Bloom, S. L., (2025). J Pub Health Issue Pract, 9(2): 249
https://doi.org/10.33790/jphip1100249

Journal of Public Health Issues and Practices

Creating P.R.E.S.E.N.C.E.: A Trauma-Informed Framework for Restoring Balance in Public Health Systems

Sandra L. Bloom, M.D.
Associate Professor, Dornsife School of Public Health, Drexel University, Philadelphia, PA, United States.

Article Details
Article Type: Mini Review
Received date: 01st November, 2025
Accepted date: 20th December, 2025
Published date: 22nd December, 2025
***Corresponding Author:** Sandra L. Bloom, M.D., Associate Professor, Dornsife School of Public Health, Drexel University, Philadelphia, PA, United States.
Citation: Bloom, S. L., (2025). Creating P.R.E.S.E.N.C.E.: A Trauma-Informed Framework for Restoring Balance in Public Health Systems. *J Pub Health Issue Pract 9*(2): 249. doi: https://doi.org/10.33790/jphip1100249

Abstract

Background: Public health systems in the United States are confronting escalating and interrelated challenges—including chronic disease, addiction, interpersonal violence, social fragmentation, political polarization, and declining trust in institutions—that increasingly strain existing governance and organizational models. These challenges are commonly addressed as discrete problems, reflecting mechanistic and reductionist approaches that fail to account for the cumulative effects of stress and adversity across the lifespan and across social systems.

Problem Framing: More than twenty-five years of research on Adverse Childhood Experiences (ACEs) demonstrates that early adversity is a major determinant of population morbidity, mortality, and social dysfunction. Despite this evidence, trauma and chronic stress remain insufficiently integrated into public health strategy, organizational practice, and policy design.

Framework: This article introduces *CREATING P.R.E.S.E.N.C.E.*, a trauma-informed, values-based framework for trauma-responsive and trauma-resilient public health systems. Drawing on trauma science, complex adaptive systems theory, organizational psychology, and public health ethics, the framework conceptualizes organizations as living systems—described here as *biocracies*—whose capacity for alignment, learning, and ethical action is profoundly shaped by stress and trauma.

Contribution and Implications: *P.R.E.S.E.N.C.E.* operationalizes the *Science of Suffering* into eight interrelated domains that support emotional regulation, shared responsibility, and adaptive capacity. The framework is offered as both a practical method of governance and a conceptual foundation for addressing preventable suffering at the population level.

Introduction

Across the United States, public health professionals are working in a social environment defined by accelerating complexity. Chronic disease, substance use disorders, interpersonal violence, homelessness, widening inequality, environmental instability, and declining trust in democratic institutions are typically addressed as separate challenges, each assigned to its own programmatic or policy domain. In practice, however, these conditions are deeply interconnected, reflecting shared upstream determinants rooted in cumulative stress, adversity, and social fragmentation [1-5].

Over the past several decades, research on Adverse Childhood Experiences (ACEs) has provided compelling evidence that early adversity is a powerful driver of adult morbidity, mortality, and diminished quality of life. Individuals with higher ACE scores face increased risk for many of the leading causes of death, as well as for mental health conditions, substance use, and social impairment. As Robert Anda and colleagues have emphasized, progress in addressing the nation's most serious health and social problems depends on understanding that many of these outcomes arise from adverse experiences during childhood [6]. Despite the strength and consistency of this evidence, trauma and adversity are still often treated as peripheral concerns rather than as central public health determinants [7-9].

At the same time, the broader sociocultural context has shifted in ways that further strain individual and collective capacity. Economic precarity, political polarization, rapid technological change, climate instability, and eroding institutional trust have created conditions in which inherited mental models no longer adequately support problem-solving. Some scholars have described this moment as a 'cognitive threshold,' in which the complexity of contemporary challenges exceeds the capacity of existing systems to manage them effectively [10-12]. Communities and institutions increasingly exhibit signs of fragmentation, reactivity, and loss of coherence—conditions that undermine collective resilience [13, 14].

