Practice Alert

Sun and summer safety

November 2022

Key points

- Particularly in the summer months, there is an increased risk of heat-related illness and health complications.
- People with disabilities who are most at risk of experiencing heat-related illness include people with swallowing difficulties, people with an intellectual or physical disability, and people who are highly reliant on others.
- Some medications may also increase the risk of heat-related illness.
- Always plan ahead when extreme weather is forecast and take steps to reduce the risk of heat-related illness.
- Monitor the fluid intake of participants and watch for signs of dehydration and heat stress.
- Use sun safety measures: apply sunscreen, wear a hat, protective clothing and sunglasses, and seek shade when outside, especially during the hottest parts of the day.
- If you are worried a person is experiencing heat-related illness, seek medical advice straight away.

Heat-related illness

Heat exhaustion is the body's response to an excessive loss of fluids and salt through perspiration. Heat exhaustion can progress to heat stroke if immediate steps are not taken to reduce body temperature. Signs of heat exhaustion include:

- Heavy sweating
- Cold, pale or clammy skin
- Nausea or vomiting
- Muscle cramps
- Dizziness
- Headache
- Fast, weak pulse

Heat stroke occurs when the body's internal temperature reaches above 40.5 degrees Celsius

Heat stroke is a medical emergency and 000 must be called.

Signs of heat stroke include:

- High body temperature (above 40.5 degrees Celsius)
- Fast and strong pulse
- Hot, red, dry or damp skin
- Intense thirst
- Rapid shallow breathing
- Headache
- Dizziness
- Confusion
- Loss of consciousness
- Nausea

Heat-related illness risk factors

People with higher risk of heat-related illness include:

- People with dysphagia (swallowing difficulties)
- People taking more than one medication
- People with epilepsy or other neurological disorders
- People with cerebral palsy or other motor disorders
- People with dementia or other intellectual disabilities
- People who are obese or have low levels of physical fitness
- People with diabetes, or hypertension (high blood pressure).

Dehydration

People with a disability and particularly those with eating and/or drinking support needs are at greater risk of dehydration. Dehydration can complicate pre-existing medical conditions and cause significant illness. Some other risk factors for dehydration include:

- Intellectual or cognitive impairment
- Medications such as antipsychotics that reduce thirst sensation and prevent sweating, or diuretics and laxatives that reduce fluids in the body.

Behaviours of concern

Acute medical conditions such as dehydration can increase behaviours of concern and extreme heat can often exacerbate comorbid mental illness and/or behavioural disorders.

Photosensitivity

Some medications can increase the body's sensitivity to UV rays (photosensitivity). These include some antipsychotics, antidepressants, anticonvulsants, antihistamines, diuretics, NSAIDS, statins and diabetes medications. People who take these medications may experience significant adverse effects following sun exposure and should be encouraged to cover their skin as much as possible, in addition to applying sunscreen and other sun safety measures.

Medications associated with an increased risk of heat-related illness

Some types of medications can increase the risk of heat-related illness, because of adverse effects associated with these medications. These include an impaired perspiration response and/or thirst sensation, dehydration due to reduced availability of water in the body, a reduced ability to perceive hot weather, sedation effect, or low blood pressure. People who take multiple medications are at even greater risk. You can read more about the use of multiple medications in the Practice Alert: Polypharmacy.

Medications with known heat-related side effects include:

- Anticonvulsants – including carbamazepine, phenobarbital, and topiramate
- Antidepressants (both SSRIs and tricyclic antidepressants)
- Antipsychotics – including aripiprazole, haloperidol, risperidone
- Diabetic medication – including metformin
- Diuretics and laxatives
- Statins – such as simvastatin
- Stimulants – such as methylphenidate.

Supporting participants

Sun protection

Workers and participants should avoid going outside during the hottest parts of the day especially between the months of September and March when the UV (ultraviolet) index is highest (10am-2pm during Australian Standard Time, or 11am-3pm in the Northern Territory, North Queensland or during daylight saving time).

Sun protection measures should be implemented when the UV index is 3 or higher. Sun protection measures should be used year-round (even on cloudy days) and can be particularly important for people living in States or Territories that regularly experience a high UV index and heat throughout the year, such as Queensland or the Northern Territory.

✓ You can check the weather forecast and UV index on the Bureau of Meteorology website or BOM Weather App, or Cancer Council SunSmart App.

Sun safety measures:

Apply sunscreen: applying sun protection factor (SPF) 30+ sunscreen at least 20 minutes before exposure to the sun and reapply at least every 2 hours to minimise the chances of being burnt. Apply sunscreen to any skin exposed to the sun.

Wear a hat: workers and participants should wear a hat with a brim to protect the face and neck from the sun.

