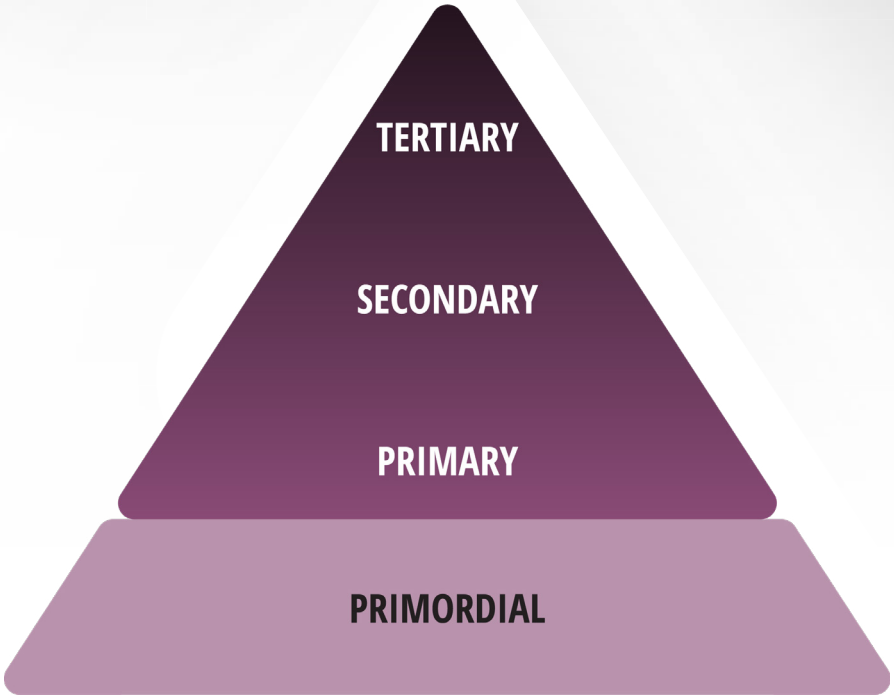
Emphasizing Prevention in Tiered Supports:

A Practice Brief on Primordial Prevention

Michael McSheehan

July 2025



Primordial prevention in education would aim to eliminate systemic risk factors that affect educational outcomes by addressing social, economic, and structural policies at the population level.

Introduction and Purpose

Multi-Tiered System of Supports (MTSS), Response to Intervention (RTI), and Positive Behavioral Interventions and Supports (PBIS) are widely recognized as three-tiered instructional frameworks. These frameworks align with or are adapted from multilevel prevention models in medicine and public health. However, unlike these models, the frameworks do not formally incorporate population-level prevention.

This brief introduces the concept of primordial prevention, a population-level approach used in medicine and public health, that aims to eliminate risk factors. To accomplish this, primordial prevention addresses social, economic, and structural policies at the population level. This brief explores the relevance of this concept for education, provides examples of its application, and proposes a six-point rationale for formalizing primordial prevention as part of education's tiered instructional frameworks. Students with disabilities are used in the examples but primordial prevention applies for all students.

Key Takeaways

- Primordial prevention is applied at the population level.
- Primordial prevention in education would focus on eliminating known risk factors in the general population.
- Schools can initiate primordial prevention for within-system change using the examples and implementation indicators presented in this brief.
- Primordial prevention should be formally incorporated into tiered instructional models.

Suggested citation: McSheehan, M. (2025, July). *Emphasizing prevention in tiered supports: A practice brief on primordial prevention* [Digital download]. Evolve & Effect, LLC. https://courses.evolveandeffect.com/products/digital_downloads/emphasizing-prevention

Background: Prevention Models in Medicine, Public Health, and Education

Public health and medicine have long employed multilevel prevention models (Kisling & Das, 2023). Various sectors and societal norms have embedded these models and are commonly organized into three levels of prevention: primary, secondary, and tertiary. Primary prevention (e.g., healthy eating, exercise, meditation) is part of many people's daily routines and promotes well-being before problems arise. Secondary prevention (e.g., medical check-ups) identifies early signs of emerging problems. Tertiary prevention manages existing conditions to prevent complications and improve quality of life—supported by an extensive health services infrastructure.

