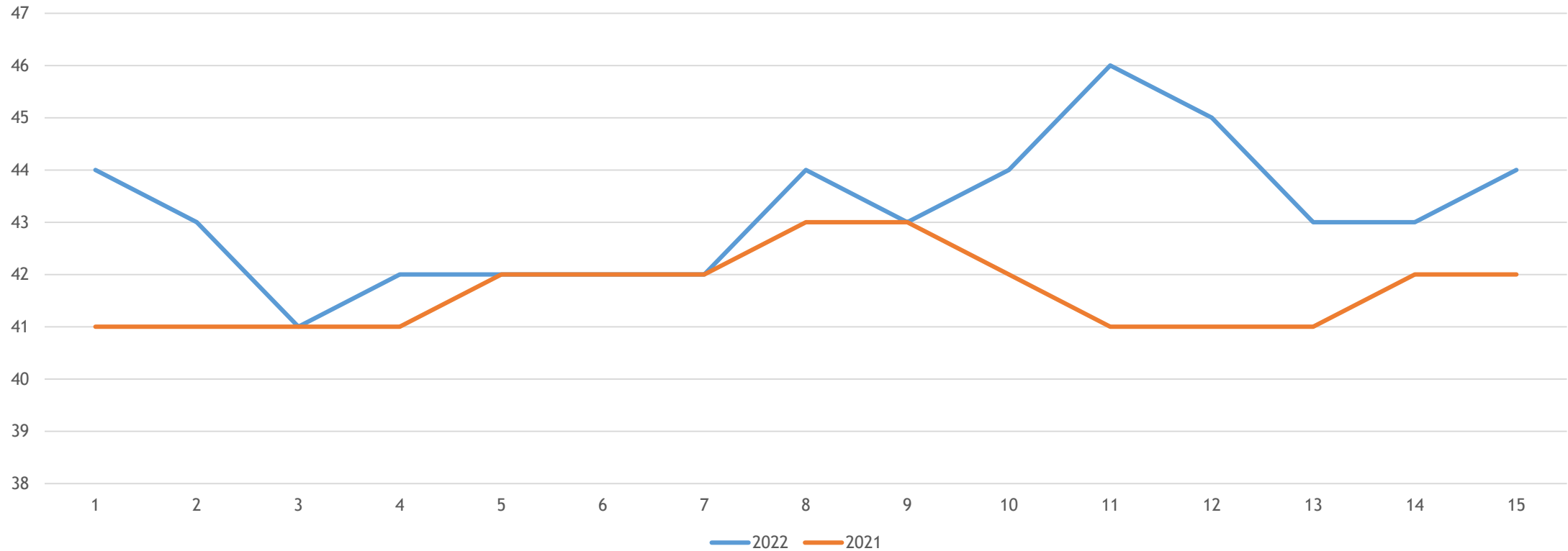


# Preventing and managing hyperthermia and heat stroke

Basic Health Care Services  
(for BHS staff and volunteers)

# Rising temperatures in areas we work

Figure-1: Temperatures in Salumber block,  
May 1-15, 2021-2022



What are the reasons for increasing temperatures? - Discuss

# Causes of heatstroke

- *Exposure to a hot environment. Non-exertional* (classic) heatstroke, being in a hot environment leads to a rise in core body temperature.
- *Strenuous activity. Exertional* heatstroke is caused by an increase in core body temperature brought on by intense physical activity in hot weather.

# Consequences

- **Damage to vital organs:** Without a quick response to lower body temperature, resultant heatstroke can cause your brain or other vital organs to swell, may result in permanent damage.
- **Death:** Without prompt and adequate treatment, heatstroke can be fatal.
  - Especially for newborns, elderly and pregnant women.
  - We saw several newborn deaths in our areas last year



# Exacerbating factors

- *Wearing excess clothing* that prevents sweat from evaporating easily and cooling your body
- *Drinking alcohol*, which can affect your body's ability to regulate your temperature
- *Becoming dehydrated* by not drinking enough water to replenish fluids lost through sweating
- *Staying in hot surroundings:*
  - Metal Corrugated sheets
  - Thick brick walls with no ventilations

# Prevention

- Wear loose-fitting, lightweight clothing.
- Wearing excess clothing or clothing that fits tightly won't allow your body to cool properly.
- Protect against sunburn. Cover your head
  - Cap, Dupatta, hat and sunglasses
- Drink plenty of fluids. Staying hydrated will help your body sweat and maintain a normal body temperature.
- ORS, lemon water, Chaach are good options. Keep them with you always.



# Prevention

- *Avoid heavy work during heat:*
  - Work during early hours and late hours
- *Stay in cool places:*
  - *Under a tree*
  - *Surrounded by cotton sheets*
  - *Improve ventilation in houses*





## Management of heatstroke: Symptoms and signs

- *High body temperature* A core body temperature of 104 F (40 C) or higher (ideally obtained with a rectal thermometer)
- *Altered mental state or behavior.* Confusion, agitation, slurred speech, irritability, delirium, seizures and coma
- *Alteration in sweating:* Skin feels hot & dry to touch.
- *Nausea and vomiting*
- *Flushed skin.* Your skin may turn red as your body temperature increases.
- *Rapid breathing.* Your breathing may become rapid and shallow.
- *Racing heart rate.* Your pulse may significantly increase
- *Headache.* Your head may throb.

# Management:

If rectal temperature is less than 104 degrees, not delirious

- *Take the patient to cool place*
- *Remove warm/ excessive clothing*
- *Cool off with damp sheets and a fan.* Cool the person by covering him or her with damp sheets or by spraying with cool water. Direct air onto the person with a fan.
- *Give the patient a cool bath or shower:* Soaking in a cool pond or stream can help bring temperature down.
- *Rehydrate.* Give the patient plenty of fluids, ORS is best, else plain water, lemon water etc. No cold drink.

# Management:

If rectal temperature is more than or equal to 104 degrees and / or delirious

- It is an emergency
- Immediately dip in cold water
- Start an IV line, and rehydrate using normal saline
- Rule out any underlying infection; and manage accordingly
- May need to refer (with cold sponging and air-conditioning on the way)

# Within Clinics and PHC

- Ensure fans, coolers, in working conditions/ change cooler pads; ensure power back-up
- No blankets, flannel sheets for mothers/ newborns
- Other ways to cool the premises (especially labour rooms and PNC wards): Shades, *Khus*, green sheets
- Monitor and maintain temperature (28-32 degrees)
- Ensure that waiting areas are cool and in shade.
- Provide adequate water and ORS for waiting patients



# Judiciously Use drugs that can cause hyperthermia

- Anti-psychotics
- Antidepressants
- Antiemetics:
  - Metaclopramide
  - Ondansetron
- Tramadol
- Chlorpheniramine (CPM)
- Nutmeg (*daalcheeni*)

# Communicate on prevention of hyperthermia: Key messages



- Avoid going out in heat -readjust your work schedule
- Wear loose, cotton clothes
- Drink lot of water, ORS when you go out
- Cover your head and eyes: Dupatta, hat and sunglasses
- Promote shade and water/ORS during NREGA meetings
- Specific focus on babies and mothers: keep in cool surroundings

