

Climate of distress

RESPONDING TO THE YOUTH MENTAL HEALTH IMPACTS OF CLIMATE CHANGE





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The final report reflects Orygen's analysis and independent conclusions. It may not necessarily reflect all the opinions or conclusions of key contributors.



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Glossary

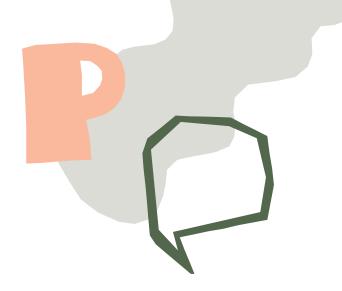
APS Australian Psychological Society
HEAL Healthy Environments and Lives
National Research Network

IPCC Intergovernmental Panel
on Climate Change

LSAC Longitudinal Study of Australian ChildrenNDC Nationally Determined Contribution

WHO World Health Organization

Contents



- **5 Executive summary**
- 6 Climate of distress: responding to the youth mental health impacts of climate change
- 7 Defining climate distress
- 9 Climate awareness, concern and distress
- 10 Climate distress research
- 11 Young people and climate change
- 15 Groups at increased risk of climate distress
- 16 Policy context
- 17 National Health and Climate Strategy

- 18 Responding to climate distress
- 18 Young people's preferences
- 19 Common approaches across settings
- 19 Climate policy and government action
- 21 Media
- 22 Schools
- 23 Health professionals
- Young people and their supports
- 27 **Policy solutions**
- 32 References



Executive summary

Nationally and internationally, young people have expressed high levels of concern about climate change, which has been consistently associated with psychological distress. Young Australians have reported that climate distress has impacted their functioning, their hope for the future and their mental health. Climate distress is not a clinical diagnosis, and likely includes healthy and adaptive responses that can lead to productive action against climate change, as well as clinically-relevant distress that requires greater support.

Young people have recognised that addressing climate distress needs to go beyond a focus on their individual mental health and include a focus on climate policy. While climate distress is often related to distress about the direct impacts of climate change, it can also include distress relating to a lack of climate action or the impact of media coverage about climate events impacting others. Opportunities have been identified in both clinical and non-clinical settings.

To inform this report, Orygen commissioned a YouGov survey of young Australians (16-25 years old) to understand how climate distress is impacting the mental health and wellbeing of young people. A total of 1,000 young people participated between April and May 2023.

Issues

Inconsistent definitions and research gaps

Climate distress may involve a range of emotions, such as anxiety, sadness and anger. Climate distress interventions should not aim to reduce climate concern, but mitigate high levels of distress and significant impacts to young people's wellbeing and functioning. A lack of consistency in definitions, terms, concepts and measures of climate distress has been a barrier to drawing clear conclusions and understanding effective interventions. Additionally, until recently, there has been little research on the intersect of climate change, young people, and mental health, and a number of research gaps remain.

Mental health and young people missing in climate policy

Currently, the intersect of climate change, young people and mental health have not been consistently considered in national, state and territory plans. Strategies related to climate change and health have not always identified young people as a group disproportionately impacted by climate change, or incorporated youth-specific activities that address the unique needs of young people. There is

a need to increase partnerships with young people to inform policy relating to climate change and health.

A lack of support available for health professionals, schools and the media

While Australian health professionals have observed the impact of climate change on young people's mental health in their practice, there is currently little information available about effective interventions. Additionally, while schools and the media both play a role in informing young people about climate change and climaterelated events, they are not currently supported by comprehensive and evidence-informed resources and advice on discussing climate change with young people safely.

Solutions

While further research is needed to understand the effectiveness of climate distress interventions, young people can be supported through opportunities across the government, the media, and the health and education system. These opportunities include:

Research and knowledge

- Define and conceptualise climate distress.
- Address mental health and climate change research gaps and develop research infrastructure.

Government and policy

- Include climate change in youth-related strategies and plans.
- Ensure the effective development and implementation of the National Health and Climate Strategy.
- Ensure a health impact assessment of climaterelated policy and investment.
- Adapt the Annual Climate Change Statement for young people.
- Establish and resource climate change youth advisory groups in states and territories.

Supports and activities across settings

- Develop climate distress media guidelines.
- Develop and evaluate an online climate change repository for students and teachers.
- Design and pilot a brief intervention for young people experiencing climate distress.
- Assess climate distress training needs and develop resources for health professionals.
- Fund the development of a youth-specific climate distress online hub.

Climate of distress: responding to the youth mental health impacts of climate change

The World Health Organization (WHO) has warned that climate change is the single greatest health threat facing humanity.(1) Climate change is expected to cause injury, illness, disease and mortality through extreme weather events, heat stress, and inadequate access to clean air, safe drinking water and food.(1) The 2022 Intergovernmental Panel on Climate Change (IPCC) report noted with medium confidence that climate change has already impacted mental health in the Australasia region.(2) Australian health organisations, specialist medical colleges and peak bodies have recognised the adverse mental health impacts of climate change through major reports, guidelines and position statements.(3-5)

At the same time, young Australians have experienced increasing psychological distress disproportionate to other age groups.(6) The rise in mental ill-health amongst young people has been documented globally.(7, 8) The US Surgeon General highlighted that climate change is a distressing issue that could be contributing to increased mental ill-health for young people.(9)

Climate change impacts mental health directly, for example, psychological trauma from extreme weather events, exposure to heat waves, and indirectly, for example, concern or worry about climate change or extreme climate-related events.(10) This report is focused on the indirect mental health impacts due to the concern and negative emotions associated with climate change. Notably, almost seven in 10 Australians lived in a disaster-impacted area in 2022.(11) While mental health disaster support is outside the scope of the current report, many young people's experience of climate change has involved direct exposure to climate-related events.

Orygen commissioned a YouGov survey of young Australians (16-25 years old) to respond to gaps in understanding how climate distress is impacting the mental health and wellbeing of young people (Orygen's survey).(12) Some of the results of the survey are provided throughout the report. A total of 1,000 young people participated between April and May 2023, approximating to 891 respondents after statistical weighting to match national distribution in age, gender, location and education level. Demographically, survey participants were:



predominately female (51.9 per cent);



aged between 16-18 (19.1 per cent), 19-21 (27.6 per cent) and 22-25 (53.3 per cent) years old;



predominately from metropolitan areas (71.2 per cent); and



predominately living in New South Wales (33.6 per cent), followed by Victoria (27.9 per cent), Queensland (17.6 per cent), Western Australia (9.3 per cent) and South Australia (7.5 per cent).





To read the full survey results, visit **ORYGEN.ORG.AU**



"It's not just anxiety ... it's frustration, it's anger, it's disappointment."
Young person



"We are the first generation to feel the impact of climate change and the last generation that can do something about it." Young person

Defining climate distress

There is emerging concern about the impacts of climate change on mental health for people who may not have been directly exposed to a climate-related event. This concept has been described as the "heightened emotional, mental or somatic distress in response to dangerous changes in the climate system." (13) Several terms have been used over the past decade, often interchangeably, to describe the indirect mental health impact of climate change, including:

- · climate anxiety;
- · climate worry;
- · ecological grief;
- · eco-anxiety;
- ecological stress;
- · ecoparalysis;
- · solastagia;
- · eco-anger; and
- eco-depression.(14)

Some terms have been used to describe the negative emotions associated with climate change, such as climate anxiety, or the broader environmental concerns such as animal extinction, such as eco-anxiety. Other terms attempt to better describe specific environmental emotions, such as eco-anger and eco-depression. This report primarily uses 'climate distress' to describe the range of emotions and mental health impacts associated with climate change, except when using a term from the cited literature.

