

AOTEAROA NEW ZEALAND'S ENVIRONMENTAL HEALTH STATUS: 2024

The major issues identified in EHINZ's environmental health surveillance during 2023-24

	CLIMATE CHANGE	AIR QUALITY	WATER QUALITY	INDOOR ENVIRONMENT
ENVIRONMENTAL INDICATORS (What has changed)	Most years since 2010 had more hot and fewer cold days compared to the baseline. Extreme rainfall in 2022 affected the same regions as Cyclone Gabrielle in 2023.	WHO air quality guidelines were exceeded at most stations monitoring nitrogen dioxide (NO ₂) and fine particulate matter (PM _{2.5}) in 2020.	The percentage of New Zealanders with access to registered and/or fluoridated drinking water supplies remained the same in the decade between 2011 and 2021.	Maternal smoking decreased over the past decade, with Māori rates down by 12 percentage points.
EFFECTS ON HEALTH INDICATORS	Changes to climate may increase: • Extreme weather events • certain gastrointestinal diseases • new exotic mosquitos establishing • expansion of established mosquitos.	3,300 deaths were associated with human-made concentrations of NO ₂ and PM _{2.5} in 2016, with 2,227 linked to vehicles. The light vehicle fleet is growing and ageing, with 4.6 million in 2022.	About 78% of New Zealanders on registered drinking-water supplies had access to water meeting all bacteriological, protozoal, and chemical safety requirements.	Health conditions related to poor indoor environments show extensive inequities for children. This domain consistently has the greatest inequities within the EHINZ program.
	Recent extreme weather affected the northern and central North Island, especially Northland, Auckland, Bay of Plenty, Gisborne and Hawke's Bay.	New Zealand has 25 PM _{2.5} and 12 NO ₂ monitoring stations. There are also few stations monitoring carbon monoxide (CO) and sulphur dioxide (SO ₂) levels. National reporting is limited by the few stations and restricted spatial coverage.	All monitored freshwater bathing sites in Gisborne, Hawke's Bay, and Southland regions received 'poor' grades based on their state between 2018 and 2023.	Occupational lead absorption notification rates are high for Pacific peoples, males and those living in more deprived areas.
VULNERABLE POPULATIONS AND INEQUITIES (The most affected)	The adverse effects of climate change have the greatest impact on the most socially vulnerable populations, ie. people more susceptible and/or less resilient. These include children, the elderly, different ethnic and socioeconomic groups.	Māori, Pacific, and children in more socioeconomically deprived areas have the highest medicated asthma and asthma hospitalisation rates. Asthma hospitalisations in children and childhood onset have been linked to NO ₂ .	People living in rural areas and small communities were less likely to have drinking-water that met safety standards.	Māori and Pacific children, and children in more socioeconomically deprived areas had higher hospitalisation rates for asthma and lower respiratory tract infection (LRTI) and notifications for Sudden Unexplained Death of Infant) SUDI, and meningococcal disease.
ENVIRONMENTAL HEALTH DATA	EHINZ does not collect data but analyses and interprets data from other agencies to provide intelligence on environmental health for decision-making and policy development. Our surveillance of environmental health indicators continues to be hampered by delays and the availability of high-quality and valid data.			

Further information about the EHINZ environmental health indicators programme is available at www.ehinz.ac.nz

