HEALTH NOTE: Expand Behavioral Health Training for K-12 Educators
Senate Bill 20-001
2020 Colorado General Assembly

Prime Sponsors:
Senator Rhonda Fields, Representative Emily Sirota, Representative Kevin Van Winkle

Bill Provisions Examined:[a]
The bill requires the department of education (department) to offer a train the trainer program (program) designed to improve school culture, promote youth behavioral and mental health, and prepare attendees to teach a youth behavioral and mental health training course. The department must make the program available to employees of a school district, charter school, or board of cooperative services (local education provider). A local education provider and its employees are not required to participate in the program.

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What is the goal of this health note?

Decisions made in sectors outside of public health and health care, such as in education, housing, and employment, can affect health and well-being. Health notes are intended to provide objective, nonpartisan information to help legislators understand the connections between these various sectors and health. This document provides summaries of evidence analyzed by the Health Impact Project at The Pew Charitable Trusts while creating a health note for Colorado Senate Bill (SB) 20-001. Health notes are not intended to make definitive or causal predictions about how a proposed bill will affect health and well-being of constituents. Rather, legislators can use a health note as one additional source of information to consider during policy-making. The analysis does not consider the fiscal impacts of this bill.

How and why was this bill selected?

The Health Impact Project identified this bill as one of several important policy issues being considered by the Colorado General Assembly. The health note screening criteria were used to confirm the bill was appropriate for analysis. (See Methodology Appendix on Page 8.)

One of the Health Impact Project's focus areas for health notes is education. There is a strong and robust evidence base linking education and health over a lifetime. Research has consistently demonstrated that people with more education live longer, healthier lives than those with fewer years of education.[1] Completing more years of education leads to better jobs with higher earnings that can provide access to healthy food, safer homes and neighborhoods, and better benefits and medical care.[2] Due to the strong ties between educational attainment and higher income, people with more education are less likely to experience stress related to social and economic hardship.[3]

SUMMARY OF HEALTH NOTE FINDINGS

Behavioral health challenges—such as substance misuse, attention deficit hyperactivity disorder, conduct disorders, and mental health issues like anxiety and depression—affect 20 percent of youth ages 3 to 17 in the U.S.[4] Mental health conditions and substance use disorders can also increase risk of suicide – a leading cause of death among youth ages 15 to 19.[5] Behavioral health challenges among youth substantially impact health care costs in the U.S. Although less than 10 percent of children enrolled in Medicaid use behavioral health services, the costs of these services account for 38 percent of total child Medicaid expenditures.[6] Furthermore, an estimated 75 percent of children in the U.S. have unmet mental health treatment needs.[7] Many Coloradan youth face behavioral health challenges: For example, in 2015, one in four middle school and high school students reported feeling so sad or hopeless almost every day for at least two weeks in a row that they stopped doing their usual activities.[8]

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[a] Summary as described by the Colorado General Assembly, https://leg.colorado.gov/bills/sb20-001. The Health Impact Project conducted this health note based on the bill as introduced.
[b] The Health Impact Project is committed to conducting non-partisan research and analysis.

In response to these and other concerning statistics, several states and school districts are exploring ways to train and engage school personnel in screening children for behavioral health risks, connecting youth to needed services and supports, and promoting a positive school climate and culture.[9] Schools can be an effective place to assess students for behavioral health risks because of the ability to reach a large group of children at low cost, and minimal training is required for teachers and other school personnel to administer screening questionnaires.[10] Colorado SB 20-001 would require the state department of education to offer a train the trainer program designed to "improve school culture, promote youth behavioral and mental health, and prepare attendees to teach a youth behavioral and mental health training course."[11] Participants would be trained to teach courses that include evidence-based content related to using trauma-informed approaches—wherein difficult behaviors and other symptoms of childhood trauma are recognized as means and products of coping with traumatic events in childhood—to improve school climate and culture, identifying behavioral health challenges, bullying prevention and intervention strategies, de-escalating crisis situations, and other topics.[12] This health note explores the evidence regarding training programs for school personnel and their impacts on youth behavioral health outcomes and trauma-informed approaches, and describes factors affecting youth behavioral health.