Public health systems do not stand outside these dynamics. They are composed of human beings working within organizations that are themselves shaped by history, culture, power relationships, and cumulative stress. When trauma and chronic adversity remain unacknowledged, they influence organizational behavior in predictable ways: reduced psychological safety, impaired communication, siloed decision-making, and diminished capacity for

learning and adaptation [15-17]. These patterns mirror the effects of trauma at the individual level and signal the need for frameworks that address both human and organizational functioning simultaneously [18, 19].

This article argues that meeting the challenges of the present moment requires more than additional programs or technical interventions [20]. It requires a shift in how public health conceptualizes organizations, leadership, and collective wellbeing. **CREATING P.R.E.S.E.N.C.E.** is presented here as a trauma-informed framework designed to support that shift by integrating trauma science with living-systems thinking, ethical reflection, and organizational practice in order to support alignment, learning, and ethical action under conditions of stress.

From Mechanistic Models to Living Systems

Much of modern public health infrastructure has been shaped by mechanistic assumptions inherited from industrial, biomedical, and bureaucratic traditions. These assumptions emphasize linear causality, hierarchical control, standardization, predictability, and efficiency as primary indicators of effectiveness. Such approaches have yielded significant achievements, particularly in sanitation, vaccination, infectious disease control, and clinical treatment. However, they are poorly suited to addressing complex social and population health challenges characterized by nonlinearity, uncertainty, feedback loops, and emergent behavior—conditions that increasingly define contemporary public health practice [21-23]. As the scope and complexity of public health challenges expand, the limitations of mechanistic approaches become increasingly evident, pointing to the need for models that can account for relational dynamics, adaptation, and emergence within human systems.

Mechanistic models tend to fragment complex problems into discrete components, assigning responsibility to specialized programs or sectors. While administratively efficient, this fragmentation obscures the ways in which chronic disease, substance use, violence, homelessness, and social disintegration arise from shared upstream determinants rooted in cumulative stress, adversity, and structural inequity. As a result, interventions often target symptoms rather than underlying system dynamics, limiting their long-term effectiveness and sustainability [2, 20].

In contrast, human organizations function more accurately as **complex adaptive systems**—open, dynamic, and relational entities whose behavior emerges from patterns of interaction rather than from centralized control [23-25]. Within such systems, stress and trauma act as powerful organizing forces, shaping not only individual behavior but also collective patterns of perception, decision-making, and response. In such systems, outcomes are shaped by shared meaning, emotional climate, power relationships, and feedback processes that evolve over time. Learning, adaptation, and coherence depend not on compliance alone, but on trust, psychological safety, and the capacity to integrate experience into collective decision-making [26].

Stress and trauma affect organizations not only through individual distress or burnout, but through **collective processes** that influence how information is processed, how authority is exercised, and how conflict is managed. Under conditions of chronic adversity, organizations commonly exhibit patterns of rigidity, hyper-reactivity, siloed functioning, diminished empathy, and resistance to change—patterns that closely parallel trauma responses observed at the individual level [17, 27, 28]. These dynamics impair an organization's ability to learn from experience and adapt to changing conditions, thereby increasing vulnerability to error, ethical drift, and mission failure.

Dr. Walter B. Cannon, considered to be one of the most important scholars of the 20th century, was a Harvard physiologist who coined the term "fight or flight" and defined the concept of "homeostasis" or balance that defines most of the function of the living body. As a physiologist he had a clear understanding of the myriad ways that our socially constructed systems mimic the function of the human body. In 1936 he wrote, "*it seems to me that quite possibly there are general principles of organization that may be quite as true of the body politic as they are of the body biologic*" (p. 206) [29]. Then, in 1940 he became President of the American Association for the Advancement of Science and in his Presidential Address he asserted that the most efficient and stable human society would be a "*biocracy in which the myriad of differentiated cells would be organized into functional organs all cooperating in a dynamic democracy in which any form of dictatorship would lead to degeneration and death*" (p. 1) [30].

