Climate change and its impact on health

- In the last 130 years, the world has warmed by approximately 0.85°C. As a result, extreme weather events are becoming more intense and frequent.

- Between 2030 and 2050, climate change is expected to cause approximately 250,000 additional deaths per year, from malnutrition, malaria, diarrhoea and heat stress.

- Direct damage cost to health is estimated to be between US$ 2-4 billion/year by 2030.

Prolonged and sustained heat waves can also be attributed to climate change, and are occurring more and more frequently in many parts of the world. Extreme high air temperatures contribute directly to deaths from cardiovascular and respiratory disease, particularly among elderly people. In addition, high temperatures raise the levels of ozone and other pollutants in the air, which exacerbate cardiovascular and respiratory disease.

In April and May 2016, the South East Asia region experienced drought, severe heat and water shortages, exacerbated by one of strongest El Niño climate cycles in decades. In Myanmar, several cases of heat-related illnesses were reported across the country, including cases of death from heat stroke.

Health effects of heat on the body

An increase in heat-related health problems is common during heat waves. Common symptoms of heat-related illnesses are: dehydration, fatigue, cramps, exhaustion, heavy sweating, faster and weaker pulse.

Heat-related illnesses are preventable and treatable, but can become fatal if symptoms are not addressed in a timely way. Heat stroke is a serious condition where the body temperature raises to dangerous levels, and it can lead to death.

Risk factors for heat-related illnesses

The main predisposing factors for heat-related illness are:

- Age – elderly people (65 or older) are more at risk;
- Dehydration because of reduced food and liquid uptake, intestinal problems, use of diuretics and alcohol abuse;
- Use of drugs and medication affecting the body temperature regulation system;
- Lower levels of fitness;
- Overweight;
- Fatigue, sleep deprivation, long-term high-level exercise and wearing protective clothing.
What to do to prevent and manage heat-related illnesses

Although anyone at any time can suffer from heat-related illness, some people are at greater risk than others. Check regularly on: infants and young children, people aged 65 or older, people who have a mental illness and those who are physically ill. If you know any elderly person living alone or isolated, make sure to regularly establish contact to check on their health (also known as ‘buddy system’).

Keep informed on the weather by regularly checking weather forecast by the national Department of Meteorology and listen to the authorities’ recommendations.

In order to prevent and manage heat-related illnesses, everyone should:

- Drink more water and fluids (non-alcoholic), regardless of activity levels. Don’t wait until you are thirsty to drink. Water consumption is a key measure for contrasting dehydration.
- Don’t drink liquids that contain caffeine, alcohol, or large amounts of sugar – these actually cause you to lose more body fluids and worsen dehydration.
- Stay indoors and, if possible, stay in an air-conditioned or ventilated place.
- Wear lightweight, light-colored, loose-fitting clothing.
- NEVER leave anyone in a closed, parked vehicle.

If you must be out in the heat:

- Limit your outdoor activity to morning and evening hours.
- Cut down on exercise. If you must exercise, drink more water and non-alcoholic fluids.
- Try to rest often in shady areas.
- Protect yourself from the sun by wearing a wide-brimmed hat and sunglasses and by putting on sunscreen of SPF 15 or higher (the most effective products say “broad spectrum” or “UVA/ UVB protection” on their labels).

If symptoms of heat-related illnesses do not improve by cooling the body down and drinking water and fluids, one could be at risk of heat stroke. This is a medical emergency; seek medical help as soon as possible.

Content for this factsheet is adapted from: Climate Change and Health, WHO Factsheet; Heat waves: Risks and responses, WHO Europe; Extreme Heat and your health, Center for Disease Control (CDC), USA. For more information, please contact WHO Myanmar at semmr@who.int.