This review did not identify research specifically examining train-the-trainer programs and their effects on youth behavioral health. However, this review found a large body of evidence that suggests that training programs for school personnel can be one effective component of comprehensive efforts to address youth behavioral health challenges when used in conjunction with other strategies. Below is a summary of key findings:
- There is **strong evidence** of a shortage of appropriate services and supports for youth with behavioral health problems. Research suggests that only half of youth with a behavioral health issue receive needed treatment, and there is not a single state in the U.S. with an adequate number of child psychiatrists.[13]
- There is **strong evidence** that programs that provide training to school personnel to identify youth at risk of behavioral health issues or suicide can improve knowledge, attitudes, and self-efficacy among school personnel, and can be one effective component of comprehensive, multi-faceted strategies to address youth behavioral health challenges and risk of suicide.[14] Furthermore, social and emotional learning programs—universal interventions that foster self-awareness, social awareness, relationship skills, and responsible decision-making—can increase children's self-confidence and improve classroom performance and behavior.[15] However, research suggests that training programs, alone, may not improve help-seeking among youth or behavioral health outcomes.[16]
- There is **a fair amount of evidence** that trauma-informed approaches in school-based programs can benefit student health and classroom achievement, but successful implementation requires commitment from teachers, staff, and school administration.[17]
- There is a **fair amount of evidence** that teacher-student relationships are an important factor in successfully addressing student behavioral health challenges and building positive, supportive school environments. This review did not find that teacher-student relationships were protective against bullying.[18]
- There is **strong evidence** that an array of complex and overlapping factors put students at risk for behavioral health challenges and academic challenges, and research suggests that multiple, complementary strategies are needed to promote youth behavioral health and well-being.[19]
- There is **strong evidence** that behavioral health challenges are associated with increased risk of student absenteeism, which is detrimental to academic performance, with implications for high school completion and students' health over the life course.[20] Educational attainment can have significant health effects throughout one's lifetime: the average lifespan of college graduates is nine years longer than that of individuals who leave high school.[21]

WHY DO THESE FINDINGS MATTER FOR COLORADO?

Like other states, behavioral health challenges are concerns for Coloradan youth and their communities. For example, in 2015, approximately one of four high school and middle school students in Colorado reported poor mental health, which is a key behavioral health challenge.[22] Nearly 14 percent of Coloradan youth ages 12-17 reported suffering at least one major depressive episode in the past year.[23] Youth in Colorado also face obstacles to accessing behavioral health services, including costs, stigma, lack of insurance, and limited service availability, and nearly 70 percent of the state's 178 school districts do not meet national recommended ratios for school mental health workers.[24]

WHAT ARE THE POTENTIAL EFFECTS OF A TRAINING PROGRAM ON STUDENTS' HEALTH AND TEACHERS' KNOWLEDGE AND SKILLS?

- **Training for school staff is consistently included in national recommendations for promoting school safety.[25]**
  - o Research on school shootings has found that the perpetrators frequently exhibited warning signs in advance of the shootings.[26] Experts suggest that comprehensive approaches to school safety should include training for all school staff to help them identify and support students with behavioral health challenges.[27] Training can be used to help school staff: identify concerning student behaviors; respond appropriately and supportively; avoid stereotyping certain students; use validated, reliable screening and assessment tools; and use reliable tracking systems once students have been identified as in need of services and supports.[28]
- **Evidence suggests that "gatekeeper training" programs, alone, do not prevent suicidal behaviors among youth, but may be one effective component of youth suicide prevention programs.[29]**
  - o There is a large body of research examining efforts to train individuals, including teachers and other school personnel, to identify people at risk of suicide.[30] These training programs are commonly referred to as "gatekeeper training," and can vary in terms of length, content, and target audiences.[31]
  - o Research on suicide-prevention gatekeeper training programs suggest that, while they can increase knowledge and improve attitudes among school staff, increased communication with and identification of youth at risk for suicide occurs most among staff members that were already engaged in conversations with students about mental health or suicide prior to trainings.[32] Research also suggests that these programs do not impact youth access to mental health services or help-seeking among youth identified at increased risk.[33]
  - o Research on the Substance Abuse and Mental Health Services Administration's Garrett Lee Smith (GLS) Youth Suicide Prevention Program found that counties that implemented GLS