To further elaborate on this reality, the term **biocracy** is used here to emphasize that organizations operate as living systems rather than as machines. In biocracies, health and dysfunction are expressed through relational patterns, cultural norms, and regulatory feedback processes that resemble those of biological organisms [31, 32]. Trauma narrows attention, accelerates defensive responses, and disrupts coordination—both within individuals and across the social systems they inhabit. When these effects remain unrecognized, they become embedded in organizational routines and governance structures, reinforcing cycles of dysregulation and fragmentation over time. Viewing organizations through this biocratic living-systems lens makes it possible to recognize trauma not as an external variable to be managed, but as an internal condition that influences how systems regulate, relate, and evolve over time.

Why Biocracy Now?

The urgency of reimagining public health organizations as living systems has intensified in recent years. Public health systems are operating in a context marked by repeated collective stressors, including the COVID-19 pandemic, climate-related disasters, widening social and economic inequities, rapid technological change, and escalating political polarization. These conditions have exposed the limits of governance models that rely primarily on control, compliance, and standardization, while placing unprecedented emotional and ethical demands on the public health workforce [33].

At the same time, public health institutions are experiencing rising levels of workforce burnout, moral distress, and attrition, signaling not only individual strain but systemic dysregulation. Research increasingly recognizes that organizational health, psychological safety, and trust are foundational to effective public health action, particularly under conditions of uncertainty and threat [34]. Without frameworks that explicitly address the ways that stress and trauma shape organizational behavior, efforts to strengthen public health capacity risk reproducing the very conditions that undermine resilience and ethical decision-making.

Biocracy offers a conceptual language for this moment by reframing organizations as social bodies whose functioning depends on regulation, feedback, and relational integrity [35]. In doing so, it aligns public health practice with contemporary understandings from complexity science, trauma research, and systems thinking, while foregrounding ethical responsibility and collective wellbeing. At a time when trust in institutions is fragile and public health authority is contested, biocracy provides a foundation for governance models that emphasize participation, transparency, shared responsibility, and adaptive learning—capacities essential for navigating the challenges of the present and future.

Recognizing organizations as living systems carries significant implications for public health practice. It suggests that sustainable change cannot be achieved solely through technical fixes, policy mandates, or performance metrics. Instead, it requires intentional cultivation of conditions that support emotional regulation, shared responsibility, ethical action, and adaptive learning across all levels of the system [36]. Trauma-informed and trauma-responsive frameworks offer one pathway for addressing these needs by integrating scientific understanding of stress and adversity with

organizational design, leadership practice, and public health ethics [37]. If public health organizations are understood as living systems shaped by cumulative stress and adversity, then frameworks for change must address not only structure and policy, but also regulation, meaning, and ethical action within those systems [38].

CREATING P.R.E.S.E.N.C.E.: Conceptual Foundations

CREATING P.R.E.S.E.N.C.E. is a structured, trauma-informed framework developed through decades of clinical, organizational, and community-based work with trauma-exposed populations and the systems that serve them [17, 39, 40] . It builds on earlier trauma-responsive models—such as trauma-informed care and sanctuary-oriented approaches—while extending their application beyond treatment settings to the organizations and institutions responsible for population health, governance, and social wellbeing. The framework integrates insights from trauma studies, developmental neuroscience, complex adaptive systems theory, organizational psychology, and public health ethics [16, 35, 41].

At its core, *P.R.E.S.E.N.C.E.* is grounded in the recognition that trauma affects not only individuals, but also families, organizations, communities, and institutions. It seeks to translate what is referred to here as **the Science of Suffering**—the accumulated interdisciplinary knowledge about how adversity shapes biology, behavior, relationships, and social systems—into shared values, practical competencies, and everyday practices that support collective wellbeing and ethical action [1, 4, 16].

Rather than prescribing a uniform set of interventions, *P.R.E.S.E.N.C.E.* provides a coherent organizing framework that supports alignment, reflection, and adaptive capacity within complex systems. It emphasizes that healing and resilience emerge through relational processes, shared meaning-making, and the restoration of regulatory balance at both individual and organizational levels. In this way, the framework operationalizes trauma-informed principles as a method of governance and leadership, not merely as a clinical or programmatic approach [22, 36, 42].