While many terms and concepts are focused on anxiety, a range of negative emotions are associated with climate change. Surveyed young Australians (aged 16-25) reported feeling anxious (65.0 per cent), afraid (64.4 per cent), sad (64.1 per cent), powerless (60.6 per cent), helpless (59.5 per cent), angry (57.4 per cent) and ashamed (53.1 per cent) about climate change. (15) Efforts have been made to differentiate more specific emotions in relation to the changing climate. In one model, three distinct groups have been suggested: an anxiety-like response (e.g. nervous, afraid and scared); a selfreflective response (e.g. ashamed and guilty); and a grief-oriented response (e.g. upset and distressed).(16) In another model, eco-anxiety

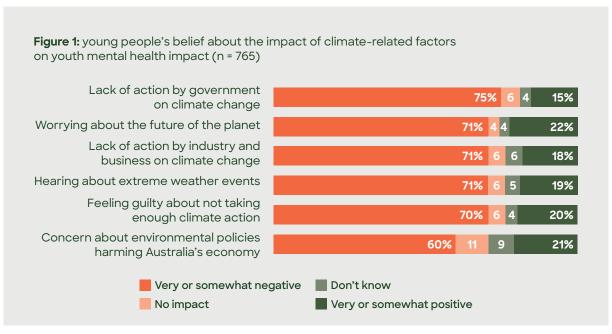
and eco-anger were experienced at similar levels, and experienced both more frequently than eco-depression.(17)

Climate distress is not a clinical diagnosis, but a valid response to a real threat.(18) Climate distress likely includes healthy and adaptive responses that can lead to productive action against climate change, as well as clinically-relevant distress that impacts functioning and requires support.(16, 19, 20) Responses to climate distress should not aim to reduce climate concern,(21) but instead mitigate high levels of distress and its impact on mental health and functioning.

Drivers of climate distress

Distress about the climate is broader than concern about the direct environmental impacts. (22) In Orygen's survey, the most frequently identified climate-related factor impacting young people's mental health was a lack of climate action by government, followed by worry about the future of the planet (figure 1).(12) Similarly, when asked about the negative aspects of climate change, young people (aged 16-24) in the UK were more likely to list their concerns about a lack of action on climate (51.5 per cent), upsetting media coverage (45.6 per cent) or a lack of agency (45.4 per cent) above worrying about the future (38.6 per cent), experiencing more extreme local weather events (30.9 per cent), concerns about the health and safety impacts of climate change (23.6 per cent), having families or friends who have experienced climate impacts (8.3 per cent) or having personally experienced climate change impacts (2.9 per cent).(23)





Note: figure 1 comprises young people who reported concern about climate change.

Measurement tools

Varied tools have been used to measure climate distress. A systematic review noted that varied definitions have led to studies measuring ecoanxiety diversley using a range of different emotions, levels of habitual worry, functional impairment and cognitive-emotional impairment. (24) Previous studies have used a variety of climate-specific scales, semi-structured interviews, single items and scales based on existing tools, such as the State-Trait Anxiety Inventory and the Habit Index of Negative Thinking.(24)

Validated scales exist for climate distress. The Climate Anxiety Scale is a 13-item scale that includes a subscale that assesses the emotional impact and subscale that assesses whether climate change is impacting people's ability to function.(25) The Climate Anxiety Scale has been translated and validated across a number of contexts.(26-30) The Hogg Eco-Anxiety Scale is a 13-item scale capturing four dimensions: affective symptoms, rumination, behavioural symptoms and anxiety about one's personal negative impact on the environment.(31) Climate Change Worry Scale is a 10-item scale developed specifically to measure proximal worry about climate change rather than social or global impacts.(32) A substantial proportion of literature also endorsed non-validated scales, and many of the scales that do exist were developed through a pathologising lens and not in collaboration with young people to reflect their preferences and experiences.

A lack of consistency in the definitions, terms and measures of climate distress is a barrier to collating the available evidence and drawing clear conclusions.(14, 24) There is a need to develop a standardised definition, concept, terms and measurement to allow consistency in research findings, and to develop targeted interventions and screening tools that could be incorporated into existing service intake processes and national youth and mental health surveys. This should leverage existing work, such as work currently being undertaken by the University of Queensland and QIMR Berghofer Medical Research Institute to validate a new measure of climate distress tailored to the unique needs of young people.



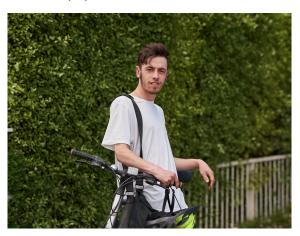
Climate awareness, concern and distress

In a 2021 survey with 1.2 million respondents from 50 countries, Australia had the ninth-highest climate belief score.(33) Most (57 per cent) Australians believe that their country has already started to experience the impact of climate change.(34) Climate change acceptance has increased, which might be driven by seeing and hearing other people's experience of the impacts of climate change.(35) In a 2022 survey of over 3,000 Australian adults:

- 31 per cent are alarmed, that is, highly engaged and currently implementing changes, compared to 14 per cent in 2011;
- 27 per cent are concerned, that is, know climate change is serious and requires a strong national response, but are less involved in personal action, compared to 31 per cent in 2011;
- 23 per cent are cautious, that is, believe climate change is a problem, but not an urgent personal threat, compared to 27 per cent in 2011;
- 2 per cent are disengaged, that is, have not thought much about climate change, compared to 6 per cent in 2011;
- 9 per cent are doubtful, that is, believe it is due to natural environmental changes, or believe there is no need to take further action, compared to 15 per cent in 2011; and
- 9 per cent are dismissive, that is, actively engaged against climate change, compared to 8 per cent in 2011.(36)

With the increase in climate change acceptance, there has been a rise in concern. A number of national and international surveys have examined climate concern, climate belief and psychological distress related to climate change (see table 1). Approximately one in two Australian adults are very (25 per cent) or fairly worried (26 per cent) about climate change.(37) Climate concern has increased, with one survey finding an increase from 35.0 per cent to 72.5 per cent of Australians over the last decade.(34) Between 2015–21, the proportion of Australian adults who were very concerned that climate change will personally harm them had almost doubled (18 to 34 per cent).(38)

Climate distress has been considered in the context of other global crises involving future uncertainty, such as the COVID-19 pandemic. In a survey of over 5,400 Australian adults between August-November 2020, 66.3 per cent indicated that climate change was a problem for them personally, compared to 25.3 per cent for COVID-19.(39)





"Climate change impacts the way I think about and plan for my future every day. I refuse to even have children because I don't believe they will have a planet to grow up in." Young person



"By the time I am old, the planet will be nothing like it was when I was a child." Young person

Table 1: selected surveys on climate concern and distress in adults

| Author/organisation | Year | Country | Sample | Key findings |
|---|------|-----------------|------------------------------|--|
| Australia | | | | |
| Climate Council and Beyond Blue(37) | 2023 | Australia | 2,032 adults | 51% were very or fairly worried about climate change and extreme weather events. |
| Griffith University's Climate Action Beacon(34) | 2022 | Australia | 3,915 adults | A proportion of Australians feel worried (59%), distressed (45%), upset (41%), anxious (41%), overwhelmed (41%) and guilty (31%) about climate change. |
| Patrick et al.(40) | 2022 | Australia | 5,483 adults | 9% across all ages experienced significant eco-anxiety, increasing to 26% for young people aged 18-24 years. |
| Sustainability Victoria(41) | 2020 | Australia | 3,060 Victorian adults | Most Victorians feel some level of frustration (75%), sadness (72%), despair (70%) outrage (67%) and fear (67%) about climate change. |
| International | | | | |
| Ogunbode et al.(42) | 2022 | 32 countries | 12,246 adults | 47% are very or extremely worried about climate change. |
| Pew Research Center(38) | 2021 | 17 countries | 2,596 adults | 72% are very or somewhat concerned that climate change will harm them personally at some point in their lives. Between 2015–21, Australians very concerned that climate change will harm them increased from 18% to 34%. 79% of 18–29 year old Australians are very or somewhat concerned compared with 49% of people older than 65. |
| American Psychological Association(43) | 2020 | US | 2,017 adults | 68% identify as having at least a little eco-anxiety. |

Climate distress research

In a 2021 survey of 828 young Australians (aged 16-25), climate change was ranked one of the most important and relevant issues for youth mental health research.(44) Despite this, there is a paucity of research on the impact of climate change on mental health. Most research has focused on the mental health impacts of specific disasters, such as bushfires and floods.(14) Scoping and systematic reviews have identified a lack of evidence on the impact of climate change on mental health, issues with non-representative samples, an absence of information about causal pathways, and a lack of focus on young people.(45) There is a need for research that understands the relationship between climate distress and mental health over time and focuses on effective prevention and intervention.

A number of recent developments in Australian climate change and health research have emerged. Between 2000-18, the National Health and Medical Research Council (NHMRC) identified that it provided funding for 33 projects relating to health and the environment.(46) Notably, none of these projects were specifically focused on the mental health impacts of climate change. Between 2018-21, resilience to environmental change was one of NHMRC's strategic priorities for action.(47) In 2020, NHMRC established the Special Initiative in Human Health and Environmental Change to prepare Australia's health system against environmental change through a multidisciplinary network that builds research capacity and capability. At the end of 2021, the initiative funded Healthy Environments and Lives National Research Network (HEAL) \$10 million over five years.