gatekeeper training had a significant decrease in their youth suicide rates compared to counties in the U.S. that did not implement the training.[34] The authors note that, in the GLS program, gatekeeper training is implemented in concert with other suicide prevention efforts, and the study did not examine other aspects of the program that may have contributed to its effectiveness.[35] Similarly, research on a GLS-funded suicide prevention program among the White Mountain Apache Tribe of Arizona—which included applied suicide intervention skills training for school nurses, social workers, guidance counselors, and other community members—found that the program, coupled with a suicide surveillance system, reduced suicide death and attempt rates.[36]
  o Researchers suggest that the effectiveness of gatekeeper training programs hinge upon accurate detection of risk by the gatekeeper, follow through on referrals among students and parents, and effective treatment.[37]
- **Studies on gatekeeper training programs suggest they can improve knowledge, attitudes, and self-efficacy among school personnel, and emphasize the importance of active learning and role play activities to help participants practice the skills they learn.**
  o Research on the implementation of the Youth Mental Health First Aid training program in five Title I schools in the U.S. found that participants who completed the program demonstrated greater knowledge about youth mental health, expressed greater confidence in their ability to identify and respond to students with mental health challenges, showed reductions in negative perceptions about youth with mental health challenges, and expressed increased intentions to help connect students to resources and seek help.[38]
  o One study that randomly assigned nearly 19,000 elementary school teachers to either participate in an online mental health training simulation or to receive no training found that the online training was effective in improving teachers' attitudes toward and demonstrate behaviors necessary to serve as a mental health gatekeeper.[39]
  o Another study examined survey data among educators in three large school districts in the southeastern U.S. and found that teachers' access to training, resources, and coaching improved their perceived preparedness to provide students with mental health supports.[40] The study also found that teachers' perceived level of preparedness to provide mental health supports predicted whether they reported talking with students about social and emotional challenges.
- **Research suggests that teacher-delivered behavioral health interventions can be effective in improving student outcomes but are more effective for certain types of behavioral health challenges.**
  o A systematic review and meta-analysis of 24 studies found that teacher-delivered, school-wide, psychosocial interventions are more effective in addressing "internalizing" disorders, such as anxiety and depression, compared to "externalizing" disorders, such as substance misuse or conduct disorders."[41]
  o A systematic review of 15 studies of school-wide interventions aimed at increasing knowledge of mental health issues, changing attitudes about mental health and related stigma, and enhancing help-seeking among youth found that all the studies demonstrated some level of improvement, but that few studies have examined whether these benefits remain over the longer term and have methodological limitations.[42]
  o A 2001 meta-analysis of 165 studies examining school-based programs to prevent problem behaviors, found that these programs were effective at reducing alcohol and drug use, school dropout, and absenteeism, but did not have a significant effect on delinquency. Programs that promoted self-control or social competency using cognitive-behavioral methods reduced problem behaviors, whereas programs founded on therapeutic interventions did not. The greatest effect was seen in students identified as high-risk for behavioral problems and high school students.[43]

HOW CAN TRAUMA-INFORMED APPROACHES AFFECT STUDENT WELL-BEING AND ACADEMIC PERFORMANCE?

- **Trauma-informed approaches in school-based programs can benefit student health and classroom achievement, but successful implementation requires commitment from teachers, staff, and school administration.[44]**
    - Trauma-informed approaches have produced positive outcomes for school communities, from reducing symptoms of students' trauma, post-traumatic stress disorder, and anxiety to improving children's classroom behavior and ability to manage their emotions in school, improving academic performance and achievement, and reducing the number of suspensions and expulsions.[45]
    - Examples of school practices to address trauma include: training for teachers and school staff on trauma awareness and its impact on academic performance; implementing regular staff meetings to discuss the school's trauma-informed practices; offering psychological consultations for students; forming committees to identify how to better engage children with trauma in school; and tailoring school administrators' disciplinary approaches to address misbehavior of children who have experienced trauma.[46]
    - Successful implementation of trauma-informed practices requires administration commitment to incorporate this approach into the school environment and ensuring that all school personnel who have contact with students have a basic understanding of trauma and its effects. Schools also need to be able to identify students who have experienced trauma and respond to their needs, and to establish procedures for responding to any student disclosures of trauma.[47]
    - One literature review identified several barriers to successful implementation of trauma-informed practices in schools: lack of buy-in from teachers and staff; competing responsibilities for educators; challenges in communicating with parents about sensitive issues related to trauma; and stigma surrounding mental health challenges. Furthermore, linguistic and cultural differences can prevent teachers from distinguishing between signs of trauma and normal challenges associated with acclimating to a new environment or cognitive delays.[48]
- **Trauma resulting from institutional and interpersonal racism can be addressed in schools by implementing collaborative and restorative practices, developing de-escalation strategies, and integrating culturally responsive and representative models.[49]**

WHAT FACTORS AFFECT ASPECTS OF SCHOOL CLIMATE AND STUDENTS' BEHAVIORAL HEALTH?