P.R.E.S.E.N.C.E. is an acronym representing eight paired domains:

- **Partnership & Power**
- **Reverence & Restoration**
- **Emotional Wisdom & Empathy**
- **Safety & Social Responsibility**
- **Embodiment & Enactment**
- **Nature & Nurture**
- **Culture & Complexity**
- **Emergence & Evolution**

These domains are not discrete components, but interdependent elements of a living system. Together, they offer a way of understanding how trauma shapes organizational life and how intentional practices can support healing, resilience, and ethical governance within public health systems facing unprecedented complexity and uncertainty.

Creating P.R.E.S.E.N.C.E. In Practice: Operationalizing Trauma-Responsive Public Health

The Eight Domains of P.R.E.S.E.N.C.E.

Each domain of P.R.E.S.E.N.C.E. represents a set of values, competencies, and regulatory capacities that support the healthy functioning of living systems under conditions of stress and complexity. Together, they provide a practical framework for aligning organizational behavior with the ethical and scientific imperatives of trauma-responsive public health. Rather than functioning as discrete programmatic elements, the domains operate as **interdependent system capacities**, shaping how organizations perceive threat, distribute power, process information, and adapt over time.

From a biocratic perspective, each domain corresponds to a core function necessary for organizational regulation and coherence. When these functions are supported, organizations are more capable of ethical action, learning, and collaboration. When they are compromised by chronic stress or unresolved trauma, systems predictably become rigid, fragmented, and reactive [17, 23, 36].

Partnership & Power emphasizes collaborative, participatory approaches to decision-making that counteract dominance, coercion, and disempowerment—conditions closely associated with trauma exposure across the lifespan. In public health organizations, a commitment to partnership redistributes authority, values lived experience, and supports shared ownership of outcomes. This shift is essential for restoring trust and engagement in systems that have often marginalized the very populations they serve.

Recent public health and governance research demonstrates that participatory and power-sharing approaches are associated with improved legitimacy, policy relevance, and sustainability, particularly in communities affected by chronic adversity and structural inequity [37, 43-45]. Trauma-responsive partnerships explicitly acknowledge historical power imbalances and institutional harm, recognizing that exclusion and coercion function as stressors that undermine both health equity and collective efficacy.

Reverence & Restoration ground public health practice in respect for human dignity and responsibility for repair. Reverence acknowledges the inherent worth of individuals, communities, and ecosystems, while restoration emphasizes accountability, reconciliation, and the capacity to heal harm. In trauma-exposed systems, unresolved moral injury, institutional betrayal, and historical injustice erode cohesion, legitimacy, and trust.

Emerging scholarship highlights the importance of explicit restorative processes within organizations and institutions responsible for public wellbeing, particularly in contexts shaped by systemic racism, policy-driven harm, and collective trauma [46-48]. Restoration functions as a regulatory mechanism that allows systems to metabolize harm rather than defensively deny it, strengthening ethical coherence and relational integrity.

Emotional Wisdom & Empathy recognize emotions as essential sources of information rather than obstacles to rational decision-making. Trauma narrows emotional awareness and heightens threat sensitivity, impairing judgment, collaboration, and moral reasoning. Cultivating emotional literacy and empathy within organizations supports regulation, communication, and ethical action under conditions of uncertainty.

Contemporary research in neuroscience, organizational psychology, and leadership underscores that emotional awareness and psychological safety are foundational to learning, innovation, and effective decision-making in complex systems [36, 49, 50]. Trauma-responsive public health organizations treat emotional signals as data that inform adaptive action rather than as liabilities to be suppressed.

Safety & Social Responsibility extend traditional notions of safety beyond physical protection to include psychological, social, cultural, and moral dimensions. Safety is a prerequisite for learning, participation, and innovation, while social responsibility emphasizes collective accountability for maintaining conditions that protect the wellbeing of all members of the system, particularly those most vulnerable to harm.

Recent public health guidance increasingly recognizes workforce wellbeing and psychological safety as critical determinants of system performance and crisis response capacity [45, 51, 52]. Within biocratic systems, safety functions as a foundational regulatory condition that enables trust, transparency, and ethical action under stress.

