

The
EXTREME!
WEATHER SURVEY

Key Findings

Overview

1. *Growing Up in New Zealand* background
2. Extreme weather events in Aotearoa, New Zealand
3. The Extreme Weather Survey key findings
4. Next steps

Associate Professor Sarah-Jane Paine



Suggested citation: Gawn, J., Fletcher, B.D., Neumann, D., Pillai, A., Miller, S., Park, A., Napier, C., Paine, S.J. (2024). The impact of extreme weather events on young people and their families: Evidence from *Growing Up in New Zealand*. Auckland: Growing Up in New Zealand. DOI: [10.17608/k6.auckland.25762731](https://doi.org/10.17608/k6.auckland.25762731)

A longitudinal study for Aotearoa

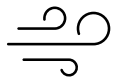


“The new study aims to create a valuable resource: for **policymakers across sectors to inform strategies to optimise children’s development; for **researchers** to gain a better understanding of the causal pathways that lead to particular developmental outcomes: for the **children and families** who take part in this study as well as for all future generations of **New Zealanders**”**

Agreed Statement of Objectives, 2009



Why investigate impacts of extreme weather events with GUiNZ?



Young people may be particularly vulnerable



Low-income households disproportionately affected



Risk of increase of existing inequities for Māori and Pacific young people



Longitudinal nature offers unique insights into psychological and mental health impacts for young people



Building on GUiNZ's existing research systems, infrastructure, experiences and relationships



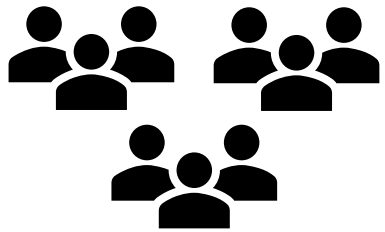


The
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Methods

Who are the cohort?

Methods



Growing Up in New Zealand cohort

6853 young people

6823 mothers



Eligible for the Extreme Weather Survey

1463 young people

1443 mothers/main caregivers



Extreme Weather Survey cohort

680 young people

817 mothers/main caregivers

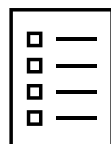


Methods



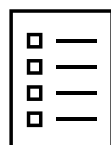
August 1 2023

September 3 2023



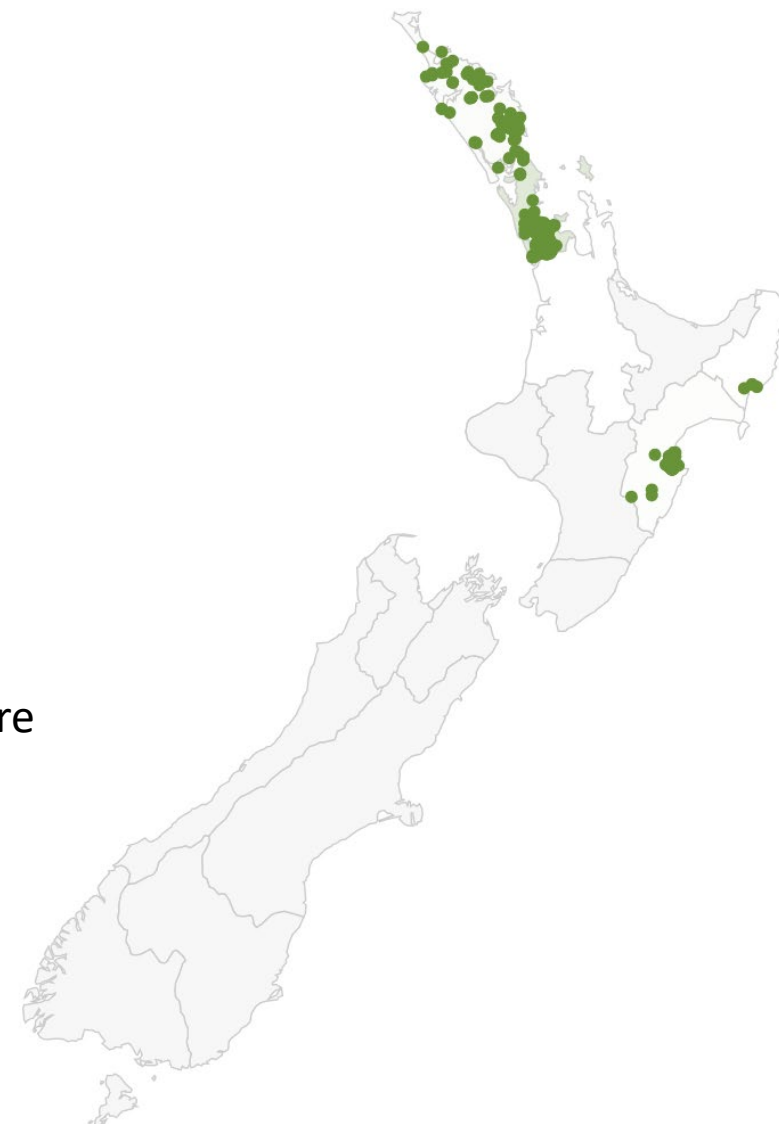
Young person

- 90 questions via online questionnaire
- 15 minutes



Mother/primary caregiver

- 237 questions via online questionnaire
- 30 minutes



How many were affected?



680 young people

“Were you affected by the floods or cyclone in January and February this year?”

1. Yes
2. No, but someone I know was
0. No



817 mothers/primary caregivers

“Was your household affected by the floods or cyclone in January and February this year?”

1. Yes
2. No, but we live in an area that was affected
0. No

Key Findings

- Who are the cohort?
- Preparedness
- Housing
- Access to services
- Schooling
- Everyday life
- Mental Health
- Physical health