PBIS and MTSS emerged from these models, with adaptations (Larson, 1994; Walker et al., 1996; McIntosh & Goodman, 2016). RTI emerged from multiple fields linked with special education and is now commonly recognized as one model under the umbrella of MTSS. (For a full discussion of the history of RTI and its relation to MTSS see Pullen & Kennedy, 2018.) Education's tiered instructional frameworks retain a three-tier structure; the tiers are defined by instructional and intervention practices:

Tier 1: Universal – high-quality curriculum, instruction, and assessment for all students, plus screening to identify those at risk academically, behaviorally, or emotionally.

Tier 2: Targeted – Small-group interventions for students with emerging needs, using low-intensity, fast-response interventions, paired with progress monitoring.

Tier 3: Intensified – Individualized, diagnostic-informed intervention and support for students with persistent or complex needs.

Each tier is designed to respond to risk—either by preventing problems or minimizing their impact. Understanding the role of *risk* sets the stage for an additional, often overlooked level of prevention—one that aims to eliminate risk altogether.

What is Primordial Prevention? The Upstream Parable

A group of teachers gather for a picnic-retreat beside a river. Not long after they arrive, a child comes floating downstream calling for help. One teacher dives in and pulls the child out.

Minutes later, another child appears, then another, and soon more are coming. The teachers leap into action—diving in, dragging children to shore, and jumping back in to save more.

In the midst of this life-saving effort, one teacher starts walking away. Her colleagues call out, "Where are you going? We have so many children to save!" She replies, "I'm going upstream to find out why kids are falling into the river."

She discovers that the children had been crossing a rotted wooden bridge with missing boards. Unable to jump across the gaps, they fell into the river.

This widely shared parable, originating with medical sociologists (Brooks, 2024), illustrates the shift from downstream intervention to upstream prevention. Downstream, efforts are reactive—individual adults helping individual students. Upstream, we address root causes and develop solutions that protect entire communities. Only by going upstream can we eliminate the risks that endanger both children and adults. That shift is the essence of "primordial prevention."

Primordial Prevention

Primordial prevention occurs at the population level, aiming to eliminate risk factors entirely.

The concept was coined by Toma Strasser (1978), a cardiovascular epidemiologist with the World Health Organization. He proposed that preventing heart disease required more than just addressing individual risk—it required preventing risk factors (e.g., smoking, poor diet, inactivity) from emerging in the first place.

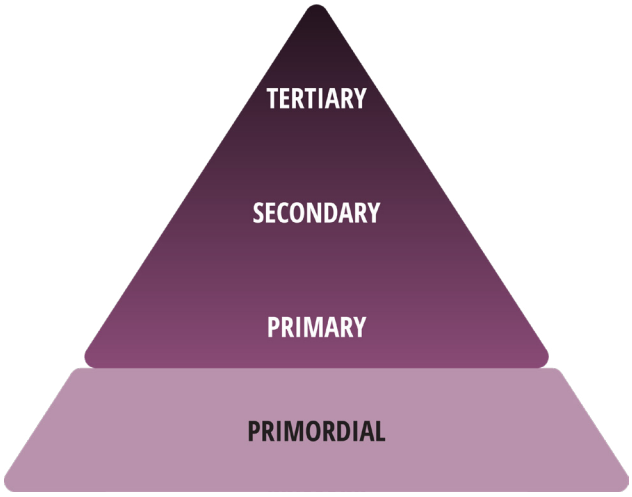
More than 45 years later, with extensive research and application of primordial prevention in different arenas, understanding of risk factors has evolved to include *systemic* risk factors. With recognition of the challenges associated with systemic risk factors, primordial prevention now "addresses social, economic, and structural policies that affect health and well-being, and are embedded into mindsets and daily practices to prevent risk factors from occurring" (Akers, Tippins, Hauan, & Lynch-Smith, 2023). In healthcare, primordial prevention places emphasis on modifying the social organization and altering the conditions that create health disparities, rather than just reducing personal exposure to risks (Pandve, 2014).

Unlike primary prevention, which targets individuals in the context of known risks, primordial prevention addresses the conditions that produce those risks, aiming to eliminate them across the entire population (Hussain, 2021). In the parable, primary prevention might teach kids to jump over missing boards and safely navigate a dilapidated bridge. Primordial prevention would fix the bridge.