Noting the limited research focus on the mental health impacts of climate change, a 2021 Delphi study identified global research priorities for climate change and mental health, which included:

- understanding mental health outcomes from climate-related exposures;
- understanding the factors that increase vulnerability and resilience;
- developing validated quantitative measures;
- · defining and quantifying the causal pathways;
- assessing mental health and psychosocial interventions;
- understanding the impact of climate change communication;
- exploring the interaction, association and potential co-benefits between pro-environmental behaviour and mental health outcomes;
- understanding how mental health research influences climate decision-making; and
- understanding and quantifying the economic costs.(48)

Similarly, a Wellcome-funded global initiative, Connecting Climate Minds, was launched in 2023 to develop an actionable research agenda addressing the mental health impacts of climate change. Dedicated research funding is needed to respond to gaps in climate change and mental health research. Research funding should be aligned with the outcomes of the Connecting Climate Minds project.

Additionally, a number of small-scale climate change and mental health projects exist in Australia. Stakeholders noted that the in-kind requirements for partnership and linkage research project grants have been a barrier to partnering with smaller organisations to evaluate existing programs.

Policy solution

Address mental health and climate change research gaps and develop research infrastructure

Respond to research gaps in mental health and climate change. This should include:

- dedicated funding on climate change and mental health, with a particular focus on young people and effective interventions:
- removing contribution barriers in linkage and partnership projects to support the involvement of organisations with fewer resources; and
- the development of research networks and supporting knowledge translation and data sharing.



Address mental health and climate change research gaps and develop research infrastructure.

Young people and climate change

The environment is a top issue for young people. In Mission Australia's 2022 youth survey of 18,800 young Australians (aged 15–19), the environment was the most frequently identified issue, with half (51 per cent) indicating that it is their top national issue.(49) Young people have increasingly identified the environment as a national issue over the past decade (see table 2).



"In the end, we're the people that are going to suffer the most." Young person



"The increasing effects of climate change seriously impact my ability to think positively about the future, and sometimes it feels hopeless even planning for one." Young person

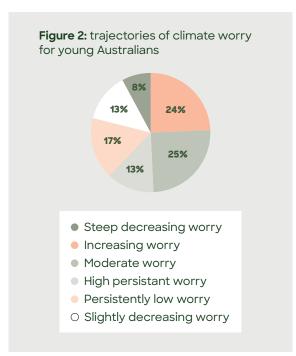
Table 2: ranking of the environment as a top national issue in the Mission Australia Youth Survey

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|----------------|-----------------|----------------|-----------------|----------------|---------------|----------------|----------------|----------------|----------------|
| Issue ranking (per cent of young people) | 8th (14.5%) | 10th (12.3%) | 9th (12.8%) | 10th (11.5%) | 8th (10.9%) | 8th (9.2%) | 2nd (34.2%) | 4th (29.8%) | 2nd (38.0%) | 1st (51.0%) |

Source: Mission Australia Youth Survey (49-58)

A number of surveys have reported that young people are experiencing high levels of climate distress and concern (see table 3). In a survey of young people from 10 countries, young people in Australia were the third most likely to report anxiety.(15) In same survey, young Australians believed that people failed to take care of the planet (80.7 per cent), that the future is frightening (76.3 per cent), that humanity is doomed (50.4 per cent), and over two in five (43.2 per cent) young Australians were hesitant to have children. In Monash University's 2022 Australian Youth Barometer survey of 505 young people (aged 18-24), 29 per cent did not believe that climate change would be effectively combatted in the future.(59) Orygen's survey identified that 75 per cent of young Australians were very (30.1 per cent) or somewhat (45.6 per cent) concerned about climate change.(12) The level of concern may be increasing, with more than half (56.3 per cent) reporting that they have become more concerned about climate change over the past 12 months.(12)

Young people experience varied trajectories of climate concern, with 24.3 per cent of young people experiencing increasing worry over adolescence.(60) Using data from the Longitudinal Study of Australian Children (LSAC), a study following 2,244 adolescents from age 10-11 to age 18-19 between 2009-2018 identified six trajectories of 'climate change-related worry' (see figure 2).(60) Young people with high persistent climate worry and increasing worry reported higher engagement with politics and news than people moderately worried. Compared to those who were moderately worried about the environment, adolescents who were persistently worried about the climate had higher symptoms of depression at age 18-19.



Source: Sciberras and Fernando (60)

Concern about climate change is associated with psychological distress, functional impairment, stress and mental ill-health.(24) A report by Orygen and Mission Australia identified that young Australians who are extremely or very concerned about climate change were more likely to be concerned about stress and mental health, and experience greater psychological distress, higher self-reported mental health conditions, lower levels of subjective wellbeing and greater negativity about the future.(61) Two in five (38 per cent) young people who were extremely or very worried about climate change experienced high psychological distress, compared to one in five (22 per cent) young people reporting no climate concern.

While studies consistently find an association between climate distress and psychological distress, there is a need to understand the interaction and directionality of the relationship. (14) While research is limited, there is some evidence to indicate that increased climate concern contributes to increased psychological distress. A longitudinal study of over 13,000 New Zealand adults found that climate concern predicted an increase in psychological distress one year later.(62) It has been hypothesised that



a bidirectional relationship exists in which climate distress contributes to psychological distress, and people with higher psychological distress are more likely to experience distress about the climate.(14, 61)

Although further research about the directionality of climate distress and psychological distress is needed, young people have clearly articulated that climate change is having an impact on their mental health. In Orygen's survey, two-thirds (66.6 per cent) reported that concerns about climate change were having a negative impact on the mental health of young Australians.(12) This is aligned with international data that has indicated that most young people believe climate change is having an impact on their mental health.(63)

Young people are also reporting that climate change is having an impact to their functioning. One in three (32 per cent) young Australians have reported that feelings about climate change had a negative impact on their daily functioning,(15) with over 46 per cent reporting feeling anxious on a weekly basis and over 17 per cent reporting a loss of sleep.(64) In the US, almost one in two (47 per cent) young adults (aged 18-34) report that climate change stress affects their daily lives.(43) Almost one in five surveyed young people (aged 8-16) in the UK had a bad dream about climate change (19 per cent) or identified that their sleeping or eating habits had been impacted by climate change (17 per cent).(65) While research on directionality is needed, young people have identified that climate change has impacted their mental health and functioning.

Table 3: selected surveys on climate concern and distress in young people

| Author/organisation | Year | Country | Sample | Key findings |
|--|------|-----------|---|--|
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| Australia | | | | |
| Orygen and Mission Australia(61) | 2023 | Australia | 18,800 young people (15-19 years old) | Most (67%) young people are concerned about climate change, and 26% are very or extremely concerned. Higher levels of climate concern were associated with higher psychological distress, poorer mental health, lower personal wellbeing, and a negative future outlook. |
| yourtown(66) | 2022 | Australia | 3,500 young people (15-25 years old) | One in two (47%) want focused action on the environment and climate change. |
| Australian Institute for Disaster Resilience(67) | 2020 | Australia | 1,477 young people (10-24 years old) | Most (78%) young people are concerned or very concerned about climate change. |
| ReachOut and Student Edge(64) | 2019 | Australia | 1,595 students (14-23 years old) | Four in ten (80%) are somewhat or very anxious about climate change, with 14% reporting a large impact. Over 46% are anxious about climate change on a weekly basis. Over 17% report losing sleep due to climate change worry. |

Table continues

| International | | | | |
|-----------------------------|------|-----------------------------|---|---|
| Galway and Field(63) | 2023 | Canada | 1,000 young people (16-25 years old) | Most young people feel afraid (66%), sad (65%) and anxious (63%) about climate change. Most (78%) report that climate change has some level of impact on their mental health. Two in five (37%) reported that climate change has some level of impact on their daily functioning. |
| Hickman et al.(15) | 2021 | 10 countries | 10,000 young people (15-25 years old) | Three in five (59%) young people were very or extremely worried about climate change. Over 45% said feelings about climate change impacted their daily life and functioning. |
| BBC(65) | 2020 | UK | 2,004 young people (8-16 years old) | Three in five (58%) are worried about the impact of climate change on their lives. |
| UNICEF and Eurochild(68) | 2020 | 48 European countries | 19,933 young people (aged 30 and under) | Two in five (38%) reported that climate change is something they are most worried about in the future. |