Embodiment & Enactment focus on aligning stated values with daily behavior. In living systems, culture is expressed through action. Trauma-organized systems often exhibit dissonance between espoused principles and enacted practices, leading to cynicism, disengagement, and moral distress.

Implementation science consistently demonstrates that sustainable change requires alignment between values, leadership behavior, organizational routines, and accountability structures [53, 54]. Trauma-responsive enactment ensures that principles such as participation, transparency, and care are visible and reliable in everyday practice, thereby restoring credibility and trust.

Nature & Nurture integrate biological, developmental, and ecological perspectives on human behavior. This domain highlights the interaction between innate vulnerability and environmental conditions, emphasizing the role of early experience, cumulative stress, and social context in shaping health trajectories across the lifespan.

Advances in developmental neuroscience, epigenetics, and life-course health development reinforce the importance of prevention-oriented public health strategies that reduce chronic stress exposure and strengthen relational supports [55, 56]. Trauma-responsive public health informed by this domain prioritizes early intervention, supportive environments, and policies grounded in biological realism rather than moral judgment.

Culture & Complexity draw on complexity science to support adaptive responses to uncertainty and change. Rather than seeking control through simplification, this domain encourages diversity, feedback, and iterative learning. Trauma constrains complexity by narrowing options, suppressing dissent, and accelerating defensive decision-making.

Public administration and health systems research increasingly emphasize adaptive governance, sense-making, and distributed intelligence as essential capacities for addressing "wicked problems" [23, 57, 58]. Trauma-responsive cultures intentionally expand perceptual and relational capacity, enabling creative and coordinated responses to emerging challenges.

Emergence & Evolution affirm the potential for transformation when conditions for safety, alignment, and participation are present. In living systems, new patterns arise from interaction rather than from top-down design. Trauma-responsive public health fosters environments in which innovation, shared meaning, and collective intelligence can emerge organically over time.

Implementing Trauma-Responsive Organizational Practice

Implementing P.R.E.S.E.N.C.E. within public health organizations is not a matter of adopting a single intervention or training module. It requires sustained cultural transformation supported by leadership commitment, shared language, reflective practice, and structural alignment. After an organizational self-assessment, the OPTIC ™ instrument, trauma-responsive implementation begins with building a common understanding of trauma and adversity, followed by intentional redesign of policies, procedures, and relational norms to support regulation, learning, and ethical action [35].

Organizations functioning as biocracies respond to stress in ways analogous to living organisms. Under chronic strain, they may become rigid, defensive, or fragmented. Trauma-responsive practice seeks to restore regulation and coherence at the system level by addressing both structural and relational factors, including power dynamics, communication patterns, workload expectations, and opportunities for reflection and collective sense-making [37, 54].

Importantly, trauma-responsive organizational change supports the wellbeing of the workforce as well as the populations served. Burnout, moral distress, and secondary traumatic stress are increasingly recognized as system-level risks within public health, threatening institutional capacity precisely when complexity is increasing [59, 60]. Frameworks such as P.R.E.S.E.N.C.E. provide practical tools for addressing these challenges by fostering connection, meaning, and shared responsibility.

Implications for Public Health Policy and Practice

The adoption of trauma-responsive, living-systems frameworks carries significant implications for public health policy. Policies that fail to account for trauma, chronic stress, and complexity risk reinforcing the very conditions they seek to address. Integrating P.R.E.S.E.N.C.E. into policy design encourages approaches that prioritize prevention, equity, participation, and long-term resilience over short-term efficiency.

At the population level, trauma-responsive public health aligns with efforts to address social determinants of health, reduce inequities, and strengthen community resilience. By recognizing the interconnected nature of individual, organizational, and societal wellbeing, frameworks such as P.R.E.S.E.N.C.E. support more coherent, ethical, and adaptive responses to contemporary public health challenges [20, 45].

Conclusion

Public health stands at a critical juncture. The scale, velocity, and interdependence of contemporary challenges demand approaches that move beyond fragmented, mechanistic solutions. Trauma and adversity are central drivers of preventable suffering at the population level, shaping health outcomes, organizational behavior, and collective capacity for action.

