean (N=288)	Passaic (N=384)	Salem (N=211)	Somerset (N=273)	Sussex (N=332)	Union (N=240)	Warren (N=336)	New Jersey (N=6,175)
Past 30 day use											
Alcohol	3.6	7.2	6.3	6.3	4.4	9.0	5.1	4.8	3.8	8.7	5.9
Binge drinking	0.7	2.2	2.2	2.8	1.1	1.9	1.5	1.5	1.3	2.1	1.7
E-cigarettes	1.8	4.4	3.1	6.0	5.3	2.9	2.6	2.4	3.3	8.4	3.9
E-cigarettes w/o marijuana	1.5	4.1	2.2	5.3	5.2	2.9	2.6	2.1	3.3	8.4	3.6
E-cigarettes w marijuana	1.1	1.0	1.8	2.4	2.1	1.0	0.7	0.9	1.3	3.3	1.6
Marijuana	1.5	0.7	1.8	2.1	2.4	2.8	0.7	0.6	1.7	3.9	1.7
Prescription drugs	0.7	0.5	0.0	0.7	1.3	1.0	0.7	0.9	0.0	1.5	0.8
Inhalants	0.0	0.2	0.0	1.0	0.0	0.5	0.4	0.6	0.4	1.2	0.5
Cigarettes	0.0	0.0	0.0	0.4	0.3	1.9	0.0	0.0	0.8	0.6	0.4

Table C-4. Prevalence Summaries of Other Illicit Drug Use by County

	Atlantic (N=300)	Bergen (N=416)	Burlington (N=254)	Camden (N=198)	Cape May (N=224)	Cumberland (N=204)	Essex (N=429)	Gloucester (N=210)	Hudson (N=335)	Hunterdon (N=320)	Mercer (N=316)
Lifetime use											
Other club drugs	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.3
Hallucinogens	0.3	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0	0.3	0.0
Downers	0.0	0.5	0.0	0.0	0.0	0.0	0.2	0.5	0.0	0.0	0.3
Ecstasy	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.5	0.0	0.0	0.0
Cocaine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Anabolic steroids	0.0	0.2	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.3	0.3
Heroin	0.3	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OxyContin	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Crystal meth	0.3	0.0	0.0	0.5	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Uppers	0.0	0.2	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Past year use											
Ecstasy	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.5	0.0	0.0	0.0
Hallucinogens	0.3	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0
Uppers	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Heroin	0.3	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Anabolic steroids	0.0	0.2	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Downers	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Crystal meth	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Cocaine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OxyContin	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other club drugs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Past month use											
Cocaine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table C-4. Prevalence Summaries of Other Illicit Drug Use by County (continued)

	Middlesex (N=276)	Monmouth (N=415)	Morris (N=225)	Ocean (N=288)	Passaic (N=384)	Salem (N=211)	Somerset (N=273)	Sussex (N=332)	Union (N=240)	Warren (N=336)	New Jersey (N=6,175)
Lifetime use											
Other club drugs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.3	0.3
Hallucinogens	0.0	0.0	0.9	0.4	0.0	0.5	0.0	0.6	0.0	0.6	0.2
Downers	0.0	0.0	0.4	0.0	0.0	1.0	0.4	0.3	0.0	0.6	0.2
Ecstasy	0.0	0.0	0.9	0.7	0.3	1.0	0.0	0.3	0.0	0.0	0.2
Cocaine	0.0	0.7	0.0	1.1	0.3	0.5	0.0	0.0	0.0	0.9	0.2
Anabolic steroids	0.0	0.2	0.4	0.3	0.3	0.5	0.4	0.3	0.0	0.0	0.2
Heroin	0.0	0.2	0.0	0.7	0.0	0.5	0.0	0.0	0.4	0.6	0.1
OxyContin	0.0	0.0	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Crystal meth	0.0	0.2	0.0	0.4	0.3	0.0	0.0	0.0	0.0	0.3	0.1
Uppers	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.3	0.1
Past year use											
Ecstasy	0.0	0.0	0.9	0.7	0.3	1.0	0.0	0.3	0.0	0.0	0.2
Hallucinogens	0.0	0.0	0.9	0.3	0.0	0.0	0.0	0.3	0.0	0.3	0.1
Uppers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.1
Heroin	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.4	0.3	0.1
Anabolic steroids	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.1
Downers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.1
Crystal meth	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Cocaine	0.0	0.2	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0
OxyContin	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other club drugs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Past month use											
Cocaine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.02

Table C-5. Prevalence Summaries of Selected Antisocial Behaviors by County

	Atlantic (N=300)	Bergen (N=417)	Burlington (N=254)	Camden (N=198)	Cape May (N=224)	Cumberland (N=204)	Essex (N=431)	Gloucester (N=210)	Hudson (N=335)	Hunterdon (N=320)	Mercer (N=316)
Lifetime											
Getting suspended	17.7	7.0	9.1	13.6	8.5	26.9	15.5	11.0	18.2	7.5	10.9
Attacking someone with intent to harm	8.7	5.6	4.7	4.6	4.9	13.9	6.8	5.7	8.1	4.7	8.6
Carrying a handgun	4.0	1.2	2.4	1.5	5.4	4.0	1.0	3.3	0.9	1.3	2.6
Belonging to a gang	2.7	1.5	2.0	2.1	2.7	2.6	2.6	1.0	2.7	1.9	3.3
Belonging to a gang, with a name	1.7	0.0	0.8	1.0	1.8	2.0	1.0	0.5	1.5	0.6	2.2
Getting arrested	1.7	0.0	0.0	0.0	0.9	3.5	1.2	1.0	0.6	0.6	1.6
Past year											
Getting suspended	14.3	4.3	6.7	9.1	6.3	20.6	10.9	5.7	11.7	6.9	5.1
Attacking someone with intent to harm	9.1	5.5	4.3	4.1	4.9	11.3	7.2	4.8	5.7	3.1	6.4
Carrying a handgun	4.3	1.2	2.8	1.5	5.0	3.9	0.7	2.4	1.5	2.2	2.5
Being drunk or high at school	3.7	0.5	1.2	0.5	2.7	3.5	1.6	0.5	1.5	1.6	2.9
Getting arrested	1.3	0.0	0.4	0.5	1.3	2.0	1.9	1.0	0.3	0.9	1.3
Taking a handgun to school	0.0	0.2	0.8	1.0	1.3	1.5	0.7	0.5	1.8	0.6	0.7
Selling drugs	0.3	0.0	0.8	0.5	1.8	0.5	0.7	0.5	0.0	0.9	1.6
Stealing or trying to steal a motor vehicle	0.7	0.5	0.8	1.0	0.9	1.5	0.7	0.5	0.3	0.9	0.6

Table C-5. Prevalence Summaries of Selected Antisocial Behaviors by County (continued)