The disproportionate impact on young people

Young people are more concerned about climate change than other age groups.(24, 34, 37, 69) In a 2020 survey, young Victorians (aged 15–24) were more likely than the general population to experience 'a lot' or an 'overwhelming' level of negative emotions, including:

- frustration (48 per cent compared to 33 per cent);
- sadness (40 per cent compared to 26 per cent);
- fear (40 per cent compared to 22 per cent);
- outrage (38 per cent compared to 25 per cent);
- powerlessness/despair (36 per cent compared to 24 per cent);
- disbelief (31 per cent compared to 23 per cent);
- confusion (29 per cent compared to 20 per cent);
- guilt (29 per cent compared to 14 per cent);
- hope (23 per cent compared to 17 per cent); and
- grief/loss (22 per cent compared to 16 per cent).(41)

Differences across age groups may be particularly relevant to Australia. A 2021 global survey found a significant difference between Australian young people (aged 18–29) who were very or somewhat concerned that climate change would impact them personally (79 per

cent) and Australians aged 65 and over (49 per cent), representing the third highest gap out of 16 surveyed countries.(38)

Consultations identified a cohort of young people that feel strongly that climate change is an inherited burden, that they will experience its most severe consequences, and they perceive that other age groups are less concerned. However, other young people noted that people in all age groups experience climate concern and distress, and felt that amplifying generational differences was not beneficial. While longitudinal data confirmed a generational gap, there is some evidence to indicate that climate change belief had increased at a similar rate across all age cohorts over 10 years, despite different levels of initial belief.(70)

Associated and protective factors

While a scoping review of the risk and protective factors of climate change on mental health in young people identified 92 studies between 2005–2020, most examined exposure to a singular climate event and only four studies focused on the indirect impact of climate change.(71) A 2023 scoping review on climate-related negative emotions and mental ill-health in young people found associations with factors such as:

- altruistic and biospheric values, a sense of global community, pro-environmental beliefs and a pro-ecological worldview,
- trust in environmental and science organisations;

- high levels of psychological distress, negative self-rated mental health, depression or anxiety;
- high levels of future anxiety and intolerance of uncertainty;
- · problem-focused coping;
- gender (female);
- ethnicity (non-white);
- low levels of social and economic conservatism:
- experiences of being more directly impacted by climate change;
- perceived inadequate government response and associated feelings of betrayal and high political engagement; and
- exposure to climate change information via social media.(14)

Protective and coping factors for climate-related negative emotions and mental ill-health included:

- gender (men);
- meaningfulness, hope, purpose, optimism and anger;
- · trust in environmental organisations;
- · meaning-focused coping; and
- social and economic conservatism.(14)

Groups at increased risk of climate distress

Young women and gender diverse young people

In Orygen's survey, young women were more likely to be somewhat or very concerned about climate change (80.9 per cent) than young men (70.0 per cent).(12) This is consistent with findings across a number of previous studies. (14, 24) Young women were also more likely to believe that concerns about climate change have a negative impact on the mental health of young Australians (74.3 per cent, compared with 58.6 per cent of young men).(12)

In the 2022 Mission Australian Youth Survey, gender diverse young people were more likely to be very or extremely concerned about climate change (47 per cent) than young women (29 per cent) and men (16 per cent).(61) The association between climate concern, psychological distress and negative future outlook was also stronger for gender diverse young people.

Young people with mental ill-health

Young people who rate their mental health as poor are more likely to be concerned about climate change (81.1 per cent) than people who identify with having good mental health (73.8 per cent).(12) Additionally, young people with poor self-rated mental health are more likely

to believe that concerns about climate change have a negative impact on the mental health of young Australians (75.0 per cent compared with 62.7 per cent of people identifying with having good mental health). An analysis of the 2022 Mission Australia Youth Survey data found that people with poorer self-rated mental health and low subjective wellbeing were also more likely to experience climate concern.(61)

People involved in climate advocacy

Climate distress is significantly associated with pro-environmental behaviour, environmental activism and connection to the natural world. (42,72) Consulted stakeholders noted that people involved in climate advocacy are particularly at risk of climate distress due to a heightened awareness about climate change and significant engagement with climaterelated content. There may be an opportunity to target supports for people engaged in proenvironmental behaviour and climate advocacy. Notably, some forms of pro-environmental behaviour are associated with lower levels of climate distress.(73)

People with experiences of climate-related events

Australians who have been directly exposed to climate-related events have higher rates of eco-anxiety. (40) Research has indicated that young Australians directly impacted by bushfires experience higher levels of concern and distress about climate change. (74) One in two (50 per cent) Australians impacted by climate-related events are extremely worried about climate change causing more severe and more frequent disasters. (75)

Australians exposed to climate-related events represent a significant proportion of the population. The Bureau of Meteorology and CSIRO's State of the Climate 2022 report noted that the past decade has seen record-breaking climate extremes exacerbated by humancaused climate change.(76) In 2023, Treasurer of Australia Jim Chalmers noted that almost seven out of 10 Australians lived in a natural disaster declared area in 2022.(77) A 2023 Beyond Blue and Climate Council survey of 2,032 Australians identified that 80 per cent had experienced a disaster at least once since 2019, with 24 per cent experiencing multiple disasters.(37)



These include heatwaves (63 per cent), flooding (47 per cent), bushfires (42 per cent), drought (36 per cent), destructive storms (29 per cent) and landslides (8 per cent). In Orygen's survey, nine in ten (88.9 per cent) young Australians reported experiencing a climate-related event in the past five years.(12) Mental health responses to disaster recovery should recognise the long-term impacts of increased climate anxiety, and climate-related media and educational content should understand the impact that the content may have on people previously exposed to climate-related events.

First Nations young people

It has been hypothesised that First Nations people may experience higher levels of climate distress, partly due to the cultural responsibilities such as caring for Country.(72, 78) While First Nations young people have reported lower levels of concern about climate change, there is a stronger association between climate concerns, psychological distress and a negative future outlook compared to non-Indigenous young people.(61) More research is needed to understand the experiences of climate change and climate distress for First Nations young people.

Young people in regional areas

While Orygen's survey found that young people in metropolitan areas have higher levels of climate concern (77.7 per cent) than young people in rural areas (71.0 per cent),(12) there is a stronger association between climate concern and psychological distress for young people living in outer regional areas.(61) Consultations with stakeholders highlighted that young people in regional areas may be more likely to be impacted by climate-related events and impacts on the agricultural industry. More research is needed to better understand their experiences of climate distress.



"A lot of the times when the media reports on things, they want people to get mad at the people protesting for the climate, even if there was a really peaceful protest and a lot of young people showed out. It doesn't do justice to the people who were standing up in a peaceful way."

Young person



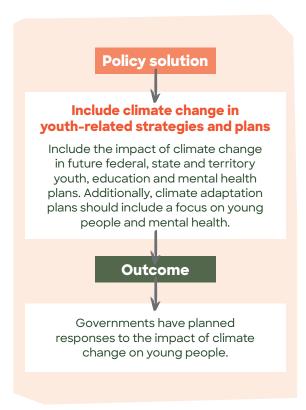
"I get stressed when summer comes around because I live rurally and I'm always scared bushfires will destroy my family's property or my community." Young person

Policy context

The indirect impacts of climate change on mental health, such as climate distress, are often unaddressed by governments. In an analysis of the UK Hansard database across 25 years (1995-2020), only 41 speeches had linked climate change to mental health, despite over 20,000 speeches on each separate topic, and only 14 referred to the indirect impacts of climate change on mental health.(79) Australian national, state and territory governments have increasingly been engaged on the intersection of health and climate change.(80) However, climate change remains unexplored in most youth, mental health and health strategies and plans. One exception is the National Preventive Health Strategy, which includes an action to identify, address and mitigate the impacts of climate change on the health system.(81) The impact of climate change on mental health, including climate distress and a focus on young people, should be included in strategies and plans across departments and jurisdictions.