Protective clothing: workers and participants should be encouraged to wear clothes that cover as much of their skin as possible.

Seek shade: when outside during summer it is best to sit in the shade such as under a tree, beach tent, or sun shelter to reduce exposure to the sun.

Wear sunglasses: wear sunglasses to protect the eyes from sun damage.

Some participants may not want to use particular sun safety measures such as applying sunscreen or wearing a hat. It is important to provide participant with choices and encourage all participants to implement sun safety measures. Some options for participants who do not want to implement sun safety measures include:

- A roll-on or spray sunscreen
- Wearing loose-fitting long clothing instead of wearing sunscreen
- Sitting in a sheltered area instead of wearing a hat or between putting on sunscreen.

Stay hydrated

Workers should support participants to stay hydrated in a manner that aligns with mealtime management plans and medical/allied health professionals regarding fluid intake. Workers should be familiar with participants' preferred drinks in order to encourage more fluid intake.

You can read more about mealtime management plans in the Practice Alert: Dysphagia, safe swallowing and mealtime management.

Plan ahead

Workers can support participants to plan ahead for outdoor activities during hot weather. This might include planning to:

- Go at a time of day that is cooler
- Reschedule or reconsider plans that involve sun exposure
- Go to locations that include shaded areas and amenities
- Have water and preferred drinks available
- Keep food and drinks refrigerated or cold - consider taking an esky or cooler bag to keep them cold while out
- Avoid wearing dark coloured clothing that absorb heat more than lighter coloured clothing.
- Eat cold foods and foods with a high water content such as salads, fruit and cold meats or fish.

Participants can also be supported to prepare their home ahead of hot weather, including to:

- Make sure all air conditioners and fans are working ahead of time
- Consider other ways to decrease heat exposure for example: installing additional blinds, reducing heat from appliances during the hotter parts of the day
- Create a contingency plan in case there is a power failure or air conditioning is not working on the day.

During extreme heat

- Stay indoors in a cool environment
- Reduce activity and minimise exertion
- Increase fluid intake.

All workers and participants should use sun and heat safety measures if going outside is unavoidable during extreme heat.

Medication Reviews

Prior to the summer season or as soon as possible, it is important that participants have all their medications reviewed by a pharmacist to assess for adverse effects and drug-to-drug interactions that can increase the risk of heat-related illness.

Recommendations from medication reviews that can prevent heat-related illness should be incorporated into participant support plans and medical records.

You can read more about medication reviews in the Practice Alert: Polypharmacy.

Support Plans

Participants at higher risk of heat-related illness can be supported to update medical records and support plans with information to prevent and manage heat-related illness or issues. This might include reviewing the following support plans with relevant medical and/or allied health specialists:

- Health care plans, including medical records
- Mealtime Management Plans
- Epilepsy Management Plans
- Behaviour Support Plans.

You can read more about keeping participant support plans up to date in the Practice Alert: Comprehensive Health.

When heat exhaustion or heat stroke is suspected:

- Seek medical assistance immediately.
- If it is an emergency, call 000.
- For health advice, call Health Direct 1800 022 222 to speak with a Registered Nurse.

Take steps to cool the person down:

- Loosen clothing.
- Move to a cool place.
- Place wet cool cloths on the person's neck, armpits or groin or take a cool bath.

For further information refer to Hot weather risks and staying cool - Healthdirect or Beat the heat - NSW Government

Provider obligations

NDIS Code of Conduct

Providers and workers must comply with the NDIS Code of Conduct when providing supports or services to NDIS participants.

The NDIS Code of Conduct requires all NDIS providers and workers who provide NDIS supports or services to NDIS participants to, among other things:

- Act with respect for individual rights to freedom of expression, self-determination and decision-making in accordance with applicable laws and conventions
- Provide supports and services in a safe and competent manner with care and skill
- Promptly take steps to raise and act on concerns about matters that may impact the quality and safety of supports and services provided to people with disability.

NDIS Practice Standards

If you are a registered NDIS provider, you must comply with the NDIS (Provider Registration and Practice Standards) Rules 2018 as part of your conditions of registration. The NDIS Practice Standards relate to the delivery of safe, quality supports and services, and the management of risks associated with the supports you provide to NDIS participants.

In delivering NDIS support and services, providers must also demonstrate compliance with the NDIS Practice Standards and Quality Indicators. The NDIS Commission's guidance on the NDIS Practice Standards and Quality Indicators provides a resource to assist registered NDIS providers to understand their obligations.