	Middlesex (N=276)	Monmouth (N=415)	Morris (N=225)	Ocean (N=288)	Passaic (N=384)	Salem (N=211)	Somerset (N=273)	Sussex (N=332)	Union (N=240)	Warren (N=337)	New Jersey (N=6,183)
Lifetime											
Getting suspended	4.0	9.6	4.9	12.2	14.1	12.5	5.5	7.6	15.2	10.4	11.4
Attacking someone with intent to harm	3.6	4.6	5.3	9.1	6.0	9.2	5.5	3.3	8.8	5.9	6.4
Carrying a handgun	0.7	2.2	2.7	4.9	0.8	5.9	1.5	2.7	2.5	3.0	2.4
Belonging to a gang	1.1	1.2	0.9	2.5	2.1	2.5	3.3	3.7	4.0	3.0	2.4
Belonging to a gang, with a name	0.0	0.2	0.5	1.7	1.0	1.5	1.1	1.5	1.7	1.2	1.1
Getting arrested	0.0	0.2	0.9	2.4	0.3	1.4	0.4	0.6	0.8	1.8	0.9
Past year											
Getting suspended	2.9	8.7	2.7	7.3	9.1	9.1	4.4	4.5	12.1	8.6	8.1
Attacking someone with intent to harm	3.3	4.1	5.8	8.4	3.9	6.2	4.0	2.4	9.6	6.2	5.6
Carrying a handgun	1.5	1.9	2.7	3.5	1.3	5.7	1.8	3.3	2.9	2.7	2.5
Being drunk or high at school	0.7	2.7	2.2	3.9	3.1	1.4	2.2	1.5	2.9	4.8	2.2
Getting arrested	0.4	0.2	0.9	2.1	1.0	1.0	0.7	0.9	2.1	1.5	1.0
Taking a handgun to school	1.1	0.5	0.5	1.4	1.6	0.5	0.4	0.9	1.3	1.2	0.9
Selling drugs	0.7	0.0	1.3	1.8	2.1	0.5	0.7	0.6	1.3	1.2	0.8
Stealing or trying to steal a motor vehicle	0.7	0.2	0.4	1.4	1.6	0.5	0.7	0.6	1.3	0.0	0.7

Table C-6. Risk Domains and Factors Averages by County

	Atlantic (N=300)	Bergen (N=417)	Burlington (N=254)	Camden (N=198)	Cape May (N=224)	Cumberland (N=204)	Essex (N=431)	Gloucester (N=210)	Hudson (N=335)	Hunterdon (N=320)	Mercer (N=316)
Risk domains and factors											
Community	**0.31**	**0.26**	**0.25**	**0.26**	**0.28**	**0.34**	**0.33**	**0.27**	**0.31**	**0.25**	**0.27**
Low attachment	0.39	0.31	0.32	0.36	0.35	0.45	0.40	0.35	0.38	0.30	0.35
Disorganization	0.27	0.21	0.15	0.18	0.20	0.32	0.37	0.21	0.33	0.16	0.20
Transitions & mobility	0.43	0.37	0.33	0.36	0.37	0.46	0.50	0.38	0.47	0.33	0.36
Perceived availability drugs	0.28	0.26	0.26	0.26	0.31	0.29	0.28	0.27	0.25	0.27	0.28
Perceived availability guns	0.12	0.07	0.13	0.10	0.13	0.14	0.10	0.09	0.09	0.13	0.10
Laws & norms	0.34	0.30	0.33	0.31	0.36	0.39	0.33	0.35	0.33	0.33	0.33
Family	**0.18**	**0.18**	**0.18**	**0.19**	**0.21**	**0.20**	**0.18**	**0.19**	**0.18**	**0.19**	**0.20**
Poor management	0.24	0.24	0.23	0.23	0.26	0.26	0.24	0.23	0.24	0.24	0.27
Parents favorable drug	0.12	0.12	0.13	0.12	0.15	0.15	0.13	0.14	0.13	0.14	0.14
Parents favorable antisocial behavior	0.19	0.19	0.20	0.20	0.22	0.19	0.18	0.19	0.19	0.20	0.21
School	**0.33**	**0.33**	**0.33**	**0.31**	**0.34**	**0.37**	**0.37**	**0.35**	**0.36**	**0.34**	**0.35**
Failure	0.27	0.26	0.25	0.20	0.24	0.32	0.34	0.27	0.30	0.25	0.25
Low commitment	0.40	0.41	0.42	0.42	0.44	0.41	0.41	0.42	0.41	0.43	0.44
Peer-Individual	**0.12**	**0.09**	**0.09**	**0.10**	**0.11**	**0.14**	**0.11**	**0.11**	**0.11**	**0.09**	**0.12**
Gang involvement	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.02	0.01	0.03
Perceived risks drug	0.23	0.18	0.18	0.18	0.20	0.29	0.21	0.21	0.21	0.19	0.23
Early initiation drug	0.05	0.04	0.03	0.03	0.07	0.07	0.05	0.04	0.05	0.03	0.06
Early initiation antisocial behavior	0.07	0.03	0.04	0.05	0.04	0.10	0.06	0.05	0.06	0.03	0.05
Favorable drug	0.16	0.15	0.14	0.14	0.18	0.20	0.15	0.16	0.15	0.16	0.17
Favorable antisocial behavior	0.22	0.21	0.20	0.20	0.22	0.22	0.20	0.20	0.21	0.20	0.22
Rewards antisocial behavior	0.22	0.18	0.19	0.23	0.21	0.24	0.22	0.24	0.22	0.16	0.23
Friends use drugs	0.06	0.04	0.04	0.03	0.08	0.06	0.05	0.05	0.04	0.04	0.06
Interaction antisocial peers	0.05	0.02	0.03	0.03	0.02	0.05	0.04	0.03	0.04	0.02	0.04
Overall mean											
Overall Risk	**0.21**	**0.18**	**0.18**	**0.18**	**0.20**	**0.23**	**0.21**	**0.19**	**0.21**	**0.18**	**0.20**

Table C-6. Risk Domains and Factors Averages by County (continued)