CREATING P.R.E.S.E.N.C.E. offers a trauma-informed, measurable framework designed to meet this moment. By conceptualizing organizations as living systems and translating the Science of Suffering into practical values and competencies, the framework provides a pathway for restoring alignment, resilience, and ethical responsibility within public health systems. While further empirical evaluation and policy application are warranted, P.R.E.S.E.N.C.E. contributes a coherent, integrative approach to advancing trauma-responsive public health practice in an era defined by complexity, interdependence, and rapid change.

Competing Interests: The authors declare that they have no competing interests.

References

1. Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *In Am J Prev Med* (Vol. 14, pp. 245-258). https://doi.org/10.1016/s0749-3797(98)00017-8
2. Marmot, M. (2020). Health equity in England: the Marmot review 10 years on. *BMJ* (Online), 368, m693-694. https://doi.org/10.1136/bmj.m693
3. Mendenhall, E. (2017). Syndemics: a new path for global health research. *The Lancet, 389*(10072), 889-891. https://doi.org/10.1016/S0140-6736(17)30602-5
4. Shonkoff, J. P., & Garner, A. S. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics, 129*(1), e232-246. https://doi.org/10.1542/peds.2011-2663
5. Singer, M., Bulled, N., Ostrach, B., & Mendenhall, E. (2017). Syndemics and the biosocial conception of health. *The Lancet, 389*(10072), 941-950. https://doi.org/10.1016/S0140-6736(17)30003-X
6. Anda, R. F., Butchart, A., Felitti, V. J., & Brown, D. W. (2010). Building a Framework for Global Surveillance of the Public Health Implications of Adverse Childhood Experiences. *American Journal of Preventive Medicine, 39*(1), 93-98. https://doi.org/10.1016/j.amepre.2010.03.015
7. Asmundson, G. J. G., & Afifi, T. O. (2020). *Adverse childhood experiences : using evidence to advance research, practice, policy, and prevention*. Academic Press.