Table 1 presents some key terms, their common-use definitions in public health, and working definitions for the education context.

Table 1. Terms, common definitions in the public health context, and working definitions for the education context

Term	Common Definition in the Public Health Context	Working Definition for the Education Context
Risk Factor	Any attribute, characteristic, or exposure that increases the likelihood of developing a disease or experiencing a negative health outcome.	Any attribute, characteristic, or exposure that increases the likelihood of developing learning difficulties or hindering a student's learning progress or ability to succeed in school.
Systemic Risk Factors	Risk factors that are rooted in broader societal structures, policies, and environments that influence health outcomes. They are often beyond an individual's control and can create disparities in health outcomes between different groups. Limited access to healthcare, including preventive care and screenings, can be a major risk factor for developing and managing diseases. This can be due to factors such as geographic isolation, lack of transportation, high costs, or inadequate insurance coverage.	Risk factors that are rooted in broader societal structures, policies, and environments that influence educational outcomes. They are often beyond an individual's control and can create disparities in educational outcomes between different groups. The impact of low expectations on people with disabilities is embedded in societal attitudes and rooted in ableism, and can lead to limited educational and employment opportunities, ultimately affecting the health and well-being of individuals with disabilities.
Symptom or Indicator	A subjective experience reported by an individual that suggests a potential illness or condition. For example, a headache, fever, or pain are symptoms that might indicate a disease.	Observable signs or behaviors that indicate a student is struggling with learning or with other experiences at school. For example, acting out in class or having difficulty reading or following directions might indicate an underlying need for a student.
Public Health Risk	The overall likelihood of a disease or health problem occurring in a specific group (e.g., higher risk of heart disease in older adults).	The overall likelihood of an education issue occurring within a specific group (e.g., higher risk of segregated placement for students with autism, intellectual disability, or multiple disabilities).
Disparities	Unequal differences, which are significant and persistent, in health outcomes or healthcare access between different population groups.	Unequal differences, which are significant and persistent, in education outcomes or educational opportunities between different student groups.



Example: Driving and Safety

As Dorfman and Wallack (2007) describe it, hearkening back to the bridge parable, "[Primordial prevention] is about understanding the problem as a social, political, and economic one that requires basic social change to alter the conditions that facilitate people easily falling into the water" (p. S45).

As another example of the positive effects of primordial prevention, consider automobile safety. Risk factors have been systematically designed out through technological innovation (e.g., lane assist, backup cameras) and public policy (e.g., licensing laws, seatbelt requirements). Outdated features that once posed risks have been removed. The results are significant. From 1913 to 2023, the vehicle death rate per 10,000 vehicles dropped by 95%. The death rate per 100 million miles driven dropped by 93% (National Safety Council, n.d.).

These gains weren't achieved by asking individual drivers to be careful or by the skilled action of first responders. The gains were the result of upstream, systemic changes.

Back to the Bridge: Education's Upstream Challenge

Dorfman and Wallack (2007) note that upstream approaches require shifting public perception: "Public health advocates must be able to explain that other forces, besides personal choice, affect health" (p. S46). The same holds in education.

Consider the downstream logic of these IEP goals: "When crossing bridges independently or with peers, Child A will recognize and jump over gaps in the bridge." "When falling through a bridge into a river, Child A will increase the amount of time they can tread water from 15 seconds to five minutes or until reaching shore." Going upstream means redesigning systems so that children aren't exposed to the risk to begin with. It means asking broader questions: Why are they on that path? Why is the bridge neglected? And then taking the upstream action.

Eliminating risk—rather than managing it—offers greater safety, access, and quality of life. Let's just fix the dang bridge.

Primordial Prevention and Students with Disabilities

Primordial prevention is not entirely new to education. Historically, female students and students of color have been treated differently because inherent biases were present but not addressed in any systematic way. Primordial prevention through human resource (HR) policies prohibits discrimination based on sex and race. Primordial prevention through pedagogical approaches like schoolwide behavioral expectations, culturally responsive teaching, and initiatives to promote girls' engagement in STEM has begun addressing systemic risk factors associated with sexism and racism. These efforts aim to change the conditions that put children at risk.