	Middlesex (N=276)	Monmouth (N=415)	Morris (N=225)	Ocean (N=288)	Passaic (N=384)	Salem (N=211)	Somerset (N=273)	Sussex (N=332)	Union (N=240)	Warren (N=337)	New Jersey (N=6,183)
Risk domains and factors											
Community	**0.26**	**0.26**	**0.25**	**0.31**	**0.31**	**0.33**	**0.24**	**0.25**	**0.31**	**0.31**	**0.28**
Low attachment	0.33	0.32	0.31	0.38	0.40	0.39	0.29	0.32	0.43	0.36	0.35
Disorganization	0.20	0.21	0.17	0.27	0.30	0.30	0.17	0.18	0.30	0.27	0.24
Transitions & mobility	0.36	0.37	0.34	0.43	0.44	0.46	0.35	0.35	0.44	0.43	0.40
Perceived availability drugs	0.26	0.26	0.26	0.30	0.26	0.30	0.24	0.25	0.25	0.29	0.27
Perceived availability guns	0.06	0.08	0.07	0.12	0.09	0.18	0.07	0.10	0.06	0.13	0.10
Laws & norms	0.32	0.32	0.33	0.33	0.34	0.38	0.31	0.33	0.35	0.35	0.33
Family	**0.18**	**0.18**	**0.20**	**0.19**	**0.20**	**0.20**	**0.18**	**0.18**	**0.20**	**0.19**	**0.19**
Poor management	0.22	0.24	0.26	0.24	0.26	0.25	0.22	0.24	0.26	0.24	0.24
Parents favorable drug	0.13	0.13	0.14	0.13	0.14	0.15	0.12	0.12	0.13	0.14	0.13
Parents favorable antisocial behavior	0.18	0.18	0.20	0.19	0.20	0.21	0.19	0.18	0.20	0.19	0.19
School	**0.31**	**0.34**	**0.32**	**0.34**	**0.38**	**0.38**	**0.33**	**0.34**	**0.38**	**0.36**	**0.35**
Failure	0.20	0.25	0.21	0.27	0.31	0.29	0.23	0.27	0.32	0.28	0.27
Low commitment	0.41	0.42	0.43	0.41	0.44	0.47	0.42	0.41	0.44	0.43	0.42
Peer-Individual	**0.09**	**0.10**	**0.09**	**0.12**	**0.11**	**0.12**	**0.09**	**0.09**	**0.11**	**0.12**	**0.11**
Gang involvement	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Perceived risks drug	0.14	0.17	0.18	0.21	0.21	0.24	0.16	0.18	0.21	0.21	0.20
Early initiation drug	0.03	0.05	0.03	0.06	0.05	0.07	0.03	0.03	0.03	0.06	0.05
Early initiation antisocial behavior	0.02	0.04	0.03	0.06	0.05	0.06	0.03	0.03	0.06	0.05	0.05
Favorable drug	0.13	0.14	0.14	0.16	0.15	0.17	0.13	0.14	0.16	0.16	0.15
Favorable antisocial behavior	0.18	0.20	0.20	0.21	0.21	0.23	0.20	0.18	0.22	0.22	0.21
Rewards antisocial behavior	0.22	0.20	0.19	0.24	0.24	0.23	0.17	0.18	0.21	0.21	0.21
Friends use drugs	0.03	0.06	0.04	0.06	0.05	0.07	0.03	0.04	0.04	0.08	0.05
Interaction antisocial peers	0.02	0.03	0.01	0.03	0.04	0.05	0.02	0.03	0.05	0.05	0.03
Overall mean											
Overall Risk	**0.17**	**0.18**	**0.18**	**0.21**	**0.21**	**0.22**	**0.17**	**0.18**	**0.21**	**0.21**	**0.19**

Table C-7. Protective Domains and Factors Averages by County

	Atlantic (N=300)	Bergen (N=417)	Burlington (N=254)	Camden (N=198)	Cape May (N=224)	Cumberland (N=204)	Essex (N=431)	Gloucester (N=210)	Hudson (N=335)	Hunterdon (N=320)	Mercer (N=316)
Protective domains and factors											
School	**0.68**	**0.67**	**0.69**	**0.67**	**0.68**	**0.62**	**0.65**	**0.66**	**0.67**	**0.66**	**0.65**
Prosocial opportunities	0.73	0.74	0.74	0.72	0.73	0.67	0.70	0.71	0.74	0.72	0.70
School prosocial rewards	0.63	0.61	0.63	0.61	0.63	0.58	0.60	0.61	0.61	0.60	0.59
Peer-Individual	**0.47**	**0.47**	**0.49**	**0.47**	**0.48**	**0.38**	**0.41**	**0.42**	**0.42**	**0.45**	**0.41**
Prosocial peers	0.62	0.61	0.65	0.62	0.61	0.48	0.54	0.56	0.56	0.58	0.53
Prosocial involvement	0.34	0.33	0.36	0.36	0.38	0.22	0.25	0.31	0.29	0.32	0.26
Prosocial rewards	0.45	0.45	0.45	0.44	0.47	0.45	0.46	0.38	0.43	0.46	0.46
Overall mean											
Overall Protective	**0.55**	**0.55**	**0.57**	**0.55**	**0.56**	**0.48**	**0.51**	**0.51**	**0.52**	**0.54**	**0.51**

Table C-7. Protective Domains and Factors Averages by County (continued)

	Middlesex (N=276)	Monmouth (N=415)	Morris (N=225)	Ocean (N=288)	Passaic (N=384)	Salem (N=211)	Somerset (N=273)	Sussex (N=332)	Union (N=240)	Warren (N=337)	New Jersey (N=6,183)
Protective domains and factors											
School	**0.68**	**0.67**	**0.68**	**0.66**	**0.66**	**0.65**	**0.67**	**0.67**	**0.68**	**0.64**	**0.66**
Prosocial opportunities	0.72	0.74	0.74	0.72	0.71	0.70	0.74	0.72	0.72	0.71	0.72
School prosocial rewards	0.63	0.60	0.63	0.59	0.61	0.59	0.60	0.62	0.65	0.58	0.61
Peer-Individual	**0.46**	**0.47**	**0.47**	**0.44**	**0.37**	**0.41**	**0.47**	**0.44**	**0.37**	**0.45**	**0.44**
Prosocial peers	0.59	0.62	0.61	0.57	0.49	0.51	0.62	0.58	0.48	0.61	0.57
Prosocial involvement	0.32	0.36	0.36	0.34	0.23	0.32	0.35	0.30	0.22	0.32	0.31
Prosocial rewards	0.45	0.45	0.44	0.40	0.39	0.42	0.43	0.45	0.41	0.41	0.44
Overall mean											
Overall Protective	**0.54**	**0.55**	**0.56**	**0.53**	**0.49**	**0.51**	**0.55**	**0.53**	**0.50**	**0.53**	**0.53**

Appendix D: Substance Use Comparison to National Benchmarks

Appendix D presents substance use by eighth grade students across three time periods (lifetime, past year, and past month) as reported in the 2021 NJRPFS compared to the Monitoring the Future 2021 survey. Monitoring the Future is a national survey conducted annually with eighth, tenth and twelfth grade students about drug use. Because Monitoring the Future does not collect data from seventh grade students, the comparison between their results and the NJRPFS is relevant only for eighth grade students.