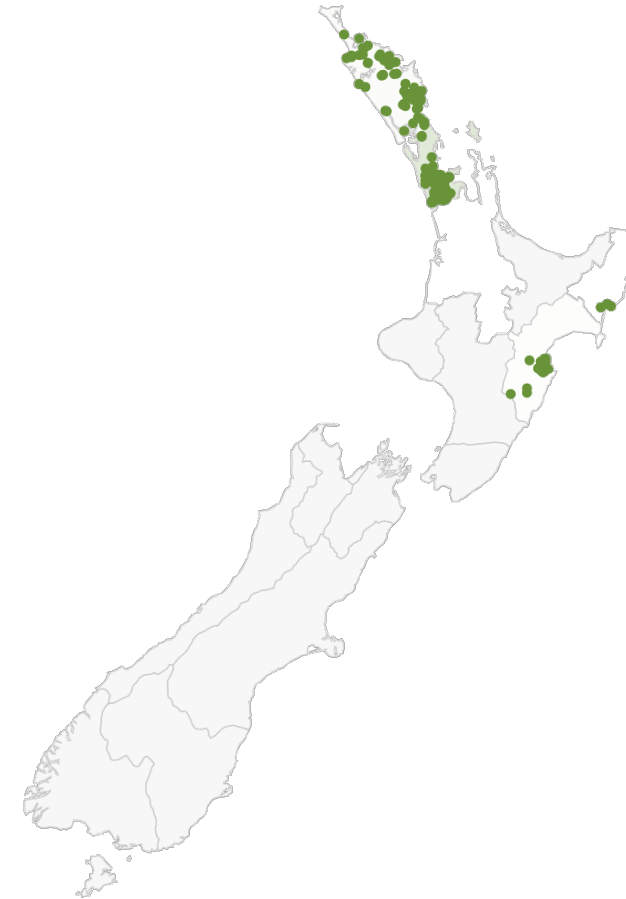


Dr Denise Neumann

Sample characteristics of young people



Region	N	% of analytical sample
Central Auckland	315	38.3
South Auckland	299	36.4
East Auckland	47	5.7
West Auckland	24	2.9
North Auckland	10	1.2
Northland	83	10.1
Hawke's Bay	40	4.9
Gisborne	<10	0.5



Sample characteristics of young people



Ethnicity	N	% of analytical sample
Māori	181	27
Pacific	231	34
Asian	65	10
MELAA/Other	18	3
Sole European	210	31

Gender	N	% of analytical sample
Cisgender boy	262	39
Cisgender girl	222	33
Transgender/non-binary/unsure	126	19

Deprivation (NZDep)	N	% of analytical sample
Quintile 1	126	19
Quintile 2	100	15
Quintile 3	95	14
Quintile 4	105	15
Quintile 5	186	27

How many were affected?



680 young people

**166 (24%)
affected**

**190 (28%)
know someone
else affected**

**324 (48%)
not affected**



817 mothers/primary caregivers

**217 (27%)
affected**

**240 (29%)
live in an
area affected**

**360 (44%)
not affected**

Preparing for extreme weather events



56% of mothers/primary caregivers reported they did not see any **information** or advice about how to prepare for the extreme weather events

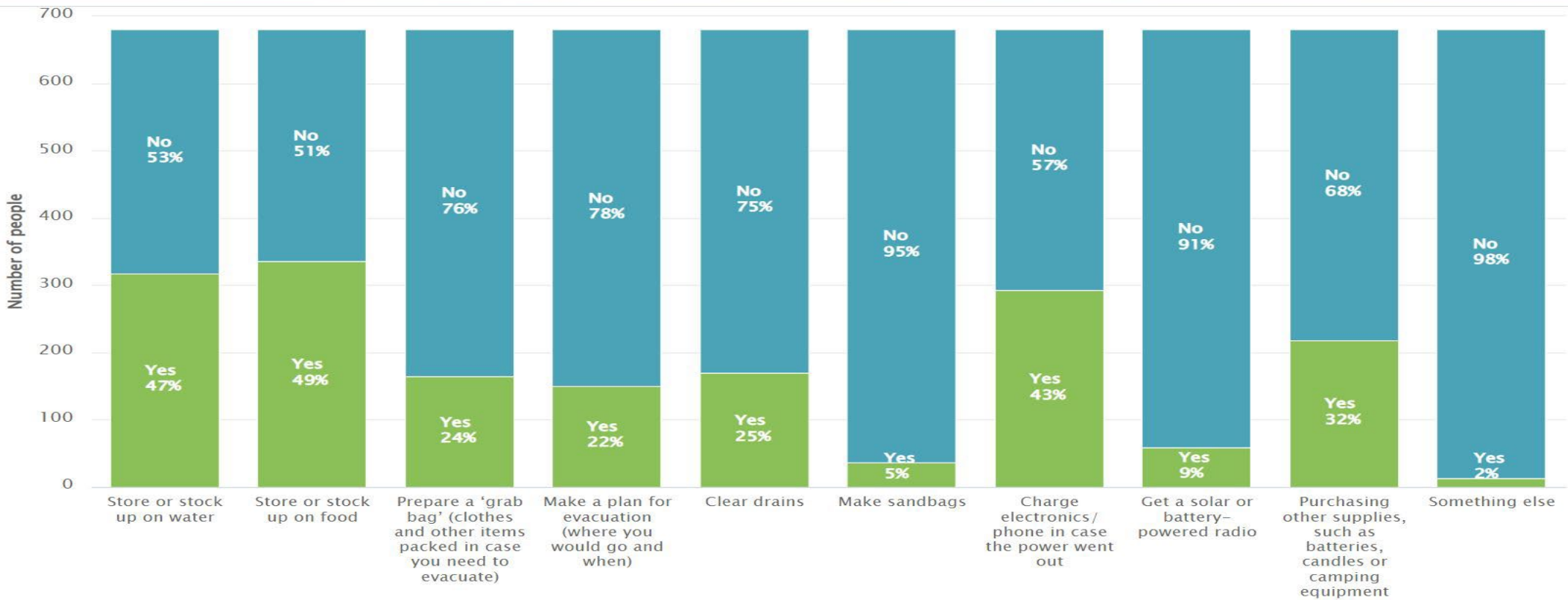


More **information** would have been preferred on:

- planning for evacuation (58%)
- preparing a grab bag (35%)
- clearing drains (34%)
- storing or stocking up water (32%)
- purchasing other supplies (32%)