The NDIS Practice Standards that are most relevant to this alert include:

- **Access to supports:** each participant can access the most appropriate supports that meet their needs, goals and preferences.
- **Independence and informed choice:** each participant is supported by the provider to make informed choices, exercise control and maximise their independence relating to the supports provided.
- **Information management:** each participant's information is managed to ensure that it is identifiable, accurately recorded, current and confidential. Each participant's information is easily accessible to the participant and appropriately utilised by relevant workers.
- **Responsive Support Provision:** each participant can access responsive, timely, competent and appropriate supports to meet their needs, desired outcomes and goals.
- **Risk management:** risks to participants, workers and the provider are identified and managed
- **Support planning:** each participant is actively involved in the development of their support plans. Support plans reflect participant needs, requirements, preferences, strengths, and goals, and are regularly reviewed.

Resources

Easy-read Resources

Council for Intellectual Disability. Summer Safety Easy-read https://cid.org.au/wp-content/uploads/2021/11/Summer-Safety-Easy-Read-Guide.pdf (PDF, 1.3 MB).

Hertfordshire Health and Community Services 2015. Easy-read guide to being safe in the sun. https://www.hcpa.info/wp-content/uploads/easy-read-guide-to-being-safe-in-the-sun-SHINE-event.pdf (PDF, 239 KB).

Centres for Disease Control and Prevention. Heat-Related Illness Fact Sheet https://www.cdc.gov/disasters/extremeheat/pdf/Heat_Related_Illness.pdf (PDF, 113 KB).

Sun safety and UV

Sun safety | Cancer Council
SunSmart App | Cancer Council
UV Index | Cancer Council
About UV and sun protection times (bom.gov.au)
Hot weather risks and staying cool | healthdirect
Heatwave Service for Australia (bom.gov.au)
Heatwave preparation checklist - Beat the heat (nsw.gov.au)

State and Territory advice regarding sun and heat safety

Heat stress - NT.GOV.AU
Heat (healthywa.wa.gov.au)
Hot weather health and safety | Health and wellbeing | Queensland Government (www.qld.gov.au)
Sun Safety (health.qld.gov.au)
Extreme heat and heatwaves (health.vic.gov.au)

Beat the heat (nsw.gov.au)
Extreme heat | Tasmanian Department of Health
Summer safety | Health (act.gov.au)
Extreme heat | SA Health

References

Ball S, Panter S, Redley M, Proctor C-A, Byrne K, Clare I, Holland A 2012. The extent and nature of need for mealtime support among adults with intellectual disabilities. Journal of intellectual disability research, 56 (4): 382-401

Blakely K, Drucker A, Rosen C 2019. Drug-induced photosensitivity - An update: culprit drugs, prevention and management. Drug safety, 42 (7): 827-47.

Bongers K, Salahudeen M, Peterson G 2020. Drug-associated non-pyrogenic hyperthermia: a narrative review. European journal of clinical pharmacology, 76 (1):9-16.

Bouchama A, Dehbi M, Mohamed G, Matthies F, Shoukri M, Menne B 2007. Prognostic factors in heat wave-related deaths: a meta-analysis. American Medical Association, 167 (20): 2170-6

Brennan M, O'Shea P, Mulkerrin E 2020. Preventative strategies and interventions to improve outcomes during heatwaves. Age and ageing, 49: 729-32.

Cancer Australia 2022. UV radiation | Cancer Australia (accessed 12th October 2022).

Cancer Council Australia 2020. https://www.cancercouncil.com.au/skin-cancer/ (accessed 17th November 2021).

Cancer Council Queensland 2017. Queensland sunburn stats a warning as autumn kicks in. https://cancerqld.org.au/news/queensland-sunburn-stats-warning-autumn-kicks/ (accessed 16th December 2021).

Cancer Council Queensland 2021. Sun protection [website]. Being Sunsmart - Cancer Council QLD (cancerqld.org.au) (accessed 20th December 2021).

Cancer Council Queensland 2021. https://cancerqld.org.au/cancer-prevention/sun-protection/#protect (accessed 20th December 2021).

Centres for Disease Control and prevention (CDC) (2017). Warning signs and symptoms of heat-related illness [website] https://www.cdc.gov/disasters/extremeheat/warning.html (accessed 20th December 2021).

Chadwick D, Stubbs J, Fovargue S, Anderson D, Stacey G, Tye S. 2014. Training support staff to modify fluids to appropriate safe consistencies for adults with intellectual disabilities and dysphagia: an efficacy study. Journal of intellectual disability research, 58 (1): 84-98.

De Winer C, Jansen A, Evenhuis H 2011. Physical conditions and challenging behaviour in people with intellectual disability: a systematic review, Journal of Intellectual Disability Research, 55 (7): 675-88.

