

Long-term environmental monitoring sensors installed on Gove Peninsula

3 September 2025

In a major step forward for community-led environmental health, the first long-term environmental monitoring network for the Gove Peninsula has been installed through the Air in East Arnhem project.

This is a Yolŋu-led project delivered through a partnership between Miwatj Health Aboriginal Corporation and Menzies School of Health Research along with AirHealth and various local community groups.

The environmental sensors have been installed at Miwatj Health clinics in Nhulunbuy, Gunyajarra and Yirrkala. The sensors measure air quality in relation to particulate matter (including dust and other particles), air pressure, temperature, and humidity. Data is publicly accessible through the AirRater app, giving individuals, health services, and emergency responders real-time access to environmental health data.

With the help of Yolŋu citizen scientists, the research team will continue to gather environmental and health data over the next 12 months to better understand how the climate impacts communities.

Yolŋu communities have shared insights and helped document local environmental health concerns and informed the development of culturally appropriate strategies to reduce health risks associated with poor environmental conditions.

Poor environmental conditions have been linked to respiratory and cardiovascular diseases, kidney problems, diabetes, mental health disorders, and poor perinatal outcomes. The installation of these sensors supports the gathering of baseline environmental quality data, to provide a clearer picture of the environmental stressors affecting remote communities.

This work is supported by the national Healthy Environments and Lives (HEAL) Network and funded through the Australian Government's Medical Research Future Fund (MRFF) Indigenous Health Research Fund.

Learn more about the Air in East Arnhem project on the [Menzies School of Health Research website](#).

Quote attributable to Menzies Air in East Arnhem Project Coordinator, Amy Le Compte:

"This project is about giving the community the tools and knowledge to better understand and respond to changes in our environment. By making this data publicly available via the AirRater app, we are empowering Yolŋu, along with all residents, health professionals, and public health responders in East Arnhem, to make informed decisions that protect health and wellbeing."

Quote attributable to Miwatj Health Research and Cultural Engagement Officer, Vanessa Marika:

"This is something different and new for us to have these monitors in the Peninsular region. It is good for Yolŋu to know about this and how the changes in the weather affects us. I was surprised to find out that these monitors can collect this data. I am excited about what this means for us Yolŋu and how we can teach young people about protecting ourselves from the heat in the future."

Quote attributable to Miwatj Health Research Manager, Dr Bronwyn Rossingh:

"Having these clinic-based sensors monitoring the air we breathe on the Gove Peninsula will provide critical data that may help guide us on seasonal health impacts as well as what improvements, services and infrastructure we may need in the future to minimise heat and other environmental effects to promote healthier livelihoods for Yolŋu."

Quote attributable to Menzies Senior Research Officer and Air in East Arnhem Data Scientist, Dr Rishu Thakur:

"Remote Australia lacks sufficient environmental monitoring, which causes major gaps in understanding how climate affects health. As a result, the climate-related health challenges faced by remote communities are often underrepresented or inaccurately generalised from urban populations. This project is a vital step toward filling this gap by collecting environmental data to provide a clearer understanding of the environmental stressors affecting remote communities."

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Media Contact

Phone: (08) 8946 8680 | Email: media@menzies.edu.au

Available Images: The following images are available for use – please contact media@menzies.edu.au to access the images.



Image 1: An example of the environmental sensor installed in Nhulunbuy.



Image 2: The Air in East Arnhem team in Nhulunbuy: Amy Le Compte, Menzies Project Coordinator; Vanessa Marika, Miwatj Health Researcher; Dr Bronwyn Rossingh, Miwatj Health Research Manager and Steve Rossingh, Miwatj Health CEO.



About Menzies School of Health Research

Menzies is at the forefront of health and medical research dedicated to improving the lives of peoples across the Northern Territory, Asia Pacific and beyond. By joining scientific knowledge with community wisdom, Menzies strives to Close the Gap, and shape a healthier, more equitable future where communities can thrive.

About Miwatj Health Aboriginal Corporation

Miwatj Health Aboriginal Corporation (MHAC) is an independent Aboriginal Community Controlled Health Organisation (ACCHO) shaping a stronger future for Yolŋu. Established in 1992, Miwatj Health is one of the largest Aboriginal healthcare providers in Australia. We provide culturally appropriate, comprehensive healthcare services across East Arnhem Land and are committed to enabling Yolŋu-powered community health and wellbeing.