Table D-1. Substance Use Among Eighth Grade Students - Comparisons to Monitoring the Future Findings

	MTF 8th Grade Only				NJRPFS 8th Grade Only	
	2015	2019	2020	2021	2015	2021
Lifetime use						
Alcohol	26.1	24.5	25.6	21.7	20.6	20.2
E-cigarettes	21.7	24.3	24.1	17.5	15.4	13.0
E-cigarettes w marijuana	-	9.0	10.2	6.5	-	5.1
Marijuana	15.5	15.2	14.8	10.2	7.8	4.6
Cigarettes	13.3	10.0	11.5	7.0	6.7	2.2
Inhalants	9.4	9.5	12.6	11.3	1.8	1.4
Past year use						
Alcohol	21.0	19.3	20.5	17.2	11.9	13.4
E-cigarettes	-	20.1	19.2	13.4	13.3	9.4
E-cigarettes w marijuana	-	7.0	8.1	4.7	-	4.0
Marijuana	11.8	11.8	11.4	7.1	3.8	3.7
Cigarettes	-	-	-	-	5.3	1.3
Cough medication	1.6	3.2	4.6	3.5	1.7	13.4
Inhalants	4.6	4.7	6.1	4.8	0.8	0.8
Past 30 day use						
Alcohol	9.7	7.9	9.9	7.3	6.4	7.2
E-cigarettes	8.0	12.2	12.5	8.9	8.5	5.5
E-cigarettes w marijuana	-	3.9	4.2	2.9	-	2.3
Marijuana	6.5	6.6	6.5	4.1	2.5	2.6
Inhalants	2.0	2.1	2.9	1.8	0.5	0.5
Cigarettes	3.6	2.3	2.2	1.1	4.2	0.5

The correct rate for cough medicine is 1.1%.

- Data not available

Appendix E: Corresponding Questions for Risk and Protective Factors

Appendix E provides each risk and protective factor with its corresponding survey questions. Tables E-1 to E-4 provide the corresponding questions to the community, family, school, and peer and individual risk factors, respectively. Tables E-5 and E-6 provide the corresponding questions to the school and peer and individual protective factors, respectively.

Table E-1. Corresponding Questions for Community Risk Factors

Factor	Question Item	Response Categories
Low Neighborhood Attachment	Q45. If I had to move, I would miss the neighborhood I now live in.	NO! (4) no (3) yes (2) YES! (1)
	Q46. I'd like to get out of my neighborhood.	NO! (1) no (2) yes (3) YES! (4)
	Q47. I like my neighborhood.	NO! (4) no (3) yes (2) YES! (1)
Community Disorganization	Q48. I feel safe in my neighborhood.	NO! (4) no (3) yes (2) YES! (1)
	Q49a. How much do the following statements describe your neighborhood? Crime and/or drug selling.	NO! (1) no (2) yes (3) YES! (4)
	Q49b. How much do the following statements describe your neighborhood? Fights.	NO! (1) no (2) yes (3) YES! (4)
	Q49c. How much do the following statements describe your neighborhood? Lots of empty or abandoned buildings.	NO! (1) no (2) yes (3) YES! (4)
	Q49d. How much do the following statements describe your neighborhood? Lots of graffiti.	NO! (1) no (2) yes (3) YES! (4)
Community (Personal) Transitions and Mobility	Q58. Have you changed homes in the past year?	No (1) Yes (3)
	Q59. How many times have you changed homes since kindergarten?	Never (1) 1 or 2 times (2) 3 or 4 times (3) 5 or 6 times (4) 7 or more times (5)
	Q60. Have you changed schools (…) in the past year?	No (1) Yes (3)
	Q61. How many times have you changed schools (…) since kindergarten?	Never (1) 1 or 2 times (2) 3 or 4 times (3) 5 or 6 times (4) 7 or more times (5)
Perceived Availability of Drugs	Q53a. If you wanted to, how easy would it be for you to get... some cigarettes?	Very hard (1) Sort of hard (2) Sort of easy (3) Very easy (4)
	Q53d. If you wanted to, how easy would it be for you to get... some marijuana (...)?	Very hard (1) Sort of hard (2) Sort of easy (3) Very easy (4)
	Q53e. If you wanted to, how easy would it be for you to get... some beer, wine or hard liquor (…)?	Very hard (1) Sort of hard (2) Sort of easy (3) Very easy (4)
	Q53f. If you wanted to, how easy would it be for you to get… a drug like LSD, cocaine or crack, amphetamines or other illegal drugs, excluding marijuana?	Very hard (1) Sort of hard (2) Sort of easy (3) Very easy (4)

Table E-1. Corresponding Questions for Community Risk Factors (continued)

Factor	Question Item	Response Categories
Perceived Availability of Handguns	Q53g. If you wanted to, how easy would it be for you to get... a handgun?	Very hard (1) Sort of hard (2) Sort of easy (3) Very easy (4)
Laws and Norms Favorable to Drug Use	Q50a. How wrong would most adults (…) in your neighborhood think it is for kids your age to... smoke cigarettes?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)
	Q50d. How wrong would most adults (…) in your neighborhood think it is for kids your age to... use marijuana (...)?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)
	Q50e. How wrong would most adults (…) in your neighborhood think it is for kids your age to... drink alcohol?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)
	Q54. If a kid used marijuana in your neighborhood, would he or she be caught by the police?	NO! (4) no (3) yes (2) YES! (1)
	Q55. If a kid drank some beer, wine or hard liquor (…) in your neighborhood, would he or she be caught by the police?	NO! (4) no (3) yes (2) YES! (1)
	Q56. If a kid carried a handgun in your neighborhood, would he or she be caught by the police?	NO! (4) no (3) yes (2) YES! (1)
	Q57. If a kid smoked a cigarette in your neighborhood, would he or she be caught by the police?	NO! (4) no (3) yes (2) YES! (1)

Table E-2. Corresponding Questions for Family Risk Factors

Factor	Question Item	Response Categories
Poor Family Management	Q63. My parents ask if I've gotten my homework done.	NO! (4) no (3) yes (2) YES! (1)
	Q64. Would your parents know if you did not come home on time?	NO! (4) no (3) yes (2) YES! (1)
	Q65. When I am not at home, one of my parents knows where I am and who I am with.	NO! (4) no (3) yes (2) YES! (1)
	Q66. The rules in my family are clear.	NO! (4) no (3) yes (2) YES! (1)
	Q67. My family has clear rules about alcohol and drug use.	NO! (4) no (3) yes (2) YES! (1)
	Q68. If you drank some beer or wine or liquor (…) without your parents' permission, would you be caught by your parents?	NO! (4) no (3) yes (2) YES! (1)
	Q69. If you carried a handgun without your parents' permission, would you be caught by your parents?	NO! (4) no (3) yes (2) YES! (1)
	Q70. If you skipped school, would you be caught by your parents?	NO! (4) no (3) yes (2) YES! (1)
Parental Attitudes Favorable Toward Drug Use	Q62a. How wrong do your parents feel it would be for you to… smoke cigarettes?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)
	Q62d. How wrong do your parents feel it would be for you to… use marijuana (...)?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)
	Q62e. How wrong do your parents feel it would be for you to… drink beer, wine or hard liquor(…) regularly (…)?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)
Parental Attitudes Favorable Toward Antisocial Behavior	Q62g. How wrong do your parents feel it would be for you to… steal something worth more than $5?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)
	Q62h. How wrong do your parents feel it would be for you to... draw graffiti, or write things or draw pictures on buildings or other property (…)?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)
	Q62i. How wrong do your parents feel it would be for you to… pick a fight with someone?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)