Some states have recognised the association between health and climate change in healthspecific climate change adaptation plans and other policy documents, such as:

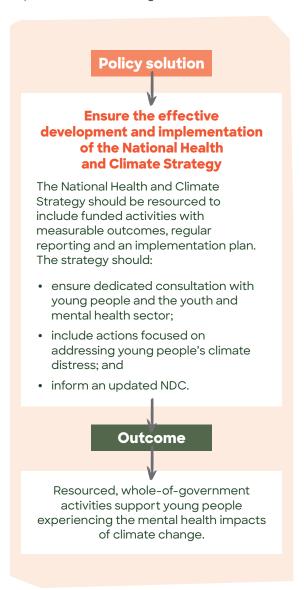
- The Victorian Government's Health and Human Services climate change adaptation action plan 2022-2026, which includes an action to develop mental health support tailored to the impacts of climate change and recognises that young people will be disproportionately impacted.(82)
- The Queensland Government's human health and wellbeing climate change adaptation plan for Queensland, which refers to increasing mental health support due to climate distress and recognises young people as one of the groups most vulnerable to climate change impacts.(83)
- The Western Australian Chief Health Officer's inquiry into the impact of climate change on health, which recognises the mental health impacts of climate change on young people.(84)
- The Victorian Government's public health and wellbeing plan 2019–2023, which includes 'tackling climate change and its impact on health' as one of its four priorities and recognises the impact of climate change on mental health.(85)



National Health and Climate Strategy

Internationally, governments are progressing towards a better understanding of climate change and health. A 2021 WHO survey identified that 77 per cent of surveyed countries had developed, or were developing, national health and climate change plans.(86) In 2022, the Australian Government committed \$3.4 million to fund a National Health and Climate Strategy and a National Health Sustainability and Climate Unit. (87) The Climate and Health Alliance has raised concerns that the National Health and Climate Strategy did not receive additional or ongoing funding in the recent federal budget, and noted that related strategies such as the National Preventive Health Strategy remain unfunded. (88) Despite the impact of climate change on mental health, consulted stakeholders noted that the mental health sector has not been widely engaged in the development of the National Health and Climate Strategy. Additionally, the recently released consultation paper did not place a focus on young people, (89) despite the fact that they are disproportionately affected by climate change. The development of this strategy should include targeted consultations with the mental health sector, the youth sector and young people. There is a need to ensure that the strategy takes an intergenerational fairness approach through a focus on younger and future generations. Additionally, the strategy requires a focus on implementation through adequate resourcing, funded activities, an implementation plan with timelines, and regular reporting of measurable targets and outcomes.

As part of the Paris Agreement, Australia submitted a Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change. In 2023, an assessment of health commitments in NDCs from 58 countries scored Australia a zero, along with five other countries, as its NDC did not include integrated governance, health impacts, health sector action, health co-benefits, health-related economics and finance, and health-related monitoring and implementation.(90) Integration of the National Health and Climate Strategy into Australia's NDC would demonstrate Australia's commitment to recognising the health impacts of climate change.





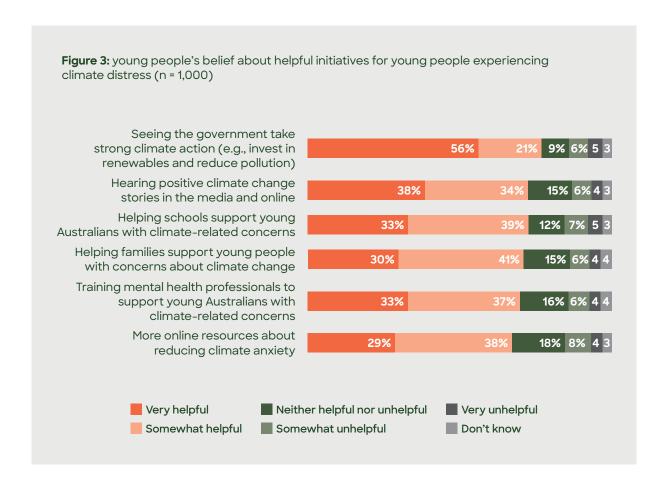
Responding to climate distress

Young people's preferences

Responses to climate distress span a variety of settings, and include actions aimed at climate distress and actions targeting climate change. There is a recognition that climate distress supports extend beyond individual psychological therapy, and that comprehensive, multifaceted approaches are required. Young people have expressed an understanding that the mental health impacts of climate change require climate change mitigation. When asked about initiatives that are helpful for addressing climate distress, strong climate action by government was the only option that most young people selected as very helpful (figure 3).(12) Additionally, when initiatives do directly focus on climate distress, stakeholder consultations identified that interventions should include varied approaches, such as group, youth-led and arts-based initiatives.

In a similar survey of 1,000 Canadian young people (16-25 years old), eight themes for climate anxiety supports were identified, including:

- seeking emotional and mental health support from others (25 per cent), such as talking to a psychologist, friends and support groups;
- taking individual and collective climate action (25 per cent), such as pro-environmental activities and supporting charities;
- formal education initiatives and programs (12 per cent), such as programs about climate change and solutions;
- managing feelings through activities (11 per cent), including reading, listening to music, hiking and meditation;
- not doing anything to cope (8 per cent);
- informal learning and information-seeking (7 per cent), such as learning about climate change through the news;
- shifting perspectives and positive thinking (6 per cent), including thinking about climate change more often and thinking more optimistically; and
- systemic government action (4 per cent), which included comments about young people's distress being lowered by government action on climate change.(63)



Common approaches across settings

There is limited research about interventions that mitigate climate distress. However, previous literature and stakeholder consultations identified approaches that could be applied to a number of clinical and non-clinical settings where young people are engaging with climate change and climate distress. Coping strategies and pro-environmental behaviours are evidence-based approaches that could be incorporated into government strategies, media messaging, schools and health settings.

Coping strategies

Frameworks for coping have previously been applied to young people's responses to climate change. (91) While approaches that focus on individual psychological resilience may risk minimising the real challenge posed by climate change, providing young people with adaptive coping strategies may allow them to maintain wellbeing while acknowledging climate change as a threat. (92) Coping strategies include:

- Problem-focused coping: such as thinking and searching for information about climate change, taking pro-environmental action, and informing other people about the actions they can take.(93) While problem-focused coping has been associated with environmental engagement, young people with high levels of problem-focused coping are also more likely to experience negative emotions.(14)
- Emotion-focused coping: such as deemphasising the threat of climate change, avoiding climate change content, ruminating about climate change and distracting themselves with other thoughts.(93) Emotionfocused coping is often used by young people to regulate their worry.(93)
- Meaning-focused coping, such as acknowledging the problem while feeling hopeful about increased solutions, faith in future innovation and humanity, and hope in governments taking action.(93, 94) Meaningfocused coping is related to greater wellbeing and optimism about climate change. It is often used by young people to promote hope,(14, 93) and may allow young people to experience concern about the climate while maintaining wellbeing.(14)

While meaning-focused coping appears particularly beneficial, consultations highlighted that all coping strategies could be useful at different times for young people.

Pro-environmental behaviour

Encouraging people to take individual and collective climate action has been identified as a potential intervention for climate distress.(95) There is some evidence indicating that proenvironmental behaviours may mitigate the impact of impairment on depressive symptoms.(24)

Enabling pro-environmental behaviours is aligned with young people's preferences. In Orygen's survey, three in five (62.0 per cent) young people selected that providing resources on helping the environment would be one of the top three most helpful climate distress responses from a health professional.(12) Similarly, a survey of Canadian young people (16-25 years old) found that taking individual and collective climate action was a support that would be beneficial for young people with climate distress.(63) Young Australians have indicated that engaging in proenvironmental activities can provide a sense of hope, help them feel like part of the solution, and make them feel like they are being heard.(96)

Despite the potential benefits, some studies have found a significant association between pro-environmental behaviour and climate distress.(42) Pro-environmental behaviour might not be beneficial for people with severe climate distress or excessive rumination.(97) It may be important to consider different types of proenvironmental behaviour, with individual actions such as recycling associated with reduced psychological distress, and collective actions such as protests associated with increased distress.(73) Young people should be supported to be engaged in pro-environmental behaviour, while also assessing whether the action they are undertaking has been helpful to their climate distress.