- **Teacher-student relationships (TSRs) are an important factor in successfully addressing student behavioral health challenges and building positive, supportive school environments.**
    - Research examining the moderating role of TSRs in student bullying found that stronger TSRs were associated with better outcomes for students' depression, emotional regulation, and concentration problems.[50] As the quality of TSRs increased, depression decreased for bullying victims as well as noninvolved students—students not involved in bullying either as victims or bullies themselves—thereby demonstrating the benefits of TSR for all students.[51]
    - High quality or strong TSRs decrease the risk of peer harassment among youth, which can often lead to depression.[52]

- Research has found that parent, peer, and teacher support are each strongly related to students' sense of school belonging, which refers to "the extent to which students feel personally accepted, respected, included, and supported by others in the school social environment."[53] This evidence highlights the importance of building healthy and effective school communities and the influence of the types of relationships students build with others.

- **Students' behavioral health is affected by an interrelated range of factors at the individual, family, school, and neighborhood levels.[54]**
    - Factors such as poverty and abuse put students at risk for mental health issues and increase the risk for co-occurring behaviors such as substance misuse and violence.[55] Understanding the contextual environment is critical to fully understanding students' behavior.[56]
    - Research examining the potential association between school climate and student health and academic outcomes found that students perceptions of school climate—such as opportunities for meaningful participation, school connectedness, and perceived safety—were strongly associated with students' self-rated sense of well-being.[57] School quality has also been shown to affect self-rated health, depression, and obesity in adulthood.[58]
    - One study found that schools may have a unique potential to affect, at a population level, the prevalence of depression among adolescents. Further, the finding suggests schools may be more salient than neighborhoods with respect to influencing depressive symptoms among adolescents, and that schools are one setting in which depressive symptoms can be addressed once they emerge.[59]
    - A systematic review of five qualitative research studies on the role of schools in self-harm or suicide among students found that anxiety and stress related to school performance may escalate students' self-harm and risk of suicide, and that bullying in the school environment can contribute to self-harm.[60]
    - School connectedness—the extent to which students feel close to people at school or feel happy at school—is another factor associated with student health outcomes. Being threatened or injured with a weapon at school, not going to school because of feeling unsafe at school or on the way to school, and being bullied at school or electronically bullied (including through texting or social media, during the past year) are indicators of disruption in the school setting that impact academic success.[61]
    - Research on cyberbullying also shows that the perpetrators are at greater risk of suicidal behavioral and suicidal ideation compared with peers that do not perpetrate cyberbullying. Furthermore, students who experience cyberbullying are less likely to report and seek help than those who face bullying at school.[62]

- **Access to appropriate services and supports remains a barrier for youth with behavioral health challenges.**
    - Evidence suggests that only half of youth with a behavioral health issue receive needed treatment, and there is not a single state in the U.S. with an adequate amount of child psychiatrists.[63]
    - Research suggests that anticipated and experienced stigma can negatively affect efforts to increase access to mental health care through school-based interventions.[64]
    - A review of research on barriers to accessing mental health care among at-risk youth such as those who are homeless, using substances, or residing in rural areas identified challenges including lack of awareness of services, lack of support for treatment, concerns about confidentiality, and treatment costs.[65]

WHAT IS THE RELATIONSHIP BETWEEN BEHAVIORAL HEALTH, ACADEMIC PERFORMANCE, AND HEALTH OVER THE LIFE COURSE?