Primordial prevention provides a way for thinking about ableism and students with disabilities. Society often subjects disabled students[1] to stereotyping, exclusion, and lowered expectations. As a result, students can internalize this stigma. If schools are to foster a healthy, positive self-concept for disabled students, the environments must be safe and affirming (i.e., free from predictable risk factors). These barriers (systemic risk factors) are rooted in broader social narratives and require upstream action. For these reasons, students with disabilities provide a useful example and these examples help clarify the application of primordial prevention in educational settings.

Although education leaders cannot be expected to lead the entirety of primordial efforts needed to eliminate ableism, schools and districts are hubs of the local community and have a role to play. They can influence attitudes, structures, and future generations. Some primordial prevention efforts to address systemic risk factors can be accomplished within the school or district system. Below are three such recommendations for primordial prevention for disabled students, adapted from Schuh & McSheehan (2023).

HR Policies

HR policies should explicitly address ableism—just as they do sexism or racism. This can be advanced by defining harassment and ableist behavior (verbal, visual, and physical); providing training with examples of prohibited language and conduct such as offensive jokes, abusive language, ability-based slurs, and microaggressions; and enforcing consequences and accountability. HR policies must also address

[1] To reflect evolving understandings of language, identity, and individual agency, this paper uses both person-first ("students with disabilities") and identity-first ("disabled students") terminology. The paper acknowledges variation in preferences within the disability community and respects the diverse ways individuals choose to describe their experiences.

inclusive hiring practices and disability representation, and must provide guidance to create a positive, affirming workplace culture.

Curriculum
Curriculum can serve as a tool of prevention by integrating disability history, contributions, and narratives across subjects; portraying disabled characters in realistic, affirming ways; teaching about ableism and its structural effects; and challenging dominant narratives that reduce disability to individual tragedy or deficit.

Accessibility
Educators should always design physical spaces and curriculum to meet accessibility standards—regardless of current student demographics. This avoids costly retrofitting to "fit" disabled learners' needs. Valuable resources, including personnel time and effort, could be better directed to quality instruction instead of redesigning physical spaces and adapting materials that were made without consideration of the needs of students with disabilities.

Primordial efforts in education fix the bridge, not just for today's students, but for all future ones. To accomplish the recommendations above, districts could start by formalizing primordial prevention as part of their MTSS, PBIS, or RTI. In support of such efforts, Table 2 presents some elements and implementation guidance for within-system primordial prevention.

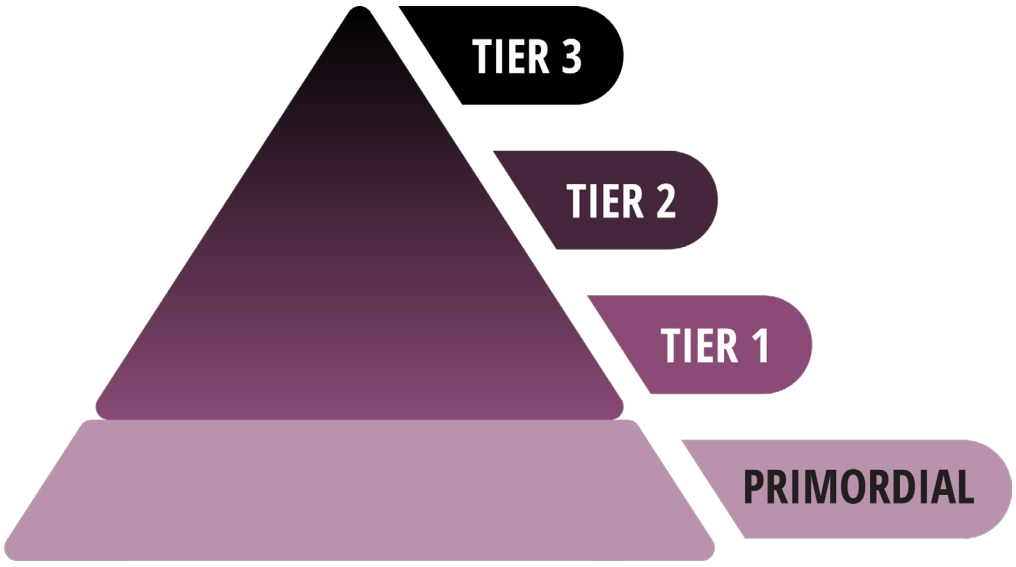


Table 2. Essential elements and full implementation descriptions for within-system primordial prevention