Table E-3. Corresponding Questions for School Risk Factors

Factor	Question Item	Response Categories
Academic Failure	Q8. Putting them all together, what were your grades like last year?	Mostly A's (1) Mostly B's (1.75) Mostly C's (2.5) Mostly D's (3.25) Mostly F's (4)
	Q18. My school grades are better than the grades of most students in my classes.	NO! (4) no (3) yes (2) YES! (1)
Low Commitment to School	Q9b. During the LAST 4 WEEKS how many whole days of school have you missed... because you skipped or "cut"?	None (1) 1 day (1.67) 2 days (2.33) 3 days (3) 4-5 days (3.67) 6-10 days (4.33) 11 or more days (5)
	Q20a. Now, thinking back over the past year in school, how often did you... enjoy being in school?	Never (5) Seldom (4) Sometimes (3) Often (2) Almost Always (1)
	Q20b. Now, thinking back over the past year in school, how often did you... hate being in school?	Never (1) Seldom (2) Sometimes (3) Often (4) Almost Always (5)
	Q20c. Now, thinking back over the past year in school, how often did you... try to do your best work in school?	Never (5) Seldom (4) Sometimes (3) Often (2) Almost Always (1)
	Q21. How often do you feel that the school work you are assigned is meaningful and important?	Never (5) Seldom (4) Sometimes (3) Often (2) Almost Always (1)
	Q22. How important do you think the things you are learning in school are going to be for your later life?	Very important (1) Quite important (2) Fairly important (3) Slightly important (4) Not at all important (5)
	Q23. How interesting are most of your courses to you?	Very interesting (1) Quite interesting (2) Fairly interesting (3) Slightly interesting (4) Not at all interesting (5)

Table E-4. Corresponding Questions for Peer and Individual Risk Factors

Factor	Question Item	Response Categories
Gang Involvement	Q24p. Think of your 4 best friends (…). In the past year (…) how many of your best friends have... been members of a gang?	None of my friends (0) 1 of my friends (1) 2 of my friends (2) 3 of my friends (3) 4 of my friends (4)
	Q26. Have you ever belonged to a gang?	No (0) Yes (8)
	Q27. If you have ever belonged to a gang, did the gang have a name?	I have never belonged to a gang (0) No (1) Yes (8)
	Q28y. How old were you when you first... belonged to a gang?	10 or younger (8) 11 (7) 12 (6) 13 (5) 14 (4) 15 (3) 16 (2) 17 or older (1) Never have (0)
Perceived Risks of Drug Use	Q51a. How much do you think people risk harming themselves (…) if they... smoke one or more packs of cigarettes per day?	No risk (4) Slight risk (3) Moderate risk (2) Great risk (1)
	Q51d. How much do you think people risk harming themselves (…) if they... try marijuana (...) once or twice?	No risk (4) Slight risk (3) Moderate risk (2) Great risk (1)
	Q51e. How much do you think people risk harming themselves (…) if they... use marijuana regularly (...)?	No risk (4) Slight risk (3) Moderate risk (2) Great risk (1)
	Q51f. How much do you think people risk harming themselves (…) if they... have one or two drinks of an alcoholic beverage (…) nearly every day?	No risk (4) Slight risk (3) Moderate risk (2) Great risk (1)
Early Initiation of Drug Use	Q28a. How old were you when you first... smoked cigarettes?	10 or younger (8) 11 (7) 12 (6) 13 (5) 14 (4) 15 (3) 16 (2) 17 or older (1) Never have (0)
	Q28d. How old were you when you first... had a drink of beer, wine or hard liquor (...) other than a few sips?	10 or younger (8) 11 (7) 12 (6) 13 (5) 14 (4) 15 (3) 16 (2)17 or older (1) Never have (0)
	Q28f. How old were you when you first... began drinking beer, wine or hard liquor (...) regularly, that is, at least once or twice a month?	10 or younger (8) 11 (7) 12 (6) 13 (5) 14 (4) 15 (3) 16 (2)17 or older (1) Never have (0)
	Q28g. How old were you when you first... used marijuana (...)?	10 or younger (8) 11 (7) 12 (6) 13 (5) 14 (4) 15 (3) 16 (2) 17 or older (1) Never have (0)
Early Initiation of Antisocial Behavior	Q28u. How old were you when you first... got suspended from school?	10 or younger (8) 11 (7)12 (6) 13 (5) 14 (4) 15 (3)16 (2) 17 or older (1) Never have (0)
	Q28v. How old were you when you first... got arrested?	10 or younger (8) 11 (7) 12 (6) 13 (5) 14 (4) 15 (3) 16 (2) 17 or older (1) Never have (0)
	Q28w. How old were you when you first... carried a handgun?	10 or younger (8) 11 (7) 12 (6) 13 (5) 14 (4) 15 (3) 16 (2) 17 or older (1) Never have (0)
	Q28x. How old were you when you first... attacked someone with the idea of seriously hurting them?	10 or younger (8) 11 (7) 12 (6) 13 (5) 14 (4) 15 (3) 16 (2) 17 or older (1) Never have (0)

Table E-4. Corresponding Questions for Peer and Individual Risk Factors (continued)

Factor	Question Item	Response Categories
Favorable Attitudes Toward Drug Use	Q25a. How wrong do you think it is for someone your age to… smoke cigarettes?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)
	Q25d. How wrong do you think it is for someone your age to… drink beer, wine or hard liquor (…) regularly (…)?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)
	Q25f. How wrong do you think it is for someone your age to… use marijuana (...)?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)
	Q25g. How wrong do you think it is for someone your age to... use LSD, cocaine or crack, amphetamines, or other illegal drugs, excluding marijuana?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)
Favorable Attitudes Toward Antisocial Behavior	Q25k. How wrong do you think it is for someone your age to… take a handgun to school?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)
	Q25l. How wrong do you think it is for someone your age to… steal something worth more than $5?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)
	Q25m. How wrong do you think it is for someone your age to… pick a fight with someone?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)
	Q25n. How wrong do you think it is for someone your age to… attack someone with the idea of seriously hurting them?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)
	Q25o. How wrong do you think it is for someone your age to… stay away from school all day when their parents think they are at school?	Very wrong (1) Wrong (2) A little bit wrong (3) Not wrong at all (4)
Rewards for Antisocial Behavior	Q52a. What are the chances you would be seen as cool if you… smoked cigarettes?	No or very little chance (1) Little chance (2) Some chance (3) Pretty good chance (4) Very good chance (5)
	Q52d. What are the chances you would be seen as cool if you… used marijuana (...)?	No or very little chance (1) Little chance (2) Some chance (3) Pretty good chance (4) Very good chance (5)
	Q52e. What are the chances you would be seen as cool if you… began drinking alcoholic beverages regularly, that is, at least once or twice a month?	No or very little chance (1) Little chance (2) Some chance (3) Pretty good chance (4) Very good chance (5)
	Q52f. What are the chances you would be seen as cool if you... carried a handgun?	No or very little chance (1) Little chance (2) Some chance (3) Pretty good chance (4) Very good chance (5)

