



Preparing for Summer Heat & Smoke

Part 1: Smoke



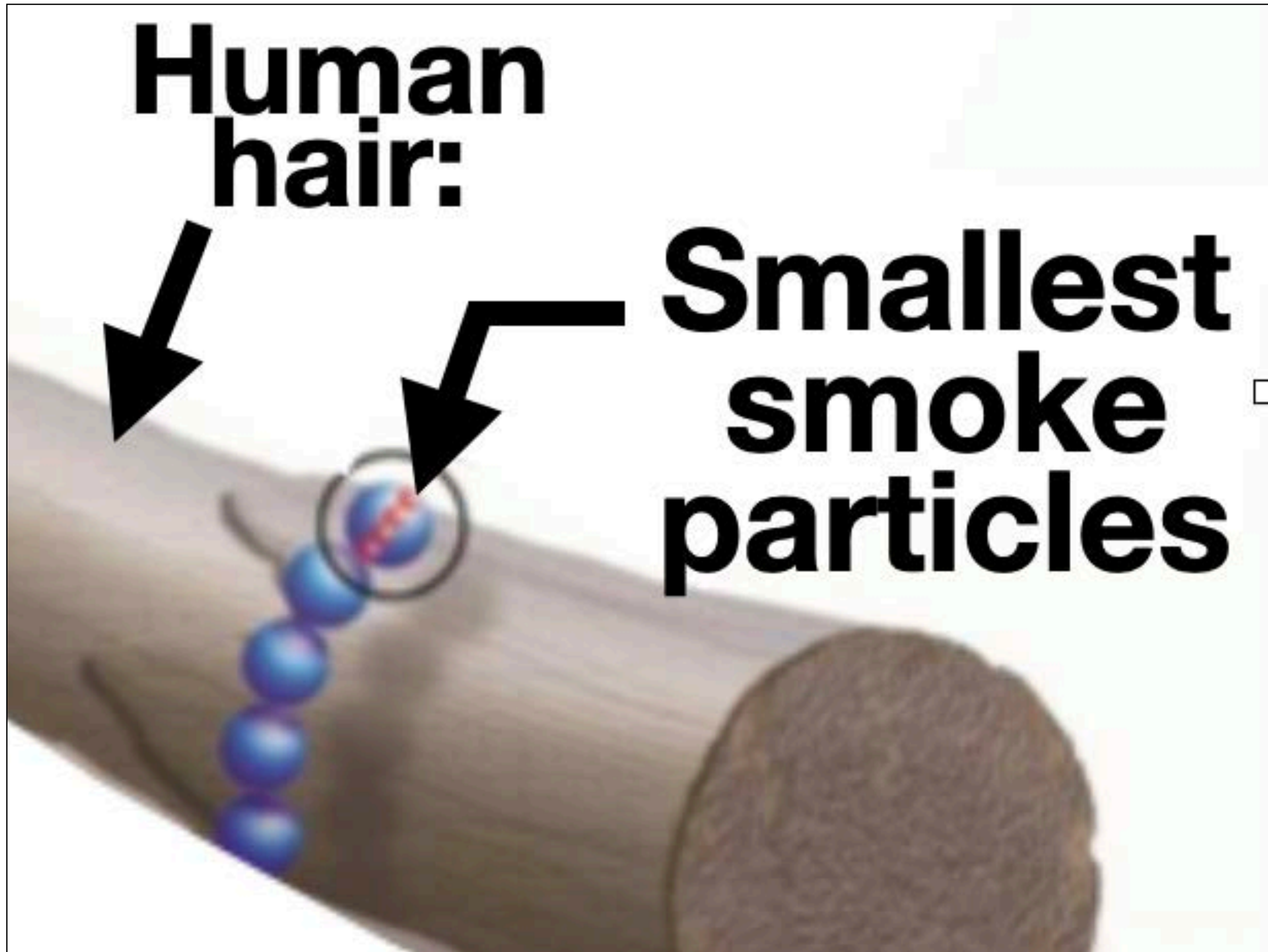
Wildfire Smoke Particle Size

**The Smallest are the
Most Dangerous**

**Smoke particles:
.4 to .7 microns**

**Human hair:
70 microns in diameter**

Wildfire Smoke Particle Size



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**Smoke particles:
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**Human hair:
70 microns in diameter**

For Smoke

You need a VERY GOOD Filter:

MERV 13, 14, 15 or 16 whole-house filter

HEPA portable air purifier

N95 mask

Tactic 1: Your Air Conditioner Filter

MERV Ratings

MERV Rating	Air filter will trap particles sized .3 to 1.0 microns	Air filter will trap particles sized 1.0 to 3.0 microns	Air filter will trap particles sized 3.0 to 10 microns
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MERV 10	<20%	50% - 64%	85% or better
MERV 12	<20%	80% - 90%	90% or better
MERV 13	>75%	90% or better	90% or better

MERV Ratings

MERV Rating	Air filter will trap particles sized .3 to 1.0 microns	Air filter will trap particles sized 1.0 to 3.0 microns	Air filter will trap particles sized 3.0 to 10 microns
MERV 10	<20%	50% - 64%	85% or better
MERV 12	<20%	80% - 90%	90% or better
MERV 13	>75%	90% or better	90% or better
MERV 14	75% - 84%	90% or better	90% or better
MERV 15	85% - 94%	95% or better	90% or better
MERV 16	95% or better	95% or better	90% or better

Whole House Air Filters

Caveat:

Ducted HVAC systems typically have a “fresh air” intake that lets some outside air in. If you have a good filter in a smoke emergency, request that your air intake gets closed so it doesn't bring smoke into your home.