Climate policy and government action

There is some evidence to suggest an association between perceived climate inaction and climate distress.(15) Young people have often linked their climate distress to a lack of action on climate change above concerns for the future or the environment. In Orygen's survey, young people most frequently selected that a lack of climate action by government was having a negative impact on young Australians.(12) Similarly, a survey of 530 young people (aged 16-24) in the UK found that the most frequently chosen negative impact of climate change was worrying about a lack of action, above worry about the future and local environmental change. (23) When young Australians were asked which supports were most useful for young people with climate distress, strong government climate action was the option most frequently selected, over support for schools or health professionals. (12) A 2020 survey of over 1,400 young Australians

(aged 10-24) identified which government climate actions would be most impactful, with young people most frequently reporting that they would like to see a transition from fossil fuels to cleaner and renewable energy.(67)

In a 2021 survey, most of the 1,000 young Australians (aged 16–25) reported feeling that governments:

- fail young people across the world (67.4 per cent);
- lie about the effectiveness of the actions they were taking (65.7 per cent);
- dismiss people's distress (63.7 per cent);
- do not take their concerns seriously enough (62.7 per cent);
- do not do enough to avoid climate catastrophe (62.5 per cent);
- cannot be trusted (62.1 per cent);
- do not do enough to protect them, the planet, and future generations (61.4 per cent); and
- do not act in line with the climate science (58.9 per cent).(15)

A number of opportunities exist for the government to better consider young people in climate policy.

Including Health in All Policies

Australians expect governments to consider their health in climate policy. In a survey of adults living in Victoria, most expected their federal (71 per cent), state (65 per cent) and local government (52 per cent) to take a leading role in health and climate change action.(41) Health in All Policies is an approach to public policy that considers the health implications of decisions and aims to avoid harmful health impacts to improve population health.(98) The approach considers the consequences of policy decisions on the health system and the determinants of health and wellbeing, and evaluates the potential health benefits and harms of policy decisions. (98) As previously recommended, (99) the consultation paper for the upcoming National Health and Climate Strategy includes a Health in All Policies approach and considers health impact assessment in climate-related policies. (89) Health impact assessments should include a specific focus on mental health and wellbeing, as well as an emphasis on the health impacts and benefits to young and future generations.



Keeping young people informed

Australia's youth policy framework requires that young people have confidence in the Australian Government's environmental action.(100) Young people should be provided with up-to-date and accessible information about climate change and climate-related government action. Under the Climate Change Act 2022, the Australian Government are required to prepare an Annual Climate Change Statement that includes:

- annual progress towards emissions targets;
- · relevant international developments;
- climate change policy;
- the effectiveness of Australian Government policies on emissions;
- the impact of the policies on rural and regional Australia; and
- risks to Australia from the impacts of climate change, including health impacts.(101)

There is an opportunity to adapt the Annual Climate Change Statement to ensure that it meets the needs of young people. This should be done in partnership with young people, which should involve a youth-specific dissemination plan and the inclusion of information about the benefits and impacts of policies on younger and future generations.



Increasing youth participation

Young people should be provided with opportunities to participate in climate change policy. Article 12 of the United Nations Convention on the Rights of the Child states that young people have a right to freely express their own views on the issues that impact them.(102) UNICEF UK have previously recommended that governments consult with and include young people in climate policy decision-making and noted that engagement methods should be developed to include young people in climate change policy.(103) The Australian Government recently established youth advisory groups. which includes a group specifically focused on climate change. This provides a model for greater youth participation in state and territory government climate policy.

Establish and resource climate change youth advisory groups in states and territories Establish and resource youth advisory groups that are focused on climate change and mental health issues across state and territory governments. Outcome Government policies and decisions represent the needs of young Australians.

Media

Many Australians have expressed an interest in learning about climate change through the news. Information can vary, with an analysis of 139,351 Australian newspaper articles on the 2019-20 Black Summer bushfire season identifying that 49 per cent of articles included a mention of climate change, with 29 per cent of climate change references considered in-depth and accurate and 5 per cent involving climate denialism.(104) In a survey of 750 TV viewers in Australian major cities, 88 per cent expressed some level of interest in learning about the impacts of climate change in a weather bulletin.(105) In a survey of Victorian adults, 77 per cent agreed that they would like to know more about the health impacts of climate change and 78 per cent, information on actions that will benefit health while mitigating climate change.(41)

Media and mental health

There is an association between climate anxiety and the rate of exposure to media related to climate change.(42) In Orygen's survey, most (70.7 per cent) young people expressed that hearing about extreme weather events has a very or somewhat negative impact on the mental health of young Australians.(12) Similarly, young people (aged 16-24) in the UK reported that upsetting media coverage was the second highest negative impact of climate change. (23) Conversely, most (72.3 per cent) young people in Orygen's survey found that hearing positive climate change stories in the media or online would be very or somewhat helpful to young people who experience climate distress. (12) There is a need for media organisations to be aware of wellbeing impacts when covering extreme weather events, and to promote the inclusion of positive climate change investment and advances in the media.



Article 17 of the United Nations Convention on the Rights of the Child notes the important function of the media and ensures that young people have access to information, while also encouraging guidelines that protect them from information that is detrimental or harmful to their wellbeing. (102) Australian media professionals and health organisations have access to comprehensive guidelines that support them with the safe and accurate media reporting of mental ill-health, suicide, eating disorders, and drug and alcohol use.(106) Mental health media guidelines with a focus on climate change and climate-related events would ensure that organisational and media reporting is accurate, encourages helpseeking, and increases coverage of positive climate advances and pro-environmental behaviour to reduce climate distress. These guidelines should:

- highlight the need to continue to appropriately inform the public about the evidence and impact of climate change, as well as health impacts;
- include guidance on headlines and mobile notifications;
- encourage organisations to follow the guidelines on their websites and social media channels:
- recognise that media coverage might have a significant impact on people who have experienced climate-related events;
- be developed in partnership with young people; and
- seek endorsement and uptake from climate, health and mental health sectors and government agencies.

Social media

Young Australians have described using social media to keep informed about climate change, learn about pro-environmental behaviour and be involved in activism.(96) As with traditional media, young Australians have expressed mixed feelings about climate change content on social media. While negative climate change content can impact on young people's mental health and increase feelings of hopelessness, guilt and overwhelm, positive content about people caring for the environment was seen as beneficial to wellbeing. (96) Stakeholder consultations identified that some young people may be overwhelmed by the frequency of climate change content on social media, and suggested that young people may need support in identifying when and how to reduce access to content if it is detrimental to their wellbeing. It is likely that climate distress media guidelines will be applicable to content posted on social media platforms.



Schools

Young people believe that schools have a role to play in supporting young people with climate distress. Young Australians have described feeling powerless, betrayed and afraid when learning about climate change in schools.(107) While teachers and school counsellors are not the most frequent professions that young people turned to in Orygen's survey, most young people reported that helping schools support young people with climate concerns would be very (32.7 per cent) or somewhat (39.5 per cent) helpful.(12) Similarly, a Canadian survey found that most (60 per cent) young people want education systems to teach young people how to constructively cope with climate distress and how to effectively collaborate with others to address climate change.(63) There is a role for schools to offer validation and developmentally appropriate support, and to refer significant climate distress to school wellbeing teams.(108)

Stakeholder consultations identified little support for teachers and schools in understanding climate distress. While some state and territory departments provide climate change content and classroom materials, resources are largely focused on climate change science education. National mental health education platform Be You includes content on climate-related disasters, but is yet to include content on climate distress. yourtown have developed climate distress advice that will be made available through Kids Helpline @ School later this year. There is currently a lack of comprehensive information from a definitive source on supporting climate distress in classrooms.

There is a need to enhance climate change education with comprehensive support for climate distress. An online government-hosted repository of climate change tools, guidance and classroom materials is needed to allow teachers to safely provide climate change education, discuss climate distress, identify young people at risk and support pro-environmental behaviour.

Case study

Force of Nature's discussion guide for educators

The climate anxiety discussion guide for educators consists of four modules developed by young people. The modules include educational content and reflective activities for content and covers how to cope with climate anxiety, channel anxiety into action and envision a better future. It includes suggested classrooms content, discussion questions, and advice to educators on how to best create a safe space for young people.

Policy solution

Develop and evaluate an online climate change repository for students and teachers

Fund the development and evaluation of a repository of evidence-informed resources, guidance and classroom activities about climate change and climate distress.

Outcome

Teachers and school staff are equipped to support students experiencing climate-related distress.