Table E-4. Corresponding Questions for Peer and Individual Risk Factors (continued)

Factor	Question Item	Response Categories
Friends' Use of Drugs	Q24a. Think of your 4 best friends (…). In the past year (…) how many of your best friends have... smoked cigarettes?	None of my friends (0) 1 of my friends (1) 2 of my friends (2) 3 of my friends (3) 4 of my friends (4)
	Q24d. Think of your 4 best friends (…). In the past year (…) how many of your best friends have... tried beer, wine or hard liquor (…) when their parents didn't know about it?	None of my friends (0) 1 of my friends (1) 2 of my friends (2) 3 of my friends (3) 4 of my friends (4)
	Q24e. Think of your 4 best friends (…). In the past year (…) how many of your best friends have... used marijuana (...)?	None of my friends (0) 1 of my friends (1) 2 of my friends (2) 3 of my friends (3) 4 of my friends (4)
	Q24f. Think of your 4 best friends (…). In the past year (…) how many of your best friends have... used LSD, cocaine or crack, amphetamines, or other illegal drugs, excluding marijuana?	None of my friends (0) 1 of my friends (1) 2 of my friends (2) 3 of my friends (3) 4 of my friends (4)
Interaction with Antisocial Peers	Q24j. Think of your 4 best friends (…). In the past year (…) how many of your best friends have... been suspended from school?	None of my friends (0) 1 of my friends (1) 2 of my friends (2) 3 of my friends (3) 4 of my friends (4)
	Q24k. Think of your 4 best friends (…). In the past year (…) how many of your best friends have... carried a handgun?	None of my friends (0) 1 of my friends (1) 2 of my friends (2) 3 of my friends (3) 4 of my friends (4)
	Q24l. Think of your 4 best friends (…). In the past year (…) how many of your best friends have... sold illegal drugs?	None of my friends (0) 1 of my friends (1) 2 of my friends (2) 3 of my friends (3) 4 of my friends (4)
	Q24m. Think of your 4 best friends (…). In the past year (…) how many of your best friends have... stolen or tried to steal a motor vehicle such as a car or motorcycle?	None of my friends (0) 1 of my friends (1) 2 of my friends (2) 3 of my friends (3) 4 of my friends (4)
	Q24n. Think of your 4 best friends (…). In the past year (…) how many of your best friends have... been arrested?	None of my friends (0) 1 of my friends (1) 2 of my friends (2) 3 of my friends (3) 4 of my friends (4)
	Q24o. Think of your 4 best friends (…). In the past year (…) how many of your best friends have... dropped out of school?	None of my friends (0) 1 of my friends (1) 2 of my friends (2) 3 of my friends (3) 4 of my friends (4)

Table E-5. Corresponding Questions for School Protective Factors

Factor	Question Item	Response Categories
School Opportunities for Prosocial Involvement	Q10. In my school, students have lots of chances to help decide things like class activities and rules.	NO! (1) no (2) yes (3) YES! (4)
	Q11. Teachers ask me to work on special classroom projects.	NO! (1) no (2) yes (3) YES! (4)
	Q13. There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class.	NO! (1) no (2) yes (3) YES! (4)
	Q14. There are lots of chances for students in my school to talk with a teacher one-on-one.	NO! (1) no (2) yes (3) YES! (4)
	Q19. There are lots of chances to be part of class discussions or activities.	NO! (1) no (2) yes (3) YES! (4)
School Rewards for Prosocial Involvement	Q12. My teacher(s) notices when I am doing a good job and lets me know about it.	NO! (1) no (2) yes (3) YES! (4)
	Q15. I feel safe at my school.	NO! (1) no (2) yes (3) YES! (4)
	Q16. The school lets my parents know when I have done something well.	NO! (1) no (2) yes (3) YES! (4)
	Q17. My teachers praise me when I work hard in school.	NO! (1) no (2) yes (3) YES! (4)

Table E-6. Corresponding Questions for Peer and Individual Protective Factors

Factor	Question Item	Response Categories
Interaction with Prosocial Peers	Q24q. Think of your 4 best friends (…). In the past year (…) how many of your best friends have... participated in clubs, organizations or activities at school?	None of my friends (0) 1 of my friends (1) 2 of my friends (2) 3 of my friends (3) 4 of my friends (4)
	Q24r. Think of your 4 best friends (…). In the past year (…) how many of your best friends have... made a commitment to stay drug-free?	None of my friends (0) 1 of my friends (1) 2 of my friends (2) 3 of my friends (3) 4 of my friends (4)
	Q24s. Think of your 4 best friends (…). In the past year (…) how many of your best friends have... liked school?	None of my friends (0) 1 of my friends (1) 2 of my friends (2) 3 of my friends (3) 4 of my friends (4)
	Q24t. Think of your 4 best friends (…). In the past year (…) how many of your best friends have... regularly attended religious services?	None of my friends (0) 1 of my friends (1) 2 of my friends (2) 3 of my friends (3) 4 of my friends (4)
	Q24u. Think of your 4 best friends (…). In the past year (…) how many of your best friends have... tried to do well in school?	None of my friends (0) 1 of my friends (1) 2 of my friends (2) 3 of my friends (3) 4 of my friends (4)
Prosocial Involvement	Q29i. How many times in the past year (…), have you... participated in clubs, organizations or activities at school?	Never (1) 1 or 2 Times (2) 3 to 5 times (3) 6 to 9 times (4) 10 to 19 times (5) 20 to 29 times (6) 30 to 39 times (7) 40+ times (8)
	Q29j. How many times in the past year (…), have you... done extra work on your own for school?	Never (1) 1 or 2 Times (2) 3 to 5 times (3) 6 to 9 times (4) 10 to 19 times (5) 20 to 29 times (6) 30 to 39 times (7) 40+ times (8)
	Q29k. How many times in the past year (…), have you... volunteered to do community service?	Never (1) 1 or 2 Times (2) 3 to 5 times (3) 6 to 9 times (4) 10 to 19 times (5) 20 to 29 times (6) 30 to 39 times (7) 40+ times (8)
Rewards for Prosocial Involvement	Q52g. What are the chances you would be seen as cool if you... worked hard at school?	No or very little chance (1) Little chance (2) Some chance (3) Pretty good chance (4) Very good chance (5)
	Q52h. What are the chances you would be seen as cool if you... defended someone who was being verbally abused at school?	No or very little chance (1) Little chance (2) Some chance (3) Pretty good chance (4) Very good chance (5)
	Q52i. What are the chances you would be seen as cool if you... regularly volunteered to do community service?	No or very little chance (1) Little chance (2) Some chance (3) Pretty good chance (4) Very good chance (5)
	Q52j. What are the chances you would be seen as cool if you... made a commitment to stay drug-free?	No or very little chance (1) Little chance (2) Some chance (3) Pretty good chance (4) Very good chance (5)

ENDNOTES

EC In this report we use "e-cigarettes" to refer to e-cigarettes, vape pen, or e-liquid rig (e.g., JUUL, N2, Joyetech).