8. Halfon, N., Larson, K., Lu, M., Tullis, E., & Russ, S. (2014). Lifecourse Health Development: Past, Present and Future. *Maternal and Child Health Journal, 18*(2), 344-365. https://doi.org/10.1007/s10995-013-1346-2
9. Waite, R., & Ryan, R. A. (2019). *Adverse Childhood Experiences: What Students and Health Professionals Need to Know* (1 ed.). Routledge. https://doi.org/10.4324/9780429261206
10. Costa, R. (2010). *The Watchman's Rattle: A Radical New Theory of Collapse*. Vanguard Press.
11. Homer-Dixon, T. F. (2006). *The upside of down : catastrophe, creativity, and the renewal of civilization*. Island Press.
12. Tainter, J. (1988). *The Collapse of Complex Societies*. Cambridge University Press.
13. Putnam, R. D. (2000). *Bowling Alone: The Collapse and Revival of American Community*. Simon & Schuster.
14. Wilkinson, R. G., & Pickett, K. (2018). *The Inner Level: How More Equal Societies Reduce Stress, Restore Sanity and Improve Everyone's Well-Being*. Penguin.
15. Bloom, S. L. (2014). Creating, Destroying and Restoring Sanctuary Within Caregiving Organisations. In A. Odgers (Ed.), *From Broken Attachments to Earned Security: The Role of Empathy in Therapeutic Change*. The John Bowlby Memorial Conference. Karnac.
16. Bloom, S. L. (2019). Human Rights and the Science of Suffering. In L. D. Butler, F. Critelli, & J. Carello (Eds.), *Trauma and Human Rights: Integrating Approaches to Address Human Suffering,*. Palgrave Macmillan.
17. Bloom, S. L., & Farragher, B. (2010). *Destroying Sanctuary: The Crisis in Human Service Delivery Systems* (1 ed.). Oxford University Press.
18. Freudenberg, N. (2016). Can Public Health Professionals Restore Joy in America's Cities? *American Journal of Public Health, 106*(4), 587-588. https://doi.org/https://doi.org/10.2105/AJPH.2016.303016
19. Freudenberg, N., Franzosa, E., Chisholm, J., & Libman, K. (2015). New Approaches for Moving Upstream: How State and Local Health Departments Can Transform Practice to Reduce Health Inequalities. *Health education & behavior, 42*(1_suppl), 46S-56S. https://doi.org/10.1177/1090198114568304
20. Krieger, N. (2021). Structural Racism, Health Inequities, and the Two-Edged Sword of Data: Structural Problems Require Structural Solutions. *Frontiers in public health, 9*, 655447. https://doi.org/10.3389/fpubh.2021.655447
21. Head, B. W. (2022). *Wicked Problems in Public Policy : Understanding and Responding to Complex Challenges* (1 ed.). Springer International Publishing. https://doi.org/10.1007/978-3-030-94580-0
22. Snowden, D. J., & Boone, M. E. (2007). A leader's framework for decision making. *Harvard Business Review, 85*(11), 68.
23. Sturmberg, J. P., & Martin, C. M. (2020). COVID-19 – how a pandemic reveals that everything is connected to everything else. *Journal of evaluation in clinical practice, 26*(5), 1361-1367. https://doi.org/10.1111/jep.13419
24. Laszlo, E. (1996). *The Systems View of the World: A Holistic Vision for Our Time*. Hampton Press.
25. Plsek, P. E., & Greenhalgh, T. (2001). Complexity Science: The Challenge Of Complexity In Health Care. *BMJ, 323*(7313), 625-628. https://doi.org/10.1136/bmj.323.7313.625
26. Heifetz, R. A., Grashow, A., & Linsky, M. (2009). *The practice of adaptive leadership : tools and tactics for changing your organization and the world*: [hard](1 ed.). Harvard Business Press.
27. Menakem, R. (2017). *My grandmother's hands : The bloodline of racialized trauma and the mending of our bodies and hearts* (1st ed.). Central Recovery Press.
28. Van der Kolk, B. A. (2014). *The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma*. Penguin Random House.
29. Cannon, W. B. (1933). Biocracy: Does the Human Body Contain the Secret of Economic Stabilization? *Technol. Rev*. 35, 203–206.
30. Laurence, C. (1940) Human body held best "democracy"; A Society Modeled After Its Organization Urged by Dr. Cannon Before Scientists. *New York Times*, 28 December.
31. Bloom, S. L. (2023). A Biocratic Paradigm: Exploring the Complexity of Trauma-Informed Leadership and Creating Presence. *Behavioral Sciences, 13*(5), 355.
32. Cannon, W. B. (1939). *The Wisdom of the Body, Second Edition*. New York: W. W. Norton & Company
33. Béland, D., He, A. J., & Ramesh, M. (2022). COVID-19, crisis responses, and public policies: from the persistence of inequalities to the importance of policy design. *Policy & society, 41*(2), 187-198. https://doi.org/10.1093/polsoc/puac021
34. Shanafelt, T. D., West, C. P., Sinsky, C., Trockel, M., Tutty, M., Wang, H., Carlasare, L. E., & Dyrbye, L. N. (2022). Changes in Burnout and Satisfaction With Work-Life Integration in Physicians and the General US Working Population Between 2011 and 2020. *Mayo Clinic Proceedings, 97*(3), 491-506. https://doi.org/10.1016/j.mayocp.2021.11.021
35. Bloom, S. L. and L. E. Pasquale (2023). "Organizational Presence of a Trauma-Informed Culture (OPTIC)™." Retrieved April 17, 2023.
36. Edmondson, A. C. (2019). *The fearless organization: Creating psychological safety in the workplace for learning, innovation, and growth*. New York: Wiley.
37. Purtle, J. (2020). Systematic Review of Evaluations of Trauma-Informed Organizational Interventions That Include Staff Trainings. *Trauma, Violence & Abuse, 21*(4), 725-740. https://doi.org/10.1177/1524838018791304
38. Hopper, K. (2010). Taking Inequality's Measure: Poverty, Displacement, Unemployment and Mental Health. In *Principles of Social Psychiatry* (pp. 341-369). John Wiley & Sons, Ltd. https://onlinelibrary.wiley.com/doi/abs/10.1002/9780470684214.ch27
39. Bloom, S. L., & Farragher, B. (2013). *Restoring Sanctuary: A New Operating System for Trauma-Informed Systems of Care*. Oxford University Press.
40. Bloom, S. L. (2013). *Creating Sanctuary: Toward the Evolution of Sane Societies, Second Edition*. Routledge.
41. Bloom, S. L., Yanosy, S, Kutzler, K. (forthcoming) Creating Presence: Trauma-Informed Organizational Training. In S. L. Bloom, C.R. Figley, & J. M. Cook, (Eds). *The Oxford Handbook of Trauma-Informed Social Health*. New York: Oxford University Press.
42. Peter, S. (2020). What Is Health? https://doi.org/10.7551/mitpress/11472.001.0001
43. O'Mara-Eves, A., et al., (2015). The effectiveness of community engagement in public health interventions for disadvantaged groups: a meta-analysis. *BMC Public Health, 15*(1): p. 1--129.
44. Wallerstein, N., et al. (2017), Community-Based Participatory Research for Health : Advancing Social and Health Equity. 3rd ed. Newark: John Wiley & Sons, Incorporated.

