

High Alert Institute, Inc.

Biannual Report

2022 - 2023



Board of Directors
2-20-2024

A Message from Leadership

Welcome to the High Alert Institute's 2022 – 2023 Biannual Report. The past two years have been a time of listening, learning, and leveling up to leverage our legacy and lean into our core principles.

At the beginning of 2022, our new board saw the shift in donor support across the nonprofit sector and the post-pandemic increase in state, national, and international nonprofit regulation. Guided by our All Hazards, One Health, One Nature (AHOHN) framework, our board set forth a five-year plan to

- Align our programs, projects, and impacts with the United Nations Sustainable Development Goals (SDGs) as well as the for-profit sector's Environmental, Social, and Governance (ESG) Pillars.
- Expanded our reach and impact through partnerships and collaborations
- Secure our future by establishing a sustainable and resilient financial program incorporating philanthropic entrepreneurship, venture philanthropy, large-gift donor relationships, small donor development, in-kind corporate support, and foundation/grant programs.
- Update our digital presence, brand awareness, and impact reputation.

Through consultation with experts in nonprofit management, donor development, reputation marketing, digital storytelling, and regulatory compliance, the Institute has become a top-rated nonprofit charity and international NGO with platinum and four-star (top) scores for environmentalism, social responsibility, governance, transparency, sustainability, and impact.

From advancing environmental justice and sustainability to providing vital support for animal welfare and pioneering the future of space healthcare, our work is a testament to what can be achieved through a holistic and integrated approach. This year, we were honored to be recognized by the White House and the U.S. Department of Health and Human Services for our commitment to decarbonization and climate resilience. Our successes are built on the dedication of our team, the generosity of our supporters, and the collaborative spirit of our partners. As we look to the future, we are more committed than ever to empowering communities and creating a resilient, equitable, and sustainable world for all.

Thank you for being a part of our journey.

Allison A. Sakara, NP, MSN, RN, PHRN
Co-Founder & Executive Director

Maurice A. Ramirez, DO, PhD
Co-Founder & Chairperson of the Board

Vision, Mission, and Values

Our Vision

To empower individuals, families, communities, businesses, and organizations to achieve Resilience, Innovation, Sustainability, Equity, and Empathy – to RISE² to every challenge.

Our Mission

Our mission is focused on programs and projects united by an All Hazards, One Health, One Nature (AHOHN) framework for the benefit of all peoples, animals, and environments. We are dedicated to serving all populations, with a particular focus on disadvantaged, historically marginalized, and underserved communities, through education, innovation, preparedness, and sustainability.

Our Values

1. **Preparedness:** Equipping people and organizations with the knowledge and resources to face challenges head-on.
2. **Equity:** Ensuring health equity, literacy, and access to resources for all, regardless of location or circumstances.
3. **Collaboration:** Building strong partnerships and networks to amplify impact and foster resilience.
4. **Innovation:** Leveraging emerging technologies and creative solutions to address global challenges.
5. **Sustainability:** Promoting environmental justice and sustainable practices to protect our planet for future generations.
6. **Education:** Providing evidence-based, curated resources to empower informed decision-making and readiness.
7. **Recovery:** Supporting communities in rebuilding and thriving after disasters.
8. **Compassion:** Advocating for the well-being of all living beings, including humans, animals, and plants.

Our History

Our roots are in disaster response, where, for over two decades, we have worked with Federal Partner Agencies to improve disaster readiness and mental wellness for frontline workers. This experience gave us a deep appreciation for the interconnected health and security of all people, animals, plants, and habitats.

Following the COVID-19 pandemic, we pivoted to a post-pandemic approach, expanding our mission to include animal welfare and technological solutions for the climate crisis. Headquartered in Lake Wales, Florida, we have evolved into a multi-faceted organization with four distinct branches, each contributing to a more resilient and sustainable future under our unified AHOHN framework.

2002: Our All-Hazards Mission Begins

In the wake of the 9/11 attacks, the Institute was formed as Disaster Life Support of Florida, focusing on preparing frontline workers and hospital systems to respond to disasters of all types.

2005-2009: Expanding Reach and Expertise

- Training expanded across North America, and the organization was renamed High Alert.
- Disaster Behavioral Health courses were launched, and academic partnerships were formed to expand services to public health and policymakers.
- Pandemic Preparedness courses were added to the curriculum, and international training programs were introduced.

2010: Haiti Earthquake Response

The Institute deployed to Carrefour, Haiti, to re-establish supply chains and deliver \$18.4 million in healthcare equipment and supplies. Post-response, the Institute assisted the Clinton Bush Fund with the Haiti Recovery Plan.