NB "Nonbinary" refers to students identifying as "other gender" (i.e., not female or male) in the survey.

NS The National Survey on Drug Use and Health study data represents responses provided by 12 to 17 year-olds.

NT Tests for statistical significance were not conducted.

PP In the population of seventh and eighth grade students in New Jersey, substance use and antisocial behaviors are influenced by a complex interaction of risk and protective factors and demographic characteristics. Therefore, results of 100% probability for any given threshold of Peer and Individual Risk score should not be interpreted to indicate that all students in the population with a Peer and Individual Risk score above that threshold will use the specified substances (or engage in the specified behaviors). They do, however, indicate that those students are highly likely to do so.

RO Percentages may not total to exactly 100 due to rounding.

SS Exercise caution interpreting results for Native Americans or Alaskan Natives (n=31) and Native Hawaiians or Other Pacific Islanders (n=11).

REFERENCES

1 Arthur, M. W., Hawkins, J. D., Pollard, J. A., Catalano, R. F., & Baglioni, A. J., Jr. (2002). Measuring risk and protective factors for substance use, delinquency, and other adolescent problem behaviors: The Communities That Care Youth Survey. *Evaluation Review*, *26*(6), 575-601. https://doi.org/10.1177/0193841X0202600601

2 Centers for Disease Control and Prevention (CDC). (2022, March 31). *New CDC data illuminate youth mental health threats during the COVID-19 pandemic.* Retrieved from https://www.cdc.gov/media/releases/2022/p0331-youth-mental-health-covid-19.html

3 Substance Abuse and Mental Health Services Administration. (2021, October). *Key substance use and mental health indicators in the United States: Results from the 2020 National Survey on Drug Use and Health* (HHS Publication No. PEP21-07-01-003, NSDUH Series H-56). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from https://www.samhsa.gov/data/sites/default/files/reports/rpt35325/NSDUHFFRPDFWHTMLFiles2020/2020NSDUHFFR1PDFW102121.pdf

4 Justicia. (2013). *2013 New Jersey revised statutes: Title 18A – Education section 18A:36-34 - school surveys, certain, parental consent required before administration.* Retrieved from https://law.justia.com/codes/new-jersey/2013/title-18a/section-18a-36-34#:~:text=Title%2018A%20%2D%20EDUCATION-,Section%2018A%3A36%2D34%20%2D%20School%20surveys%2C%20certain%2C,parental%20consent%20required%20before%20administration&text=(8)social%20security%20number.,%2C%20assessment%2C%20analysis%20or%20evaluation.

5 Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological bulletin*, *112*(1), 64-105.

6 National Institute on Drug Abuse (NIDA). (2011, October). *Preventing drug use among children and adolescents (in brief): What are risk factors and protective factors?* Retrieved from https://nida.nih.gov/publications/preventing-drug-use-among-children-adolescents/chapter-1-risk-factors-protective-factors/what-are-risk-factors

7 Whitesell, M., Bachand, A., Peel, J., & Brown, M. (2013). Familial, social, and individual factors contributing to risk for adolescent substance use. *Journal of Addiction*, *2013*, 1-9. https://doi.org/10.1155/2013/579310

8 Monahan, K. C., Oesterle, S., Rhew, I., & Hawkins, J. D. (2014). The relation between risk and protective factors for problem behaviors and depressive symptoms, antisocial behavior, and alcohol use in adolescence. *Journal of Community Psychology*, *42*(5), 621-638. https://doi.org/10.1002/jcop.21642

9 Johnston, L. D., Miech, R. A., O'Malley, P. M., Bachman, J. G., Schulenberg, J. E., Patrick, M. E. (2022). *Monitoring the future national survey results on drug use 1975-2021: Overview, key findings on adolescent drug use. Institute for Social Research, University of Michigan*. Retrieved from http://www.monitoringthefuture.org//pubs/monographs/mtf-overview2021.pdf

REFERENCES

10 Centers for Disease Control and Prevention (CDC). (2020, August 21). Youth risk behavior surveillance — United States, 2019. *Morbidity and Mortality Weekly Report*, *69*(1), 1-83. Retrieved from https://www.cdc.gov/healthyyouth/data/yrbs/pdf/2019/su6901-H.pdf

11 Centers for Disease Control and Prevention (CDC). (2022, March 11). Tobacco product use and associated factors among middle and high school students — National Youth Tobacco Survey, United States, 2021. *Morbidity and Mortality Weekly Report*, *71*(5), 1-29. Retrieved from https://www.cdc.gov/mmwr/volumes/71/ss/pdfs/ss7105a1-H.pdf

12 Centers for Disease Control and Prevention (CDC). (2021, October 6). *Alcohol and public health: Underage drinking*. Retrieved from https://www.cdc.gov/alcohol/fact-sheets/underage-drinking.htm

13 Watson, R. J., Fish, J. N., McKay, T., Allen, S. H., Eaton, L., & Puhl, R. M. (2020). Substance use among a national sample of sexual and gender minority adolescents: Intersections of sex assigned at birth and gender identity. *LGBT Health*, *7*(1), 37-46. https://doi.org/10.1089/lgbt.2019.0066

14 Substance Abuse and Mental Health Services Administration. (2022, February). *Alcohol use among girls and young women: A worrying trend*. Retrieved from https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/PEP22-03-10-010.pdf?utm_source=SAMHSA&utm_medium=email&utm_term=0_ee1c4b138c-a195e9e5b7-169582201&utm_campaign=a195e9e5b7-New_Publication_2022_03_01_1600773

15 Centers for Disease Control and Prevention (CDC). (2022, March 22). *Smoking & tobacco use: Quick facts on the risks of e-cigarettes for kids, teens, and young adults*. Retrieved from https://www.cdc.gov/tobacco/basic_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html

16 Center for Behavioral Health Statistics and Quality. (2021). *Racial/ethnic differences in substance use, substance use disorders, and substance use treatment utilization among people aged 12 or older (2015-2019)* (Publication No. PEP21-07-01-001). Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://www.samhsa.gov/data/report/racialethnic-differences-substance-use

17 Felton, J. W., Kofler, M. J., Lopez, C. M., Saunders, B. E., & Kilpatrick, D. G. (2015). The emergence of co-occurring adolescent polysubstance use and depressive symptoms: A latent growth modeling approach. *Development and Psychopathology*, *27*(4pt1), 1367-1383. https://doi.org/10.1017/s0954579414001473

18 Silveira, M. L., Green, V. R., Iannaccone, R., Kimmel, H. L., & Conway, K. P. (2019). Patterns and correlates of polysubstance use among US youth aged 15–17 years: Wave 1 of the Population Assessment of Tobacco and Health (PATH) Study. *Addiction*, *114*(5), 907-916. https://doi.org/10.1111/add.14547