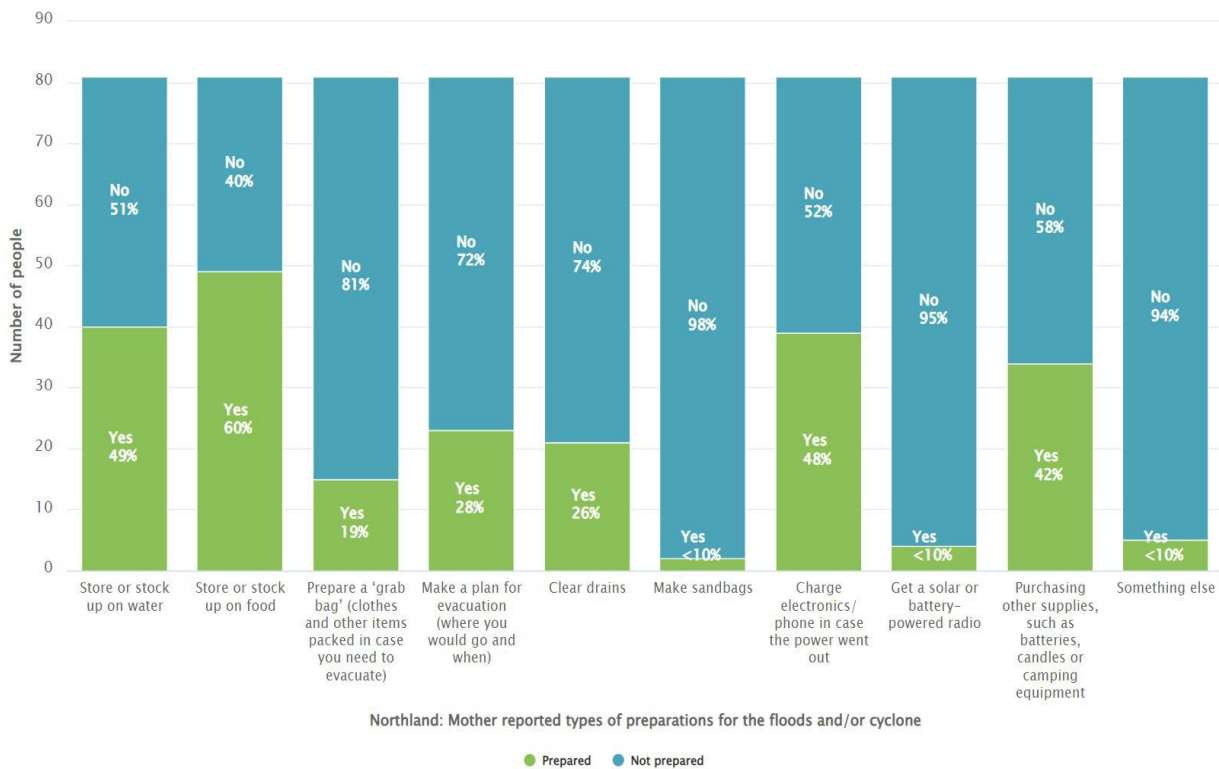
Preparing for extreme weather events



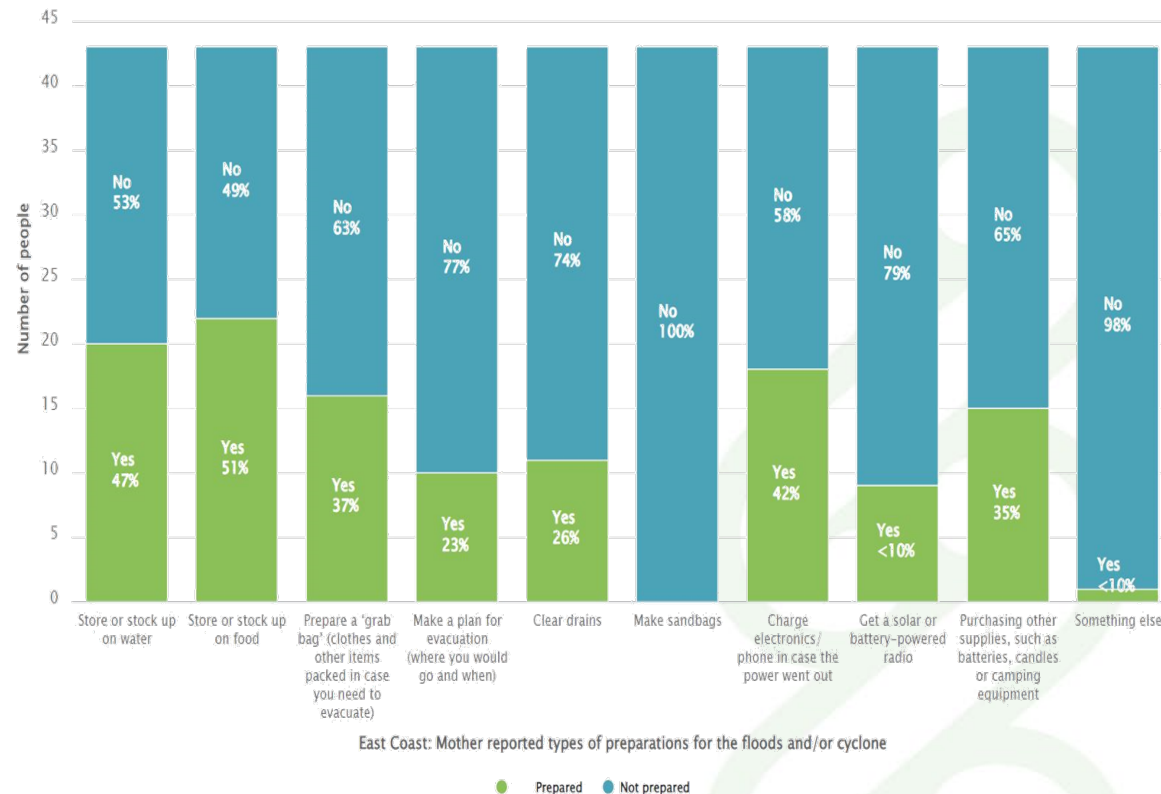
Auckland: Mother reported types of preparations for the floods and/or cyclone

● Prepared ● Not prepared

Preparing for extreme weather events: by region



Te Tai Tokerau/Northland



Te Matau-a-Māui/Hawke's Bay & Te Tai Rāwhiti/Gisborne

Young People's Voices



What do you think the Prime Minister should do to support young people who might experience a natural disaster?