- **Behavioral health challenges are one of many complex factors that can increase the risk that children are chronically absent from school, defined as missing at least 10 percent of the school year, which can negatively affect students' educational attainment and health over their lifetime.[66]**
  - A meta-analysis of 75 studies examining risk factors for absenteeism found significant associations between several behavioral health challenges, including substance use and psychiatric symptoms or disorders, and risk of absenteeism.[67]
  - A systematic review and meta-analysis of data from 19 studies that explored the association between youth depression and school attendance suggests that depression is associated with absenteeism and truancy, and among studies that explored the chronology of this relationship, depression preceded poor attendance.[68] The study found a small-to-moderate association between depression and absenteeism, a small-to-moderate association between depression and unexcused absences, and a moderate-to-large association between depression and students refusing to attend school. The study found mixed evidence regarding associations between depression and excused absences.
  - One study that followed a group of Florida students from kindergarten to 8th grade found that physical and mental health challenges and substance misuse were the largest factors in how often a student was absent from school.[69] Other factors such as having a parent with severe mental illness and living in a neighborhood with high rates of violent crime and fewer social and economic opportunities—as seen in a Pittsburgh study—are also linked to higher rates of absenteeism.
  - Students who are chronically absent are more likely to receive lower grades in school and are less likely to complete high school.[70]
  - Children and adolescents with mental disorders are at much greater risk for dropping out of school and suffering long-term impairments.[71]
- **Young people suffering from mental health issues often have difficulty performing in school and face other barriers that can affect their academic performance and health over the life course, such as difficulty forming interpersonal relationships.[72]**
- **Educational attainment can have significant health effects throughout one's lifetime: the average lifespan of college graduates is nine years longer than that of individuals who leave high school.[73]**

WHICH POPULATIONS ARE MOST LIKELY TO BE AFFECTED BY THIS BILL?

There is a large body of research documenting that factors that increase students' risk of behavioral health challenges, such as poverty, abuse, and trauma, also increase their risk of other challenges to academic performance, health, and well-being.[74] Children in foster care, homeless or runaway youth, LGBTQ youth, and youth involved in the juvenile justice system are more likely to have experienced stressful or traumatizing events, such as witnessing or experiencing violence, and are therefore more likely to benefit from trauma-informed practices in school.[75] Individuals who have experienced trauma during childhood are in turn more likely to engage in behaviors that increase the risk of adolescent pregnancy and are at a greater risk of developing mental health disorders and diminished academic achievement.[76] Furthermore, youth who have been in the care of the child welfare system are more likely to attempt suicide than children who have not been in care.[77] Evidence also shows that school protective factors can decrease suicide ideation, and school connectedness can reduce suicidal ideation amongst the LGB community.[78] One study found that found that LGB students who reported less connection to school had higher odds of

suicidal ideation.[79] Another study that examined a survey of white, black, and Hispanic adolescents found that LGB youth of all races were more likely to report being bullied than their white heterosexual counterparts.[80] For both male and female participants in the study, being bullied significantly increased the likelihood of reporting suicide ideation.[81] In Colorado, people living in rural and frontier communities, LGBTQ youth, and transgender individuals have higher than average risk of suicide.[82]

HOW LARGE MIGHT THE IMPACT BE?

Where possible, the Health Impact Project describes how large the impact may be based on the bill language and literature, such as describing the size, extent, and population distribution of an effect. It is difficult to predict the number of students that would be affected by SB 20-001, if implemented, as this would depend on factors including program participation, which is voluntary, and the extent to which the personnel participating in the train the trainer program implement subsequent trainings. The fiscal note estimates that 650 local education provider employees will participate annually in the first two years. As previously described, researchers estimate that approximately 20 percent of youth ages 3 to 17 have a behavioral health problem.[83]

It was beyond the scope of this analysis to consider the fiscal impacts of this bill or the effects any funds dedicated to implementing the bill may have on other programs or initiatives in the state. To the extent that this bill requires funds to be shifted away from other purposes or would result in other initiatives not being funded, policymakers may want to consider additional research to understand the relative effect of devoting funds for this program relative to another purpose.

APPENDIX: METHODOLOGY

Once the bill was selected, a research team from the Health Impact Project hypothesized a pathway between the bill, heath determinants, and health outcomes. The hypothesized pathway was developed using research team expertise and a preliminary review of the literature. The bill components were mapped to steps on this pathway and the team developed research questions and a list of keywords to search. The research team reached consensus on the final conceptual model, research questions, contextual background questions, keywords, and keyword combinations. The conceptual model, research questions, search terms, and list of literature sources were peer-reviewed by two external subject matter experts. The external subject matter experts also reviewed a draft of the note. A copy of the conceptual model is available upon request.

The Health Impact Project developed and prioritized eight research questions related to the bill components examined:

- To what extent do unidentified mental health needs affect academic attainment/achievement and school attendance?
- To what extent does behavioral and mental health affect emotional and social skills?
- To what extent do academic and health outcomes among children with behavioral and mental health problems differ from those without?
- To what extent does bullying affect academic achievement?
- To what extent do school-based mental health services effectively address student needs?
- To what extent do school-based mental health services affect school safety?
- To what extent do restorative practices for addressing behavioral and mental health challenges affect:
  - School safety?