Essential Element	Full Implementation Description	Status Notes and Action Steps
1. Established Team	There is an established team whose mission is to identify and substantially reduce or eliminate systemic risk factors and the negative indicators associated with those factors.	
2. Membership	The team includes district cabinet-level representation and board liaison, HR director, relevant departmental leadership, school administrator, family member, and (secondary-level) student representative. Members have political visibility, credibility, and commitment to the issues at hand, with decision-making authority to move their recommendations into action.	
3. Interest-Holder Involvement	The team regularly engages students, families, educators, and other relevant interest-holders (e.g., teacher unions) to provide feedback on plans and methods to eradicate specific risk factors.	
4. Data-Based Decisions, Monitoring, and Review	The team identifies, collects, and analyzes relevant process and outcome data to inform decisions, and periodically reviews the effectiveness of their efforts, checking for intended and unintended consequences as well as for responsiveness to their interventions to eliminate systemic risk factors.	
5. Coordination	The team coordinates, embeds, and aligns their efforts with other current initiatives (e.g., district strategic plan), organizational teams (e.g., climate/culture or professional learning teams), and teaching and learning teams (e.g., tier-level teams in MTSS, RTI, or PBIS).	
6. Communication	The team utilizes a comprehensive plan for internal and external communication with interest-holders.	

Formalizing Primordial in Education's Tiered Frameworks

Although tiered frameworks in education (e.g., MTSS, PBIS) are adapted from multilevel prevention models in public health and medicine—fields with a long and successful history of applying primordial prevention—education frameworks have yet to formally incorporate this upstream, population-level approach. Systemic risk factors are kept in place by known and discoverable structures. Formalizing primordial efforts would help identify what's keeping the risk factors in place and what we can change in order to eliminate them. Structures like values, governance, laws, policies, regulations, and institutional practices impact and preserve these patterns (Heller et al., 2024). Formally integrating primordial prevention as a recognized tier of tiered instructional frameworks presents a wealth of opportunities for innovation, impact, and sustainability. Doing so would:

1. **Acknowledge the role of systemic risk factors in educational inequity**

Formally including primordial prevention explicitly recognizes that many learning challenges are not due to individual student deficits, but rather to predictable, preventable systemic conditions—such as poverty, ableism, sexism, racism, or exclusionary policies. This reframes the conversation from "fixing students" to addressing and redesigning the conditions that create barriers in the first place. An added benefit would be increased alignment with trauma-informed and whole-child frameworks.

2. **Provide a conceptual space for proactive, population-level action**

Currently, the tiered model begins with universal instruction (Tier 1), which is reactive to known risks. Adding a primordial tier would create formal space for proactive system redesign—actions that reduce or eliminate risks before they emerge. Having a conceptual space for this would better support education agencies (e.g., schools), related organizations (e.g., teacher unions), and interested community partners (e.g., businesses, foundations) to plan for reduction and elimination of risk itself rather than continuously investing in managing risk when it appears.

3. **Invite innovation and research in upstream educational design**

Including primordial prevention as a recognized component of tiered frameworks would provide a theoretical and practical arena for research, funding, and innovation. It would invite new kinds of questions, methods, and interventions focused on root causes. This would encourage longitudinal studies and transdisciplinary collaborations that expand the evidence base beyond what currently exists for downstream interventions.

4. **Translate lessons from other fields into education**

Public health, transportation, environmental science, and social work have successfully implemented population-level prevention strategies. Formalizing primordial prevention would create a structure to translate these lessons for educational use. This could allow leaders to leverage proven models from other sectors and accelerate systemic improvement in education.

5. **Promote cross-sector partnerships**

Primordial prevention cannot be carried out by education alone. Its inclusion would naturally foster partnerships with public health, urban planning, social services, community organizations, and disability justice movements. This would bring broader coalitions and funding opportunities and enhance schools' capacity to address complex social determinants of learning.