2011-2019: Transition to Sustainability

- The Institute became a 501(c)(3) nonprofit charity and transitioned to web-based learning.
- Sustainability projects began, including the installation of solar PV systems and the development of SMART ventilation systems.
- The Institute achieved recognition for its renewable energy advancements, becoming the most energy-efficient facility in North America through the use of disaster-resilient green energy technologies.

2020-2023: Innovation and Global Impact

- Our volunteer subject matter experts assisted in the search for repurposed antiviral treatments to address the COVID-19 pandemic. We reviewed and analyzed over 250,000 scientific articles in 4 months, becoming one of only two teams to identify ritonavir as a necessary component of COVID-19 treatment.

- The AHOHN framework was formalized, emphasizing the interconnectedness of human, animal, and environmental health.
- The Institute achieved recognition for environmental justice and climate resilience, including programs in healthcare sustainability and waste-to-energy technologies.
- Collaborations with global organizations led to the development of an AI-powered digital health ecosystem and drivers of health big data analysis initiatives.

2022 – 2023 Impact & Highlights

This year marked a period of substantial achievement across all our operational branches, demonstrating the power of our integrated AHOHN framework.

Climate and Sustainability Leadership

- **White House Recognition:** On December 3, 2023, at the UN Climate Change Conference (COP28), the White House and HHS recognized the Institute for our public commitment to decarbonizing operations and improving health resilience in the face of climate change.
- **Carbon Negativity:** Our Florida facility achieved a new standard in carbon negativity, repaying to the grid all power used since renovations began in 2014. Additionally, our facility recycles over 95% of all solid and liquid waste.
- **Renewable Energy:** The Good4Planet Project now produces over 4 MWh of renewable energy each month, contributing to a cleaner grid.

Education and Outreach

- **Global Readership:** Our publications reached over 1.2 million readers, with more than 100 articles distributed across 200 outlets.
- **Policy Impact:** Position papers authored by the Institute were recognized by the UN Climate Change Conference, the Environmental Protection Agency (EPA), and the Department of Health and Human Services (HHS).
- **Community Engagement:** We responded to numerous federal Requests for Information (RFIs) from agencies including the CDC, DOJ, and FEMA, contributing expert insights on sustainability and climate resilience.

Innovation and Technology

- **Technology Transfer:** After a year of preparation, education, and regulatory compliance actions, the Institute became a qualified technology transfer organization and registered with the US IRS to receive intellectual property as tax deductible donations.
- **OHANA Alliance:** Through the One Health And Nature Alliance (OHANA), we advanced our SCWOR/SCCO2T waste-to-energy and waste-to-water system design. This initiative is central to our proposed Space Act Agreement with NASA.
- **ALOHA Alliance:** The Advanced Learning One Health Alliance (ALOHA) was established as a joint venture to develop software solutions that improve resilience.

Key projects include a mental wellness app, gamified educational platforms, and the ESDoH+G Big Data Project to analyze health drivers.

- **Space Healthcare & AI Informatics:** Our AI-DIMES and SHIP-WG working groups made significant strides in defining frameworks for healthcare in austere and extraterrestrial environments. The Mapped Austere Healthcare Utility (MAHU) project was authorized to develop and test these models in real-world disaster operations.

Animal Welfare

- **National Rescue Network:** Our Aquatic Exotic Animal Mutual Aid network grew to include all 30 regional Koi rescues and shelters across North America. We coordinated 12 koi rescues nationally through our mutual aid network, facilitating rehomings in multiple states.
- **Shelter Operations:** Our Lake Wales, Florida shelter now provides expert care for nearly 200 non-native ornamental and exotic aquatic animals.
- **Behavioral Health Support:** We developed and deployed a specialized training program for veterinary professionals on suicide prevention and behavioral health through our partnership with Not One More Vet.

Long-Term Resilience Project Reports

Resilience Project Report #1:

Resilient People/Resilient Society – Psychological First Aid Training Program

The High Alert Institute's Psychological First Aid (PFA) and Skills for Psychological Recovery (SPR) training program addresses the critical need for Disaster Behavioral Health (DBH) to foster resilience among responders, survivors, and communities. Behavioral health is essential for overall wellness and the ability to cope with risks, shocks, and stressors, especially during disasters. The program aims to fill gaps in DBH training, enabling communities and responders to better manage mental health challenges.

Key Objectives:

- Develop a four-level DBH course series (Awareness, Responder, Outreach, Train-the-Trainer) based on PFA and SPR best practices.
- Incorporate flexibility for population-specific needs and emerging behavioral health science.
- Train responders to support their communities, colleagues, and themselves while fostering resilience.

Achievements: Since 2006, nearly 20,000 individuals across diverse professions, including first responders, healthcare workers, teachers, and animal welfare professionals, have been trained. The program's newest series, launched in 2023 for the animal welfare community, successfully intervened in post-traumatic self-harm risks following a mass shooting incident.