19 Gilbert, P. A., Kava, C. M., & Afifi, R. (2021). High-school students rarely use e-cigarettes alone: A sociodemographic analysis of polysubstance use among adolescents in the United States. *Nicotine & Tobacco Research 23*(3), 505-510. https://doi.org/10.1093/ntr/ntaa037

20 Centers for Disease Control and Prevention (CDC). (2021, September 10). *Violation prevention: Fast facts*. Retrieved from https://www.cdc.gov/violenceprevention/youthviolence/fastfact.html

REFERENCES

21 Department of Health and Human Services. (2001). *Youth violence: A report of the surgeon general*. National Center for Biotechnology Information (NCBI). Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK44294/

22 Del Toro, J., & Wang, M.-T. (2021). The roles of suspensions for minor infractions and school climate in predicting academic performance among adolescents. *American Psychologist*. https://doi.org/10.1037/amp0000854

23 Hemphill, S. A., Kotevski, A., Herrenkohl, T. I., Smith, R., Toumbourou, J. W., & Catalano, R. F. (2013). Does school suspension affect subsequent youth non-violent antisocial behaviour? A longitudinal study of students in Victoria, Australia and Washington State, United States. *Australian Journal of Psychology*, *65*(4), 236-249. https://doi.org/10.1111/ajpy.12026

24 New Jersey Department of Education. (2020). Commissioner's annual report to the education committees of the senate and general assembly on student safety and discipline in New Jersey public schools. *State of New Jersey Department of Education.* Retrieved from https://www.state.nj.us/education/schools/vandv/1819/vandv.pdf

25 Jackson, C. L., Hanson, R. F., Amstadter, A. B., Saunders, B. E., & Kilpatrick, D. G. (2013). The Longitudinal Relation Between Peer Violent Victimization and Delinquency. *Journal of Interpersonal Violence*, *28*(8), 1596-1616. https://doi.org/10.1177/0886260512468328

26 Centers for Disease Control and Prevention (CDC). (2022, March 31). *1991-2019 High School Youth Risk Behavior Survey Data*. Retrieved from http://yrbs-explorer.services.cdc.gov/

27 Youth.gov. (2022) (2022, March 31). Co-Occurring Disorders. Retrieved from https://youth.gov/youth-topics/youth-mental-health/co-occurring

28 Price-Feeney, M., Green, A. E., & Dorison, S. (2020). Understanding the mental health of transgender and nonbinary youth. *Journal of Adolescent Health, 66*(6), 684–690. https://doi.org/10.1016/j.jadohealth.2019.11.314

29 Selph, S. S., & McDonagh, M. S. (2019). Depression in children and adolescents: Evaluation and treatment. *American Academy of Family Physicians*, *100*(10), 609-617.

30 Peters, E. N., Nordeck, C., Zanetti, G., O'Grady, K. E., Serpelloni, G., Rimondo, C., . . . Schwartz, R. P. (2015). Relationship of gambling with tobacco, alcohol, and illicit drug use among adolescents in the USA: Review of the literature 2000–2014. *The American Journal on Addictions*, *24*(3), 206-216. https://doi.org/10.1111/ajad.12214

31 Marchica, L. A., Giordano, T., Ivoska, W., & Derevensky, J. L. (2019). The relationship between problem gambling and substance use among American adolescents. *Journal of Concurrent Disorders*, *1*(2), 47-56. Retrieved from https://pdfs.semanticscholar.org/19cf/c1049fddfb7e2164bbd770cb685c89cdea51.pdf?_ga=2.131180303.1021687618.1648067108-1325107376.1646946150

32 Zendle, D., Meyer, R., Cairns, P., Waters, S., & Ballou, N. (2020). The prevalence of loot boxes in mobile and desktop games. *Addiction*, *115*(9), 1768-1772. https://doi.org/10.1111/add.14973

REFERENCES

33 Yard, E., Radhakrishnan, L., Ballesteros, M. F., Sheppard, M., Gates, A., Stein, Z., Hartnett, K., Kite-Powell, A., Rodgers, L., Adjemian, J., Ehlman, D. C., Holland, K., Idaikkadar, N., Ivey-Stephenson, A., Martinez, P., Law, R., & Stone, D. M. (2021, June 18). Emergency department visits for suspected suicide attempts among persons aged 12–25 years before and during the COVID-19 pandemic - United States, January 2019–May 2021. *Morbidity and Mortality Weekly Report*, *70*(24), 888-894. Retrieved from https://www.cdc.gov/mmwr/volumes/70/wr/mm7024e1.htm

34 Armitage, R. (2021). Gambling among adolescents: An emerging public health problem. Lancet Public Health, 6, e143. https://www.thelancet.com/action/showPdf?pii=S2468-2667%2821%2900026-8

35 Hoven, C. W., Duarte, C. S., Wu, P., Doan, T., Singh, N., Mandell, D. J., . . . Cohen, P. (2009). Parental Exposure to Mass Violence and Child Mental Health: The First Responder and WTC Evacuee Study. *Clinical Child and Family Psychology Review*, *12*(2), 95-112. https://doi.org/10.1007/s10567-009-0047-2

36 Gassman-Pines, A., Gibson-Davis, C. M., & Ananat, E. O. (2015). How Economic Downturns Affect Children's Development: An Interdisciplinary Perspective on Pathways of Influence. *Child Development Perspectives*, *9*(4), 233-238. https://doi.org/10.1111/cdep.12137

37 Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, *395*(10227), 912-920. https://doi.org/10.1016/s0140-6736(20)30460-8

38 Lee, D. S., Orvell, A., Briskin, J., Shrapnell, T., Gelman, S. A., Ayduk, O., Ybarra, O., & Kross, E. (2020). When chatting about negative experiences helps—and when it hurts: Distinguishing adaptive versus maladaptive social support in computer-mediated communication. *Emotion*, *20*(3), 368-375. https://doi.org/10.1037/emo0000555

39 Ozbay, F., Johnson, D. C., Dimoulas, E., Morgan, C. A., Charney, D., & Southwick, S. (2007). Social support and resilience to stress: From neurobiology to clinical practice. *Psychiatry (Edgmont (Pa. : Township))*, *4*(5), 35-40. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2921311/pdf/PE_4_5_35.pdf

40 De Simone Irace, C., Caporino, N. E., & Crowell McQuarrie, S. J. (2020). Confirmatory factor analysis of the Caregiver Responses to Youth Media Exposure (CRYME). *Psychology of Violence*, *10*(6), 648-656. https://doi.org/10.1037/vio0000291

41 McQuarrie, S. J. C., & Caporino, N. E. (2018). Measuring caregiver impact on children's violent news media exposure: Development and initial validation of the Caregiver Responses to Youth Media Exposure (CRYME). *Psychology of Violence*, *8*(5), 527-536. https://doi.org/10.1037/vio0000150

42 Centers for Disease Control and Prevention (CDC). (2021, July 22). Helping Children Cope. Retrieved from https://www.cdc.gov/mentalhealth/stress-coping/help-children-cope/index.html