Health professionals

In 2020, most (72 per cent) surveyed Australian health professionals believed climate change was already having a moderate to great impact on the health of Australians, with over half (54 per cent) reporting that they currently see mental illhealth due to climate change - the second most frequent climate-related health issue reported. (109) In 2022, 16.5 per cent of surveyed Australian psychologists reported an increased frequency of climate distress presentations since 2019.(110) Over half (54.9 per cent) of surveyed Australian psychologists noted that they expected climate distress to be a key challenge that impacts their work over the next 5 to 10 years. Australian psychologists reported that they expected climate change to have a moderate (44.2 per cent) or critical (24.1 per cent) impact on their work, with only 6.0 per cent not expecting it to impact them. Similarly, a UK survey by the Royal College of Psychiatrists found that over half (57 per cent) of child and adolescent psychiatrists have seen young people distressed about climate change and the environment.(111)

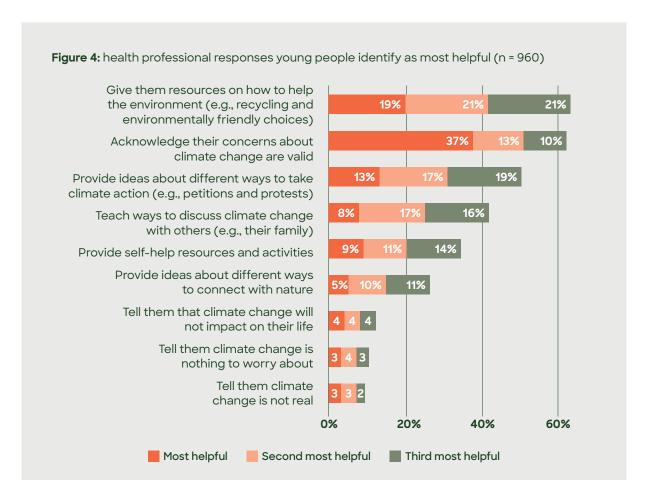
Health professional peak bodies have identified a need for greater focus on youth mental health and climate change. In a 2023-24 pre-budget submission, the Australian Psychological Society (APS) noted the need for a national priority that addresses the mental health impact of climate change on young people, recommending prevention and early intervention programs, enhanced coping strategies and providing a sense of optimism about the future.(112)

Young people's clinical support preferences

Insights from young people can inform the role of health professionals in supporting climate distress. Young people believe it is helpful and appropriate for their health professionals to connect them to pro-environmental action, with six in 10 (62.0 per cent) young people noting that it would be beneficial for health professionals to provide young people with resources on pro-environmental action (figure 4).(12) Stakeholders reported that this could foster a sense of autonomy and engage young people in meaningful action when they feel overwhelmed, helpless or disempowered. Validating responses were most frequently selected as a first choice for helpful responses. which may be beneficial and encourage people to express their feelings.(97).



"I have no future to look forward to.
I fear the collapse of civilisation.
I fear natural disasters like those seen increasing in frequency and severity already. This is the reality we have been told is coming, and yet nobody seems to care." Young person



Interventions and frameworks

There is a paucity of research on effective interventions for climate distress. A scoping review of interventions for people experiencing eco-anxiety identified 34 studies between 2005–2019, although most were conceptual papers and only four research studies were identified.(95) The scoping paper identified five themes among the identified interventions:

- fostering inner resilience, including cognitive, meaning-focused, existential, emotionfocused, self-care and art interventions;
- building social connection and support through groups;
- encouraging individual and collective climate action;
- inner work and education for the health professional; and
- · connecting to nature.

Some guidance is available to support health professionals build a foundational understanding of climate distress based on psychological principles, clinical experience and emerging evidence. Australian researchers have proposed a framework for mental health assessments in the context of climate change. (92) The key elements of the SAFE framework include:

- setting: cues of safety to share climate concerns in the waiting area and reception;
- awareness: clinician is aware of climate change and has sufficient support for their response to climate change;
- facts: clinician has knowledge about the mental health impacts of climate change and identifying the need for clinical intervention; and
- engagement: using validation, connection to others and values-based action.

Australian researchers and clinicians have also provided advice to GPs on understanding and managing climate distress, supporting GPs to identify maladaptive coping strategies and severe distress, and encourage adaptive coping strategies, behavioural engagement, connection to nature and connecting with groups.(113) A stronger evidence base for climate distress interventions needs to be developed to inform comprehensive guidelines.

Notably, consulted stakeholders identified that most health professionals will have the skills needed to support a young person experiencing general distress, but some may require further support in understanding effective approaches to climate distress, a thorough understanding of climate change and its impacts and strategies to safely engage in pro-environmental behaviour.

There is an opportunity to pilot a climate distress brief intervention module to provide mental health professionals with additional support. Brief interventions allow young people to access timely and time-limited support from health professionals. Orygen has developed a brief interventions in youth mental health toolkit, which includes assessment tools, evidenceinformed guidance and handouts on a range of youth mental health topics.(114) Young people have reported high levels of satisfaction with brief interventions, and identified particular value in learning strategies for managing emotions and coping strategies.(115) There is an opportunity to partner with young people to pilot a climate distress brief intervention module and develop associated training, providing mental health professionals with evidence-informed guidance, handouts and activities to complete with young people, and assist professionals to increase their knowledge about climate change and pro-environmental behaviours. Future work could assess the feasibility and effectiveness of extending the module to other workforces, including youth workers and school counsellors.

Design and pilot a brief intervention for young people experiencing climate distress

Design and pilot a climate distress brief intervention module and training.

Outcome

Health professionals can provide evidence-informed, time-limited support to young people.

Training and professional development

Climate change is not consistently embedded into tertiary health professional education. (116) There is increasing recognition of the need to include climate change in health professional education and to understand climate change as a determinant of health. (117) Four in five (84 per cent) Victorian health professionals agree that climate change health impacts and mitigation should be included in their undergraduate training, and most (88 per cent) believe that there should be ongoing professional development opportunities.(41) Australian health professionals have identified a

strong preference for flexible and online climate change professional development. Australian psychologists noted a preference for webinars (72 per cent) and online courses (71 per cent), and identified time (67 per cent) and cost (58 per cent) as key barriers.(11)

An assessment of the training and professional development needs of health professionals should be included in the National Health and Climate Strategy, followed by the development of training, professional development and clinical practice points. Training should be designed in partnership with young people and leverage existing guidance.

Case study

Psychology for a Safe Climate

Psychology for a Safe Climate are a nonprofit organisation supporting people working in health or mental health in Australia. The organisation offers:

- Climate Cafes, which are facilitated conversational spaces for people to share their thoughts about climate change.
- Interversion groups to connect and share resources with people working in mental health or environmental roles.
- Professional development for health professionals to build skills and knowledge in supporting people experiencing climate distress.
- A public network of health professionals who have undertaken professional development, aiming to increase access to health professionals who are knowledgeable about climate distress.



Policy solution

Assess climate distress training needs and develop resources for health professionals

Ensure that the National Health and Climate Strategy includes an assessment of the training and professional development needs of health professionals in relation to climate distress. Subsequently, fund the development of training, professional development and clinical practice points that address identified gaps.

Outcome

Clinicians are equipped to support young people experiencing climate distress.

Young people and their supports

Most young people report that they would turn to friends, parents or online resources if they were experiencing climate distress. While some resources are currently available through climate and mental health organisation websites, they are often brief communications that provide broad advice informed by psychological principles. Additionally, the available resources are not likely to meet the unique needs of a young person, or a person experiencing significant climate distress. There is a need to provide a comprehensive online hub of youth-friendly psychoeducational content and activities, regularly audited and updated to reflect emerging evidence on effective tools. These resources should be developed in partnership with young people, leverage existing resources, be suitable for health professionals and schools to provide to young people, and be provided across youth mental health, youth and climate change organisation websites. The online hub should be resourced to develop and deliver an implementation plan for Australian schools and health professionals, as well as a youth-focused campaign that aims to increase awareness about climate distress and available resources.

Case study

Climate Cares self-guided journal

In the UK. Climate Cares is a collaboration between researchers at the Institute of Global Health Innovation and the Grantham Institute at Imperial College London. Climate Cares worked with young people to develop a self-guided activity journal to help young people (aged 16-24) explore climate-related feelings.(118) The journal contains stories, a daily check in to identify emotions and practice gratitude, areas for freeform writing, and short activities that aim to help young people identify what they are feeling, build a self-care practice. envision a better world and find creative ways to take action. In a small trial during COP26, preliminary results indicate that the journal may assist young people to develop coping skills and engage in meaningful climate action. Climate Cares have worked on adjusting the journal for young people in other countries.

Policy solution

Fund the development of a youthspecific climate distress online hub

Develop a youth-specific online hub and campaign focused on increasing awareness about climate distress and available supports.

Outcome

Evidence-informed resources support young people, families, health professionals and people supporting young people.