Challenges: Despite the evident need, funding for DBH training has been limited, with most agencies unable to prioritize it in their budgets. Training is often pursued outside of work hours, further limiting accessibility.

Impact: The program has improved coping capacity, empathy, and disaster recovery for individuals and communities. It has also enhanced workplace productivity and attendance while reducing injury risks. Short-term benefits include increased wellness, while long-term impacts include reduced risks of trauma-induced stress injuries.

Future Plans: The Institute plans to expand access to the training series through its website and partner platforms, contingent on funding. Partnerships with nonprofits aim to broaden deployment of DBH and resilience programs.

Takeaways: PFA and SPR-based training is a cost-effective, impactful tool for supporting DBH and resilience. However, insufficient funding and buy-in hinder its widespread implementation, leaving critical needs unmet.

Conclusion: DBH training is vital for fostering resilience at all levels—individual, community, and national. It equips responders and communities to better manage the mental health challenges posed by disasters, risks, and stressors, ensuring long-term recovery and well-being.

Resilience Project Report #2:

Resilient Built Environments – Wind Turbine Multi-Substrate Noise Mitigation

The High Alert Institute's Wind Turbine Noise Mitigation project addresses concerns about noise from wind turbines, which can cause annoyance, sleep disturbances, and health impacts. The project aimed to reduce noise levels to meet World Health Organization (WHO) standards (below 45 dBA), using a multi-substrate approach to mitigate multi-modal noise sources from wind turbines and monopole towers.

Key Achievements:

- Developed a cost-effective (\$2,500) noise mitigation system using common off-the-shelf (COTS) technologies.
- Reduced noise levels significantly, achieving WHO-recommended dBA levels at various distances.
- Demonstrated durability and effectiveness, with the system projected to last over 30 years without significant degradation.

Challenges:

- Unique sound conduction and amplification properties of wind turbines required a multi-modal approach with targeted materials.
- Lack of reliable certifications for equipment and manufacturers slowed planning and deployment.

Impact and Benefits: The system reduced noise from mechanical vibrations, electrical vibrations, and tower resonance, achieving substantial noise reductions at 1 foot, 30 meters, and 60 meters. It also decreased vibration-related equipment fatigue, reducing maintenance needs and costs. Over seven years, the system saved \$1,000 in maintenance costs and is expected to pay for itself within this timeframe.

Health and Environmental Benefits:

- Short-term: Reduced noise pollution exposure and improved mental wellness.
- Long-term: Supported public health, mitigated chronic noise pollution illnesses, and enhanced climate resilience.
- Demonstrated compatibility of wind energy systems with environmental stewardship and habitat preservation.

Future Plans: The Institute plans to license its noise mitigation system for utility-grade wind energy systems, both nationally and internationally, highlighting its scalability and cost-effectiveness (1-2% of total system cost).

Takeaways: The project proved that wind turbine noise can be mitigated affordably and effectively, meeting health and environmental standards. It also demonstrated that noise mitigation reduces equipment fatigue, lowering maintenance costs and enhancing system longevity. This approach supports the integration of wind energy into sustainable and resilient conservation efforts.

Our Team and Board

Our success is driven by a multidisciplinary team of over 170 experts, including disaster responders, clinicians, educators, and innovators. The Institute is guided by a dedicated Board of Directors, whose collective experience in disaster medicine, global public health, veterinary science, data science, and technology governance shapes our strategic direction.

Co-Founders:

- **Allison A. Sakara, NP, MSN, RN, PHRN:** Executive Director
- **Maurice A. Ramirez, DO, PhD:** Chairperson of the Board

Board of Directors:

- Heidi P. Cordi, MD, MPH, MBA
- Veronica Pardini, DVM, CertAqVet
- David Billingsley, BS
- Andrea Keener, PhD, LMHC, MCAP
- Gregory Santa Maria
- Amy Lynn Walters, MPH, RAC
- Zachary Walters, MS

Our Programs and Projects

The High Alert Institute operates through four synergistic branches, each with a distinct focus unified under the AHOHN framework.

1. AHOHN Education & Publishing

This branch is our voice, translating complex science into accessible, evidence-based content. Through our Advanced Learning One Health Alliance (ALOHA) initiative, we are developing gamified education and a mental wellness app to combat misinformation and

address healthcare illiteracy. Our upcoming AI-powered project, codenamed LET-CAI, aims to deliver verified truth to a global audience.

2. Aquatic Animal Welfare & Mutual Aid

This branch provides direct care and coordinates a national mutual aid network for freshwater aquatic animals. Beyond rescue and rehoming, we offer disaster readiness planning for pet owners and a directory of rescue resources, ensuring the safety of these vulnerable animals during crises.