“I feel we should learn about preparing for emergencies and first aid. Evacuation plan”

(Young person from Te Tai Tokerau/Northland)

“Trust your parents, and always try to stay up to date. There is always help if you ask”

(Young person from South Auckland)

“Give us younger generation the opportunity to participate and support those in need, find ways that we can as young people to help our community”

(Young person from South Auckland)

Housing: Evacuation, costs, damage



4.3% of mothers/primary caregivers reported that their family had to evacuate their home



44% were unable to live in their homes for more than one week



23% of mothers/primary caregivers said that their housing costs have increased



Housing: Evacuation, costs, and damage



27% of young people indicated their houses were damaged

46% reported their neighbourhood was damaged

11% reported their belongings were damaged

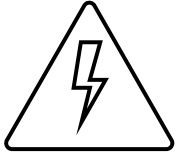
“...make a charity to raise money to repair special or significant places that have been damaged”

(Young person from Te Matau-a-Māui/Hawke’s Bay)

“...I think the government should have also hosted a fun day for families (especially children) who went through such trauma, this could include games, food, theme park rides etc. This idea would hopefully get the kids out of the house and getting their minds off things rather than watching it all unfold in front of them”

(Young person from East Auckland)

Service disruption



Many participants experienced disruptions to services: power (27%), internet (23%), mobile phone coverage (16%), water (14%)



Of these, many services were disrupted for 3 or more days



Service disruption by region

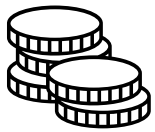


Region	Internet	Power	Mobile Phone	Water
Tāmaki Makaurau/Auckland	14% ≥3 days: 25%	16% ≥3 days: 15%	7% ≥3 days: 33%	8.8% ≥3 days: 43%
Te Tai Tokerau/Northland	63% ≥3 days: 54%	79% ≥3 days: 48%	51% ≥3 days: 48%	37% ≥3 days: 50%
Te Matau-a-Māui/Hawke's Bay & Te Tai Rāwhiti/Gisborne	91% ≥3 days: 80%	91% ≥3 days: 70%	93% ≥3 days: 76%	43% ≥3 days: 68%

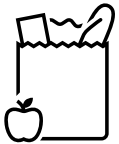
Unmet need



34% of primary caregivers reported they needed but did not receive support with **property, transport or belongings**



23% indicated they needed but did not receive **financial assistance**



21% reported they needed but did not receive support with **food, water, or clothes**



17% reported they needed but did not receive **medical or mental health care**



Young People's Voices



“More support services to help young people deal with the trauma of being affected by natural disasters, also provide the basic needs for free, like accommodation, food, clothing and appropriate foot wear, bedding etc”

(Young person from South Auckland)

“To create a fund for young people, to encourage them to create and design what they need during a natural disaster. Just like a flood relief fund, there should be one for the youth also”

(Young person from South Auckland)

“Ensure communications stay working”

(Young person from Te Tai Tokerau/Northland)

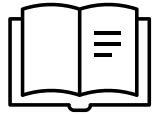
Key Findings

- Who are the cohort?
- Preparedness
- Housing
- Access to services
- Schooling
- Everyday life
- Mental Health
- Physical health

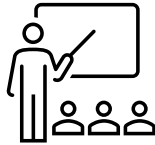


Dr Ben Fletcher

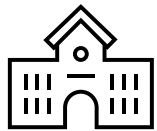
School



67% of young people were delayed from starting school

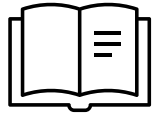


82% of young people had time off school



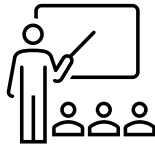
96% of young people did not have to change schools or move school buildings

School



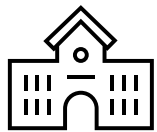
67% of young people were delayed from starting school

- Auckland (70%), Northland (56%), Hawke's Bay & Gisborne (53%)



82% of young people had time off school

- Auckland (82%), Northland (80%), Hawke's Bay & Gisborne (98%)



96% of young people did not have to change schools or move school buildings

- Auckland (96%), Northland (97%), Hawke's Bay & Gisborne (98%)

Young People's Voices



“Make sure kids can get home if there is bad weather while at school especially if parents can't pick them up. Or if kids can't get home there is plan in place to be looked after at school and they feel safe”

(Young person from Te Tai Tokerau/Northland)

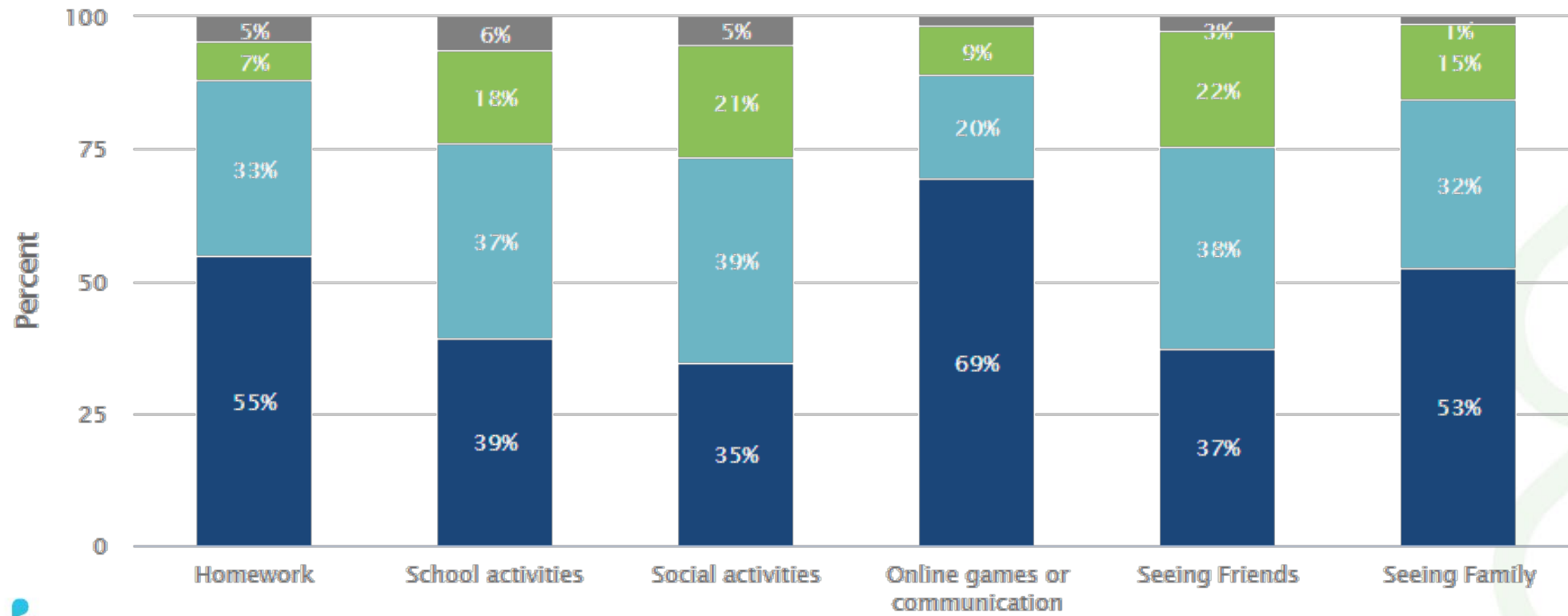
“Provide support within schools, making sure that teachers or adults check up on the young people to ensure that they're doing alright”