45. World Health Organization. (2022). *Guidelines on mental health at work*. https://www.who.int/publications/i/item/9789240053052
46. Shay, J. (2014). *Moral injury. Psychoanalytic Psychology, 31*(2), 182–191. https://doi.org/10.1037/a0036090
47. Smith, C. P., & Freyd, J. J. (2014). Institutional betrayal. *American Psychologist, 69*(6), 575–587. https://doi.org/10.1037/a0037564
48. Zehr, H. (2015). *The little book of restorative justice* (Revised & updated). Good Books.
49. Immordino-Yang, M. H. (2016). *Emotions, learning, and the brain: Exploring the educational implications of affective neuroscience*. W. W. Norton & Company.
50. Lieberman, M. D. (2013). *Social: Why our brains are wired to connect*. Crown.
51. National Academies of Sciences, Engineering, and Medicine. (2019). Taking action against clinician burnout: A systems approach to professional well-being. *National Academies Press*. https://doi.org/10.17226/25521
52. National Academy of Medicine. (2022). *National plan for health workforce well-being*. https://nam.edu/publications/national-plan-for-health-workforce-well-being/
53. Aarons, G. A., Ehrhart, M. G., Farahnak, L. R., & Sklar, M. (2017). Leadership and organizational change for implementation (LOCI): A randomized mixed method pilot study of a leadership and organization development intervention for evidence-based practice implementation. *Implementation Science, 12*(1), 1–15. https://doi.org/10.1186/s13012-017-0592-y
54. Fixsen, D. L., Blase, K. A., Metz, A., & Van Dyke, M. (2018). Statewide implementation of evidence-based programs. *Exceptional Children, 84*(3), 297–315. https://doi.org/10.1177/0014402918758690
55. Halfon, N., Forrest, C. B., Lerner, R. M., & Faustman, E. M. (2018). *Handbook of life course health development*. Springer. https://doi.org/10.1007/978-3-319-47143-3
56. Shonkoff, J. P., Slopen, N., & Williams, D. R. (2021). Early childhood adversity, toxic stress, and the impacts of racism on the foundations of health. *Annual Review of Public Health, 42*, 61–78. https://doi.org/10.1146/annurev-publhealth-090419-101940
57. Head, B. W., & Alford, J. (2015). Wicked problems: Implications for public policy and management. *Administration & Society, 47*(6), 711–739. https://doi.org/10.1177/0095399713481601
58. Room, G. (2016). *Agile actors on complex terrains: Transformative realism and public policy*. Routledge.
59. de Beaumont Foundation. (2022). *PH WINS 2021: Rising stress and burnout in public health*. https://debeaumont.org/phwins/2021-findings/stress-and-burnout/
60. Shanafelt, T. D., Dyrbye, L. N., West, C. P., et al. (2023). Organizational strategies to improve professional well-being. *Mayo Clinic Proceedings, 98*(2), 353–366. https://doi.org/10.1016/j.mayocp.2022.10.006