Policy solutions

Define and conceptualise climate distress

| Policy solution | Evidence base and rationale | Outcome | Mechanism |
|---|---|---|--------------------------------------|
| Fund the development of a standardised definition and conceptualisation of climate distress. Subsequently develop and test a climate distress measurement tool. | Previous research on climate distress utilises heterogeneous definitions, terms and measures. A standardised definition and conceptualisation of climate distress will ensure appropriate measurement and screening tools, and consistency in future approaches. The conceptualisation should categorise and define the range of experiences, from healthy adaptive responses to experiences that may require clinical support. The definition and measurement tool should include a more comprehensive focus than anxiety-related emotions. | Increased consistency strengthens the available evidence base for policy development. | Mental health research organisation. |

Address mental health and climate change research gaps and develop research infrastructure

| Policy solution | Evidence base and rationale | Outcome | Mechanism |
|--|--|--|--|
| Respond to research gaps in mental health and climate change. This should include: • dedicated funding on climate change and mental health, with a particular focus on young people and effective interventions; • removing contribution barriers in linkage and partnership projects to support the involvement of organisations with fewer resources; and • the development of research networks and supporting knowledge translation and data sharing. | While the academic literature on climate change and youth mental health has increased in recent years, very little is understood about the relationship between climate change and mental health, as well as effective prevention and intervention in clinical and community environments. The agenda should be aligned to an international research agenda, such as Connecting Climate Minds. Additionally, stakeholders noted barriers working with small organisations in partnership and linkage projects due to the requirements to provide cash or in-kind contributions that match the grant funding requested. This has been a barrier to evaluating climate and mental health programs in Australia. | Policymakers and clinicians have evidence to inform policies, programs and practice that best supports young people and mitigate climate distress. | National Health and Medical Research Council, Australian Research Council. |

Include climate change in youth-related strategies and plans

| Policy solution | Evidence base and rationale | Outcome | Mechanism |
|--|--|---|--|
| Include the impact of climate change in future federal, state and territory youth, education and mental health plans. Additionally, climate adaptation plans should include a focus on young people and mental health. | The direct and indirect impacts of climate change is missing from most youth, education and mental health plans. Future federal, state and territory plans should include measurable and resourced activities on the intersection between climate change and mental health, particularly for young people. | Governments have planned responses to the impact of climate change on young people. | Federal, state and territory health and education departments. |

Ensure the effective development and implementation of the national health and climate strategy

| Policy solution | Evidence base and rationale | Outcome | Mechanism |
|---|--|--|---|
| The National Health and Climate Strategy should be resourced to include funded activities with measurable outcomes, regular reporting and an implementation plan. The strategy should: • ensure dedicated consultation with young people and the youth and mental health sector; • include actions focused on addressing young people's climate distress; and • inform an updated NDC. | Consultations identified a strong need for whole-of-government approaches and activities that span the intersection of climate change and mental health. Stakeholders also noted a need for stronger mental health sector engagement in the development of the strategy, as well as a dedicated focus on young people and mental health. | Resourced, whole-of- government activities support young people experiencing the mental health impacts of climate change. | Australian Government Department of Health and Aged Care. |

Ensure a health impact assessment of climate-related policy and investment

| Policy solution | Evidence base and rationale | Outcome | Mechanism |
|--|--|--|---|
| Include a health impact or health lens assessment in climate-related policy and investment. This should include: • a mental health and wellbeing assessment; and • an emphasis on younger and future generations. | Young people have identified that their wellbeing is impacted by government action on climate. Consideration of the mental health and wellbeing benefits and consequences of climate-related decisions recognises the broad impacts of government decision-making. | Health and wellbeing is considered in all climate-related policy and investment. | Australian Government, state and territory governments. |

Adapt the annual climate change statement for young people

| Policy solution | Evidence base and rationale | Outcome | Mechanism |
|--|--|--|--|
| Develop a Youth Annual Climate Change Statement with a dissemination plan focused on young people. | Australia's youth policy framework requires that young people have confidence in the environmental actions of the Australian Government. Developing a Youth Annual Climate Change Statement and dissemination plan ensures that young people are aware of climate change policy and progress being made. This should be developed in partnership with the climate change youth advisory group and the Office for Youth and should consider expanding the statement to include a focus on mental health, wellbeing, and the impacts to younger and future generations. | Young people are provided with youth- friendly information about climate change in Australia. | Australian Government Department of Climate Change, Energy, the Environment and Water. |

Establish and resource climate change youth advisory groups in states and territories

| Policy solution | Evidence base and rationale | Outcome | Mechanism |
|--|---|---|----------------------------------|
| Establish and resource youth advisory groups that are focused on climate change and mental health issues across state and territory governments. | The Australian Government established a mental health and a climate change youth advisory group in March 2023. These groups and their implementation should inform the creation of groups in state and territory jurisdictions, which should leverage state and territory youth departments and youth affairs councils. | Government policies and decisions represent the needs of young Australians. | State and territory governments. |

Develop climate distress media guidelines

| Policy solution | Evidence base and rationale | Outcome | Mechanism |
|---|--|--|--|
| Fund the development of guidelines for media professionals and climate organisations on the reporting of climate change and extreme weather events. | In partnership with young people, guidelines should seek to increase adaptive coping and helpseeking behaviours and minimise contributing to climate distress. | Content about climate change and climate- related events are safe and support help- seeking. | Australian Government Department of Health and Aged Care, mental health and climate organisations. |

Develop and evaluate an online climate change repository for students and teachers

| Policy solution | Evidence base and rationale | Outcome | Mechanism |
|--|--|---|--|
| Fund the development and evaluation of a repository of evidence-informed resources, guidance and classroom activities about climate change and climate distress. | Teachers and schools require further support to safely provide climate change education, as well as understanding and managing climate distress in the classroom. An online repository of resources, guidance and classroom activities would encourage the safe communication of issues relating to climate change, identify students at risk of distress and aim to mitigate severe climate distress. This should leverage existing resources and be supplemented with resources developed by young people and a youth mental health organisation. Resources should be incorporated into existing national mental health education initiatives. | Teachers and school staff are equipped to support students experiencing climate-related distress. | Australian Government Department of Education. |

Design and pilot a brief intervention for young people experiencing climate distress

| Policy solution | Evidence base and rationale | Outcome | Mechanism |
|---|---|--|---|
| Design and pilot a climate distress brief intervention module and training. | Health professionals are currently supporting young people experiencing climate distress. While many health professionals are equipped at providing mental health support, they may be supported by brief, evidence-informed, climate-specific content and activities. This module should be developed in partnership with clinicians and young people. | Health professionals can provide evidence- informed, time-limited support to young people. | Australian Government Department of Health and Aged Care, youth mental health organisation. |

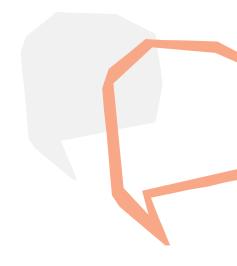


Assess climate distress training needs and develop resources for health professionals

| Policy solution | Evidence base and rationale | Outcome | Mechanism |
|---|--|--|---|
| Ensure that the National Health and Climate Strategy includes an assessment of the training and professional development needs of health professionals in relation to climate distress. Subsequently, fund the development of training, professional development and clinical practice points that address identified gaps. | While some guidance for clinicians exist, gaps in training and professional development remain. The National Health and Climate Strategy should include resourced actions that assess and respond to training needs. This should include a focus on content relating to young people and climate distress. | Clinicians are equipped to support young people experiencing climate distress. | Australian Government Department of Health and Aged Care. |

Fund the development of a youth-specific climate distress online hub

| Policy solution | Evidence base and rationale | Outcome | Mechanism |
|---|---|---|---|
| Develop a youth- specific online hub and campaign focused on increasing awareness about climate distress and available supports. | The current resources provided by mental health, youth and climate change websites are often broad or inconsistent. Resources should be evidence-informed and provide comprehensive advice to young people, families and professionals working with young people. This should leverage existing resources, be updated to reflect emerging evidence, and young people and a youth mental health organisation should be funded to supplement with additional content. | Evidence- informed resources support young people, families, health professionals and people supporting young people. | Australian Government Department of Health and Aged Care. |



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Orygen acknowledges the Traditional Owners of the lands we are on and pays respect to their Elders past and present. Orygen recognises and respects their cultural heritage, beliefs and relationships to their Country, which continue to be important to First Nations people living today.







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