3. Environmental Stewardship & Drivers of Health

Focused on the intricate links between environmental factors and health, this branch leads pioneering projects in renewable energy, indoor air quality, and big data health analysis. The Environmental, Socioeconomic & Genomic Drivers of Health (ESDoH+G) Big Data Project, a cornerstone of our ALOHA alliance, seeks to provide location-specific data to inform healthcare research, policy, and education.

4. AHOHN Innovation & Technology

As our R&D engine, this branch develops and commercializes technology to solve critical infrastructure challenges. Through the One Health And Nature Alliance (OHANA), we are advancing waste-to-energy technologies. With ALOHA, we are creating clinical decision support tools and disaster planning software. This division also houses our forward-looking work in space healthcare, including:

- **AI-DIMES Working Group:** Defining an ecosystem of AI-based software to meet the healthcare needs for private spaceflight and habitation using commercial-off-the-shelf (COTS) technology.
- **SHIP-WG (Space Healthcare Policy Working Group):** Establishing a potential regulatory framework for healthcare, including licensing and oversight, for private activities beyond Earth's atmosphere.
- **MAHU (Mapped Austere Healthcare Utility) Project:** A project designed to implement and test a machine-learning-based medical expert system (ML-DIMES) in real-world disaster scenarios, serving as an analogue for space healthcare.

Partnerships and Collaborations

Our impact is amplified through strong alliances with diverse organizations across the public, private, and non-profit sectors. Key collaborations and partners include:

- **Government & Research:** NASA Glenn Research Center, Department of Energy, Sandia National Labs, Environmental Protection Agency (EPA), Department of Health and Human Services (HHS), National Institute of Environmental Health Sciences (NIEHS).
- **Humanitarian & Health:** My Healthy Globe (MHG), Force for Health (FFH), Not One More Vet, One Health Lessons (OHL), International Space Court Foundation.
- **Corporate & Technology:** Solis Power, LLC, Five Bugles Institute, LLC, INSP Group, Google, Amazon Web Services (AWS), HandzIn, Automated Clinical Guidelines, Inc.

- **Academic & Foundations:** University of Lancashire (UK), Global Health Impact Network, International Space Court Foundation.

These relationships are instrumental in developing projects like the OHANA waste-to-energy system, the ALOHA educational platforms, and our AI-DIMES and SHIP-WG initiatives.

Recognition and Awards

The High Alert Institute is honored to be recognized by leading charity evaluators and organizations for our transparency, impact, and fiscal responsibility. Our accolades include:

- **White House & HHS Pledge Recognition:** Acknowledged for our commitment to the Health Sector Climate Pledge.
- **Charity Navigator:** Four-Star Rating
- **GuideStar:** Platinum Seal of Transparency
- **GreatNonprofits:** Top-Rated Nonprofit
- **1% for the Planet:** Approved Nonprofit Partner
- **Adopt-a-Pet:** Approved Shelter & Approved Rescue

These recognitions reflect our unwavering commitment to our mission and to our stakeholders. We are also proud that our work has been publicly recognized by the **United Nations**, the **EPA**, and **HHS** for our contributions to sustainability and climate resilience.

Financial Overview

The High Alert Institute is committed to the highest standards of transparency and financial accountability. As a 501(c)(3) nonprofit organization, we ensure that every donation and grant is used effectively to advance our mission. Our strong financial health reflects prudent management, the trust of our supporters, and our dedication to creating sustainable impact.

We are proud to hold top ratings from leading charity evaluators, including a Platinum Seal of Transparency from Candid (GuideStar) and a four-star rating from Charity Navigator. These ratings affirm our commitment to fiscal responsibility and operational excellence.

Our revenue is diversified across individual contributions, corporate sponsorships, foundation grants, and licensing fees from our intellectual property. This model supports our operational stability and allows us to invest in long-term, high-impact projects.

(Note: The complete, audited financial statements and IRS Form 990 are available for public viewing on our Transparency page at highalertinstitute.org.)

A Look to the Future

As we move forward, the High Alert Institute will continue to build on the momentum of the past year. Our focus remains on operationalizing the AHOHN framework to create scalable, sustainable, and equitable solutions. Key priorities include securing funding for the TRAIN platform to expand our educational reach, finalizing the Space Act Agreement with NASA, and advancing the development and real-world testing of our ALOHA, OHANA, and MAHU

projects. We are confident that by staying true to our vision and values, we will continue to make a meaningful difference in the world, on Earth, and beyond.

Call to Action

Your support is vital to our mission and to our vision for the future. As we prepare to expand our programs, scale our projects, and increase our impact, we invite you to join us in shaping a more resilient and equitable world. Whether through donations, partnerships, or volunteering, you help us strengthen preparedness, resilience, sustainability, and impact for communities, animals, and our shared environment.