Han D, McDuff D, Thompson D, Hitchcock M, Reardon C, Hainline B 2019. Attention deficit/ hyperactivity disorder in elite athletes: a narrative review. British journal of sports medicine, 53 (12): 741-5.

Herbst J, Mason K, Byard R, Gilbert J, Charlwood C, Heath K 2014. Heat-related deaths in Adelaide, South Australia: review of the literature and case findings – An Australian perspective. Journal of forensic and legal medicine, 22: 73-8.

Hertfordshire Health and Community Services 2015. Easy read guide to being safe in the sun. https://www.hcpa.info/wp-content/uploads/easy-read-guide-to-being-safe-in-the-sun-SHINE-event.pdf (Accessed 14th December 2021).

Hoffmann G, Weber B 2020. Drug-induced photosensitivity: culprit drugs, potential mechanisms and clinical consequences. Journal der Deutschen Dermatologischen Gesellschaft, 19 (1): 19-29.

Hooper L, Bunn D 2015. Reducing dehydration in residents of care homes. Nursing times, 111 (34/5): 16-19.

Kanellis V 2020. Barriers to sun safety in autism spectrum disorder. Biophysical Reviews, 12: 791-2.

Lawton E, Pierce H, Gabb G 2019. Review article: environmental heatstroke and long-term clinical neurological outcomes: a literature review of case reports and case series 2000-2016. Emergency medicine Australasia, 31 (2): 163-73.

Levine M, LoVecchio F, Ruha A-M, Chu G, Roque P 2012. Influence of drug ise on morbidity and mortality in heatstroke. Journal of medical toxicology, 8: 252-7.

Manduchi B, Fainma G, Walshe M 2020. Interventions for feeding and swallowing disorders in adults with intellectual disability: a systematic review. Dysphagia, 35 (2): 207-19.

Mornington Peninsula Shire 2021. How to prepare for heat waves and stay healthy this summer. https://www.mornpen.vic.gov.au/Community-Services/Seniors/Health-Wellbeing-Tips-for-Older-Residents/How-to-prepare-for-heat-waves-and-stay-healthy-this-summer (accessed 1st December 2021).

Northern Territory Government (Department of Education) 2016. Sun safety in schools | Department of Education (accessed 6th October 2022).

Northern Territory Institute of Sport (NTIS) 2012. NTIS sun and heat guidelines. https://www.nt.gov.au/__data/assets/pdf_file/0010/238159/NTIS-Sun-and-Heat-Guidlines,-Sept-2012.pdf (Accessed 16th December 2021).

NSW Health 2019 – How to stay healthy in the heat. https://www.health.nsw.gov.au/environment/beattheheat/Pages/stay-healthy-in-heat.aspx (Accessed 14th December 20121).

NSW Health 2020. Heat-related illness [website]. https://www.health.nsw.gov.au/environment/beattheheat/Pages/heat-related-illness.aspx#:~:text=Heat%20exhaustion%20is%20the%20body%27s,can%20turn%20into%20heat%20stroke (Accessed 20th December 2021).

Perez C, Ball S, Wagner A, Clare I, Holland A, Redley M 2015. The incidence of healthcare use, ill health and mortality in adults with intellectual disabilities and mealtime support needs. Journal of intellectual disability research, 59 (7): 638-52.

Schols J, Rikkert M, van der Cammen T 2009. Preventing and treating dehydration in the elderly during periods of illness and warm weather. The journal of nutrition health and ageing, 13 (2): 150-7.

Stella A, Filingeri D, Ravanelli N, Morrison S, Ajčević M, Furlanis G, et al 2021. Heat risk exacerbation potential for neurology patients during the COVID-19 pandemic and related isolation. International journal of Biometeriology, 65 (4): 627-30.

SunSmart 2020. What is UV? https://www.sunsmart.com.au/uv-radiation/what-is-uv#:~:text=UV%20levels%20can%20be%20damaging,UV%20levels%20are%20less%20intense. (accessed 17th November 2021).

Taylor 2021. Adult dehydration. https://www.ncbi.nlm.nih.gov/books/NBK555956/.

Westaway K, Frank O, Husband A, McClure A, Shute R, Edwards S 2015. Medicines can affect thermoregulation and accentuate the risk of dehydration and heat-related illness during hot weather. Journal of clinical pharmacy and therapeutics, 40: 363-7.

General enquiries

Call: 1800 035 544 (free call from landlines). Our contact centre is open 9.00am to 4.30pm in the NT, 9.00am to 5.00pm in the ACT, NSW, QLD, SA, TAS and VIC Monday to Friday, excluding public holidays.

Email: contactcentre@ndiscommission.gov.au

Website: www.ndiscommission.gov.au