(Young person from Central Auckland)

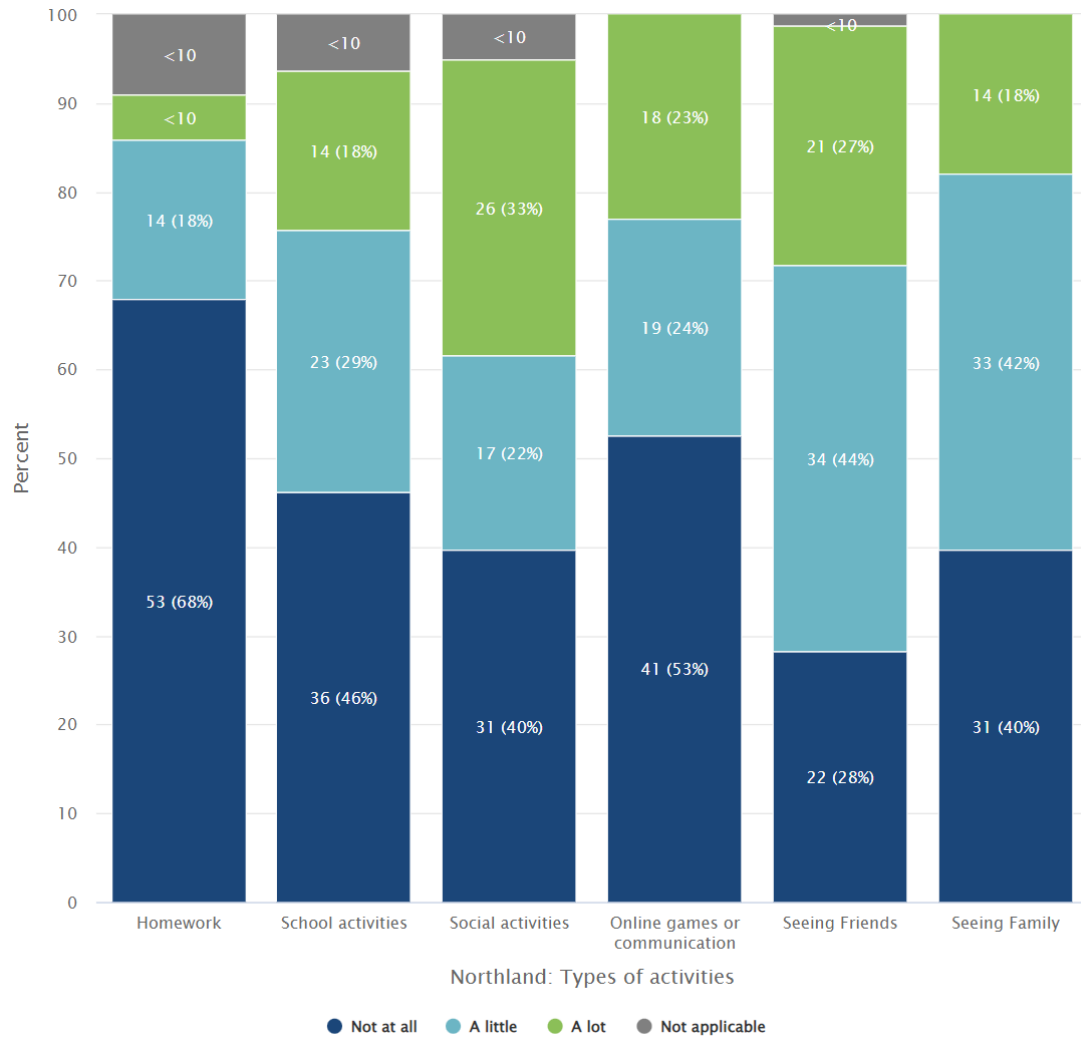
Everyday life



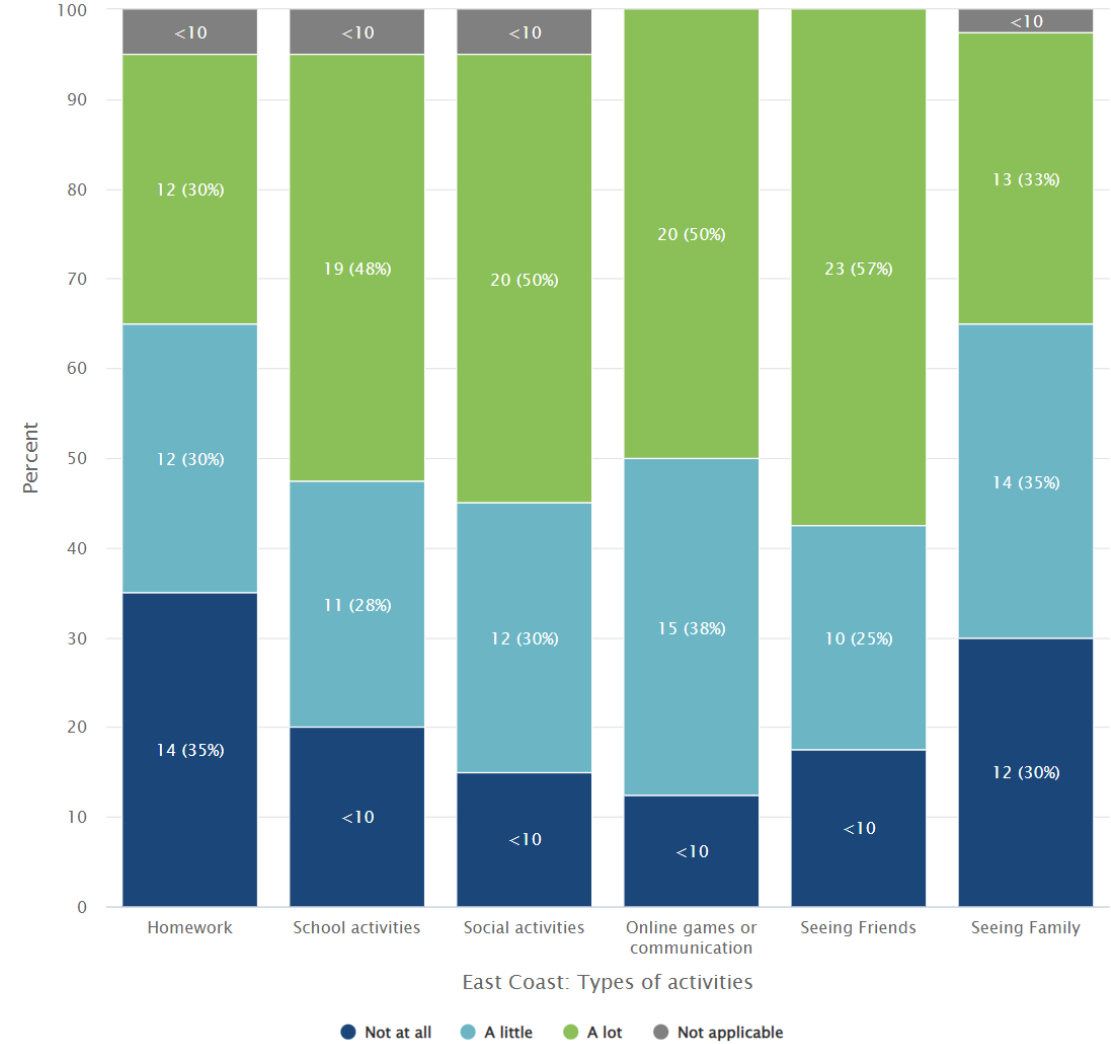
Activities interrupted or stopped during term 1 because of the flooding or cyclone