- o Academic performance?
- To what extent does teacher behavioral health training affect:
    - o Student outcomes?
    - o Academic performance?
    - o School safety?

Next the research team conducted an expedited literature review using a systematic approach to minimize bias and answer each of the identified research questions.[c] The team limited the search to systematic reviews and meta-analyses of studies first, since they provide analyses of multiple studies or address multiple research questions. If no appropriate systematic reviews or meta-analyses were found for a specific question, the team searched for nonsystematic research reviews, original articles, and research reports from U.S. agencies and nonpartisan organizations. The team limited the search to electronically available sources published between January 2015 and January 2020.

The research team searched PubMed and EBSCO databases along with the following leading journals in public health, education, and youth health and development to explore each research question: American Journal of Public Health, Social Science & Medicine, Health Affairs, Early Childhood Research Quarterly, Journal of Child and Adolescent Mental Health, and Journal of School Health.[d] For all searches, the team used the following key terms: behavioral health training, educational attainment, educational achievement, social isolation in youth, school safety, youth mental health, educators, substance use, absenteeism in school, graduation rates, school dropout, restorative practices, behavioral health, academic performance, teacher training. The team also searched the National Institute of Mental Health, National Institutes of Health, National Association of School Psychologists, Centers for Disease Control and Prevention, National Alliance on Mental Illness, Mental Health America, and Substance Abuse and Mental Health Services Administration.

After following the above protocol, the team screened 49457 titles and abstracts,[e] identified 96 abstracts for potential inclusion, and, after reviewing each of these abstracts, identified 41 articles for full-text review. After applying the inclusion criteria, 21 articles were excluded. In addition, the team identified 14 peer-reviewed articles through the original articles and identified 21 resources with relevant research outside of the peer-reviewed literature. A final sample of 55 resources was used to create the health note. In addition, the team used 3 references to provide contextual information.

Of the studies included, the strength of the evidence was qualitatively described and categorized as: not well researched, mixed evidence, a fair amount of evidence, strong evidence, or very strong evidence. The evidence categories were adapted from a similar approach from another state.[84]

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[c] Expedited reviews streamline traditional literature review methods to synthesize evidence within a shortened timeframe. Prior research has demonstrated that conclusions of a rapid review versus a full systematic review did not vary greatly. Cameron A. et al., "Rapid versus full systematic reviews: an inventory of current methods and practice in Health Technology Assessment," (Australia: ASERNIP–S, 2007): 1–105, https://www.surgeons.org/media/297941/rapidvsfull2007_systematicreview.pdf.

[d] These journals were selected using results from a statistical analysis completed to determine the leading health research journals between 1990 and 2014. Merigó, José M., and Alicia Núñez. "Influential Journals in Health Research: A Bibliometric Study." *Global Health* 12.1 (2016), accessed Jan. 11, 2018, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4994291/.

[e] Many of the searches produced duplicate articles. The number of sources screened does not account for duplication across searches in different databases.

Very strong evidence: the literature review yielded robust evidence supporting a causal relationship with few if any contradictory findings. The evidence indicates that the scientific community largely accepts the existence of the relationship.

Strong evidence: the literature review yielded a large body of evidence on the association, but the body of evidence contained some contradictory findings or studies that did not incorporate the most robust study designs or execution or had a higher than average risk of bias; or some combination of those factors.

A fair amount of evidence: the literature review yielded several studies supporting the association, but a large body of evidence was not established; or the review yielded a large body of evidence but findings were inconsistent with only a slightly larger percent of the studies supporting the association; or the research did not incorporate the most robust study designs or execution or had a higher than average risk of bias.

Mixed evidence: the literature review yielded several studies with contradictory findings regarding the association.

Not well researched: the literature review yielded few if any studies or yielded studies that were poorly designed or executed or had high risk of bias.

EXPERT REVIEWERS

This health note benefited from the insights and expertise of Dr. Ashley Brooks-Russell, Assistant Professor at the Colorado School of Public Health and Dr. Jenn Leiferman, Associate Professor and Director of Rocky Mountain Prevention Research Center at the Colorado School of Public Health. Although they reviewed the health note and found the approach to be sound, neither they nor their organizations necessarily endorse its findings or conclusions.

ACKNOWLEDGEMENTS

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