6. **Support long-term cost savings and sustainability**

Many Tier 2 and Tier 3 interventions are resource-intensive and reactive. By reducing the number of students who experience the risks that lead to the need for interventions, a primordial approach supports long-term sustainability and better use of public funds. This would help move us further upstream, preventing the overreliance on remediation and crisis response, allowing resources to be redirected toward other priorities in education.

Formalizing primordial prevention in education's tiered frameworks would act as a convening force for interest-holders to join efforts to eliminate known and removable systemic risk factors.

Conclusion

Schools and districts may not be able to lead every aspect of societal change—but within their sphere of influence, they can model it. When districts adopt policies and practices rooted in primordial prevention, they send a powerful message: All children deserve to thrive in an environment free from avoidable harm. These actions send a message and provide a model to the staff, students, families, and broader community. Acting within their domain of control, education leaders can inspire others to primordial prevention.

Incorporating primordial prevention into education's tiered frameworks is more than a technical update—it is a philosophical, scientific, and strategic evolution. It shifts education from reacting to known systemic risks to preventing them. It strengthens our systems and offers a structure for shared responsibility—where no child is left to fall into the river.

References

Akers, L., Tippins, J., Hauan, S., & Lynch-Smith, M. (2023, June). *Advancing primary prevention in human services: Opportunities for people with lived experience* (Issue brief). Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. https://aspe.hhs.gov/reports/primary-prevention-lived-experience-brief

Brooks, R. (2024, April 29). *What is the upstream parable and why is it relevant for our well-being? — Part I.* Dr. Robert Brooks. https://www.drrobertbrooks.com/upstream-parable-part1/

Dorfman, L., & Wallack, L. (2007). Moving nutrition upstream: The case for reframing obesity. *Journal of Nutrition Education and Behavior, 39*(2 Suppl), S45-S50. https://pubmed.ncbi.nlm.nih.gov/17336805/

Heller, J. C., Givens, M. L., Johnson, S. P., & Kindig, D. A. (2024). Keeping it political and powerful: Defining the structural determinants of health. *The Milbank Quarterly, 102*(2), 351–366. https://doi.org/10.1111/1468-0009.12695

Hussain, M. (2021). Primordial prevention: The missing link in neurological care. *Journal of Family Medicine and Primary Care, 10*(1), 31–34. https://doi.org/10.4103/jfmpc.jfmpc_1806_20

Kisling, L. A., & Das, J. M. (2023, August 1). *Prevention strategies.* In StatPearls [Internet]. StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK537222/

Larson, J. (1994). Violence prevention in the schools: A review of selected programs and procedures. *School Psychology Review, 23*(2), 151–164. https://doi.org/10.1080/02796015.1994.12085703

McIntosh, K., & Goodman, S. (2016). *Integrated Multi-Tiered Systems of Support: Blending RTI and PBIS* (1st ed.). Guilford Publications.

National Safety Council. (n.d.). *Historical fatality trends: Car crash deaths and rates.* Retrieved July 7, 2025, from https://injuryfacts.nsc.org/motor-vehicle/historical-fatality-trends/deaths-and-rates/

Pullen, P. C. & Kennedy, M. J. (Eds.). (2018) *Handbook of Response to Intervention and Multi-Tiered Systems of Support.* Routledge. https://doi.org/10.4324/9780203102954

Pandve, H. (2014). Changing concept of disease prevention: From primordial to quaternary. *Archives of Medicine and Health Sciences, 2*(2), 254-256. https://doi.org/10.4103/2321-4848.144366

Schuh, M., & McSheehan, M. (2023). *Disability-affirming education: Indicators for classrooms, schools, and districts* [Digital download]. Evolve & Effect, LLC. https://courses.evolveandeffect.com/products/digital_downloads/disability-affirming-indicators

Strasser, T. (1978). Reflections on cardiovascular diseases. *Interdisciplinary Science Reviews, 3*(3), 225–230. https://doi.org/10.1179/030801878791925921

Walker, H. M., Horner, R. H., Sugai, G., Bullis, M., Sprague, J. R., Bricker, D., & Kaufman, M. J. (1996). Integrated approaches to preventing antisocial behavior patterns among school-age children and youth. *Journal of Emotional and Behavioral Disorders, 4*(4), 194–209. https://doi.org/10.1177/106342669600400401