Everyday life

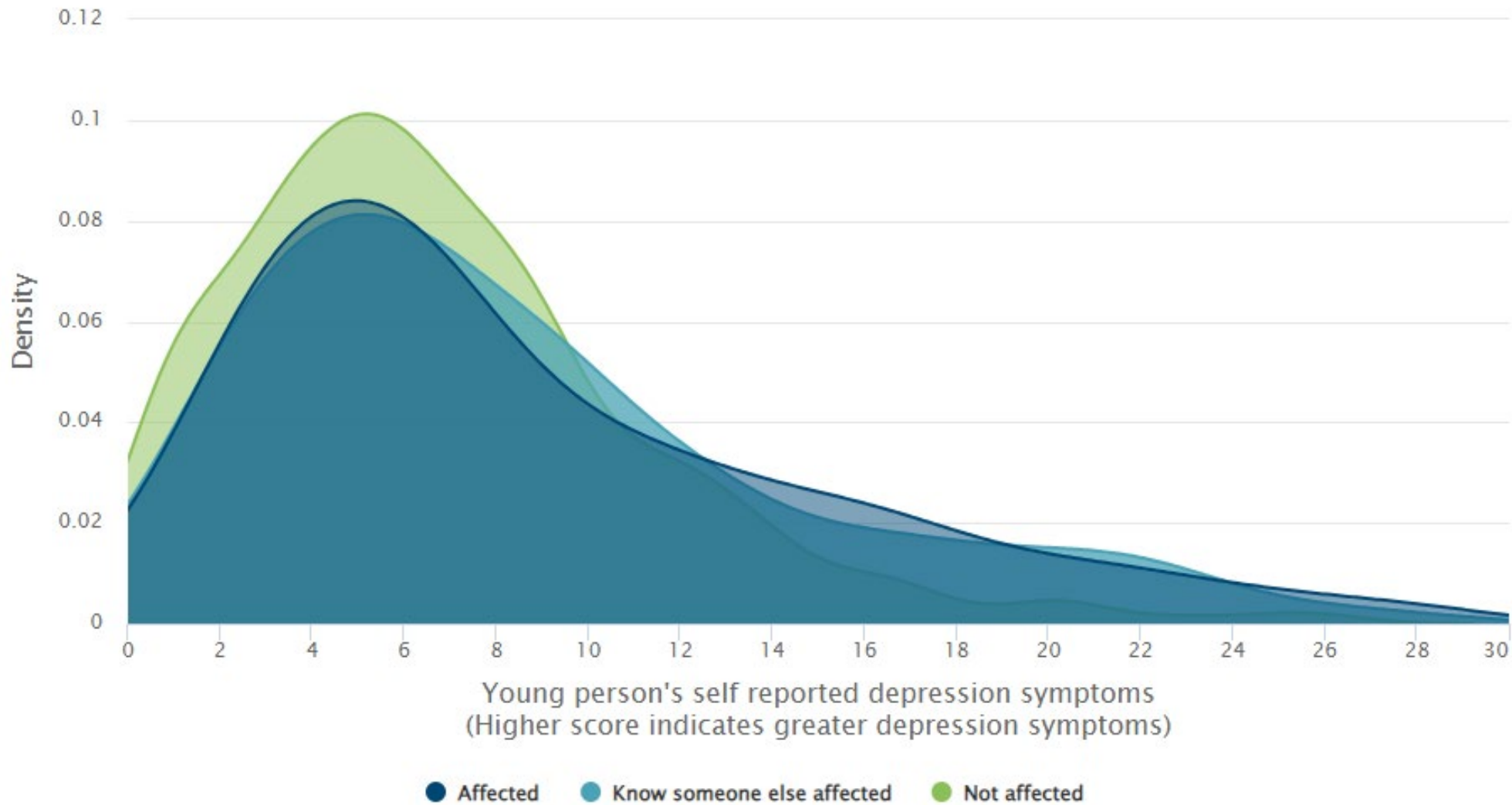


Te Tai Tokerau/Northland

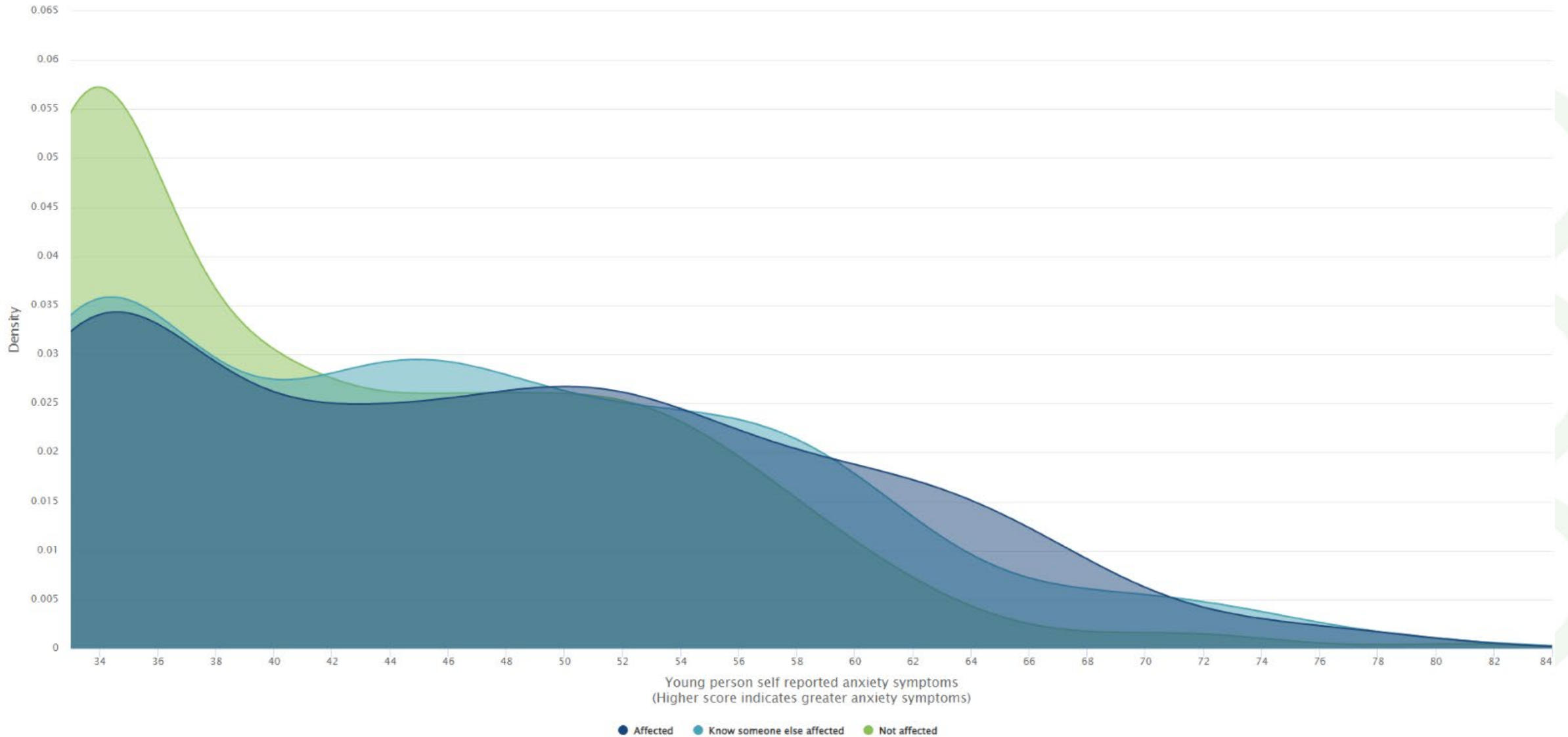


Te Matau-a-Māui/Hawke's Bay & Te Tai Rāwhiti/Gisborne

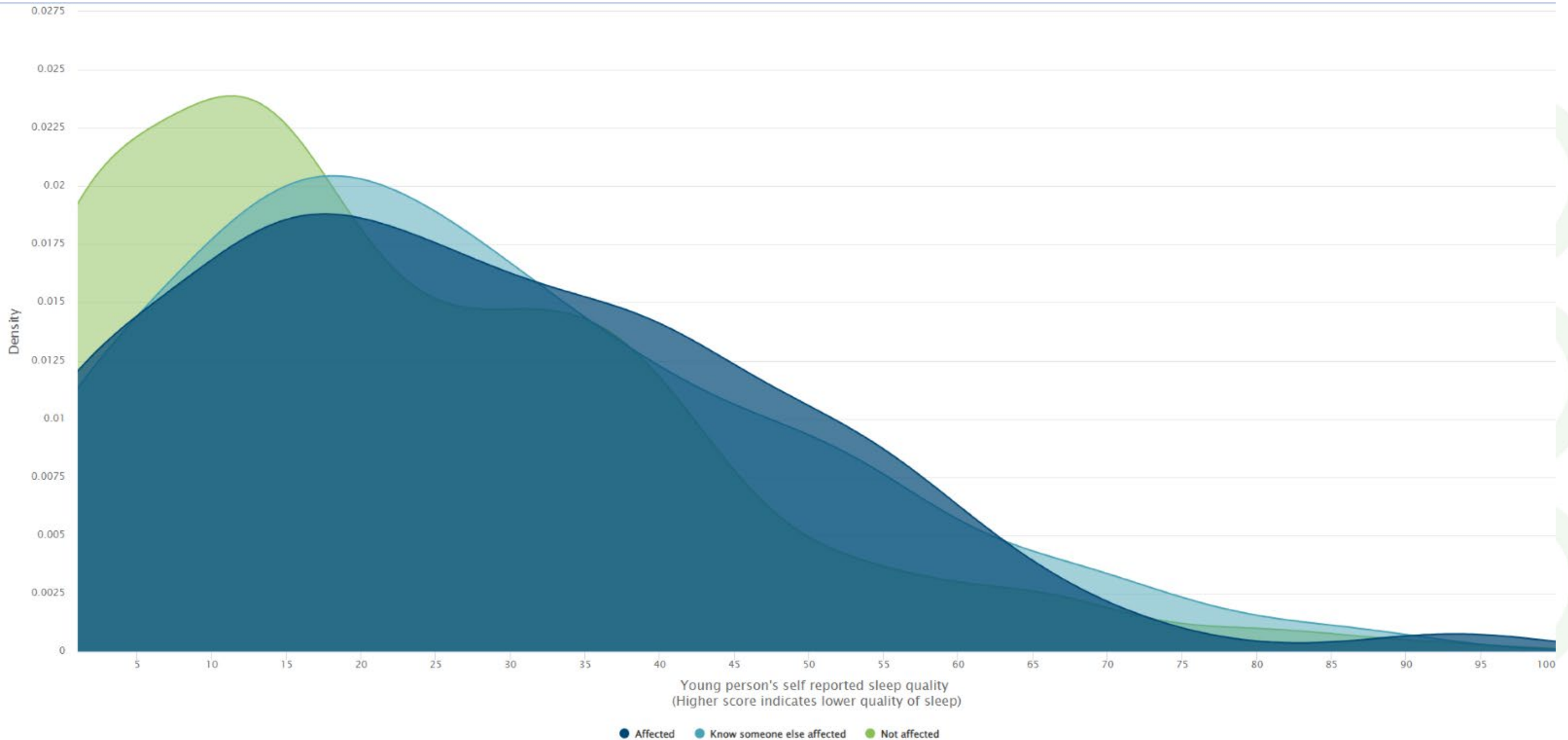
Mental health: Young person



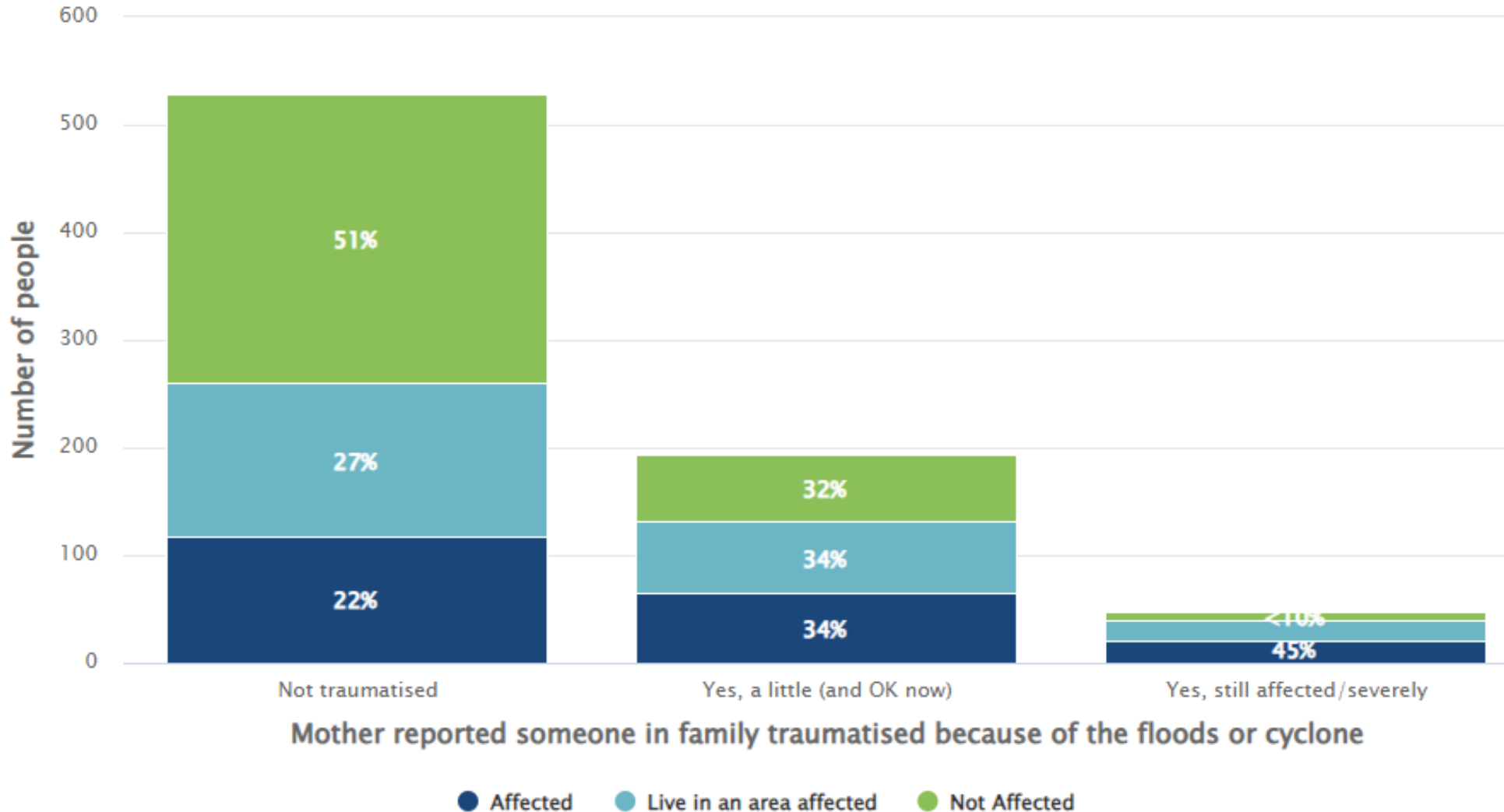
Young person anxiety symptoms



Young person sleep quality



Family member trauma



Young People's Voices

What advice would you give to other young people who might experience a flood or cyclone in the future?

“It’s not your fault. You are allowed to be sad. Talk to your friend and adults if you can. It is hard!”

(Young person from Te Matau-a-Māui/Hawke’s Bay)

“Talk to an adult or a trusting person. Get help from a counsellor or community support. Reach out and talk to someone don’t keep it inside because it will make you feel even more stress”

(Young person from Central Auckland)



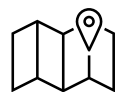
Summary & Discussion

How to access GUiNZ data and resources

How to access extreme weather event and GUiNZ data



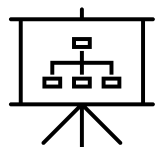
Full descriptive report available on the *Growing Up in New Zealand* website: <https://www.growingup.co.nz/extreme-weather-survey-2/extreme-weather-survey-overview-list>



Regional snapshots of key findings (Auckland, Northland & East Coast (Hawke's Bay & Gisborne)) available from dataaccess@growingup.co.nz



Extreme Weather Survey dataset available for external researchers: <https://www.growingup.co.nz/available-data>



Comprehensive and longitudinal *Growing Up in New Zealand* dataset available via data access process: <https://www.growingup.co.nz/available-data-disclaimer>

Resources for rangatahi and communities



“Uncivil Defence”

A guide to help young people to cope with their emotions and to be ready for extreme weather events

PDF version available for download at:

<https://www.growingup.co.nz/extreme-weather-survey-3>



Source: <https://www.toimatarua.com/>

‘MokoBoys’ by Toi Matarua

A rangatahi-led short film and documentary capturing the incredible resilience, generosity and innovation of rangatahi making a meaningful contribution to their community of Te Matau-a-Māui during and post the extreme weather crisis

Summary & Discussion



- Over 50% of participants did not receive enough information or advice about EWE preparations
- Disruptions to a range of essential services lasted several days
- There was a lack of support with properties/belongings, finances, health care, food and other necessities
- Additional support/information following EWE may help long-term wellbeing
- For future research: measures capturing experiences of EWE allowing for cross-study comparisons
- Hearing young people's voices and their involvement is critical for decision-making and targeted support

Ngā mihi!
Thank you!



www.growingup.co.nz

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Acknowledgements

GUiNZ cohort and their whānau

GUiNZ team

MBIE