MERV 16 Can be used by:

- Garden Grove
- North Pocket
- CAB

discountfurnacefilter.com

You'll have to buy them

**Check with Building Ops about
what size filter your unit uses**



Mini Split Heat Pump



**These systems have
NO AIR EXCHANGE
To the outside, so
They are safe to use
In a smoke emergency**

HVAC - Which to Turn Off

NEIGHBORHOOD - TYPE OF HVAC	STD. FILTER	OPT. FILTER	WHEN OUTSIDE AIR QUALITY IS POOR
North Main/South Main	MERV 10		TURN UNIT OFF
Classic Cottage- Elect baseboard heat/window AC	NONE		CAN LEAVE UNIT ON
Classic Cottage- Ductless Mini Split Heat Pump	Washable:screen		CAN LEAVE UNIT ON
Classic Cottage- Forced Aiir Heat Pump	MIERV 10		TURN UNIT OFF
Garden Grove -!!Forced Air Heat Pump	MERV 10	MERV 16	TURN UNIT OFF (UNLESS MERV 16)
North Pocket- Forced Air Heat Pump	MERV 10	MERV 16	TURN UNIT OFF (UNLESS MERV 16)
Redev ,(Ph 1) Cottages-Forced Air Heat Pump	MERV 10		TURN UNIT OFF
CAB- Forced Air Heat Pump	MERV 10	MERV 16	TURN UNIT OFF (UNLESS MERV 16)
Rose Court-forced Air Heat Pump	MERV 10		TURN UNIT OFF
Rose Court-DuctlessMini Split Heat Pump	Washable:screen		CAN LEAVE UNIT ON
Oaks	MERV8/15		CAN LEAVE UNIT ON
Schroeder Lofts	MERV 13		CAN LEAVE UNIT ON (but recommend use of portable HEPA filters to remove more particles)
Trillium Townhouses	MERV 8/15		CAN LEAVE UNIT ON

The Air Conditioning Challenge

- **If you have MERV 10 filters, it's best to turn the air conditioner off in a smoke emergency**
- **But - what if it also happens to be very hot?**
- **You might have to choose between smoke and heat**

Tactic 2: Seal your House

- **Keep doors & windows closed!**
- **Consider clear-plastic window seal**
- **Turn off forced-air HVAC (it does pull in some outside air)**

Tactic 3: Set up a Clean Room

- See [RVillagers.org](https://www.rvillagers.org) for a PSU video
 - Health & Safety/Ready Force/Prepare for summer smoke
- Put purifier in 1 room (perhaps bedroom)
- **TURN OFF FORCED AIR system or seal vents in your bedroom**

Tactic 4: Use Portable Air Purifiers

- **Look for a HEPA rating**
- **Get one BEFORE the smoke appears!**

Purifier options (Consumer Reports)

For a Large Area (under \$300)



RECOMMENDED PORTABLE AIR PURIFIERS

Blueair Blue Pure 211+

Price **\$300.00**

[Shop](#)

OVERALL SCORE



DUST, POLLEN, SMOKE REMOVAL (LOW) i



5 / 5

DUST, POLLEN, SMOKE REMOVAL (HIGH) i



5 / 5

NOISE (LOW SPEED) i



3 / 5


NOISE (HIGH SPEED) i




2 / 5

Purifier options (Consumer Reports)

For a Large Area (under \$300)

	<p>✔ CR RECOMMENDED ROOM AIR PURIFIERS</p> <p>Blueair Blue Pure 211i Max</p> <p>from \$349.00 Shop</p>	<p>OVERALL SCORE</p> <p>86</p>	<p>PREDICTED RELIABILITY</p> <p>5 /5</p>	<p>OWNER SATISFACTION</p> <p>5 /5</p>	<p>DUST, POLLEN, SMOKE REMOVAL (LOW)</p> <p>5 /5</p>	<p>DUST, POLLEN, SMOKE REMOVAL (HIGH)</p> <p>5 /5</p>
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Budget solution (for a bedroom) \$138

	<p>✔ CR RECOMMENDED ROOM AIR PURIFIERS</p> <p>Winix 5300-2</p> <p>from \$138.99 Shop</p>	<p>OVERALL SCORE</p> <p>61</p>	<p>PREDICTED RELIABILITY</p> <p>4 /5</p>	<p>OWNER SATISFACTION</p> <p>4 /5</p>	<p>DUST, POLLEN, SMOKE REMOVAL (LOW)</p> <p>2 /5</p>	<p>DUST, POLLEN, SMOKE REMOVAL (HIGH)</p> <p>5 /5</p>
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Tactic 5: Get N95 Masks

- **N95 removes 95 percent of particles larger than 0.3 microns**
- **... if properly fitted**
- **Yes, they are effective for smoke**

Tactic 6: Build your Own Filter



- See [RVillagers.org](https://www.rvillagers.org)
 - Health & Safety/Ready Force/Prepare for summer smoke

Summary

- 1. If you have ducted air conditioning, use the best MERV-rating filter your air conditioner can support**
- 2. If you have ducted HVAC with a MERV 10 filter and smoke is bad, turn off HVAC**
- 3. Seal your house as well as you can**
- 4. Consider setting up a “clean room”**
- 5. Use portable air purifiers**
- 6. Get N95 masks**

Part 2: Heat



**HEAT
EXHAUSTION**

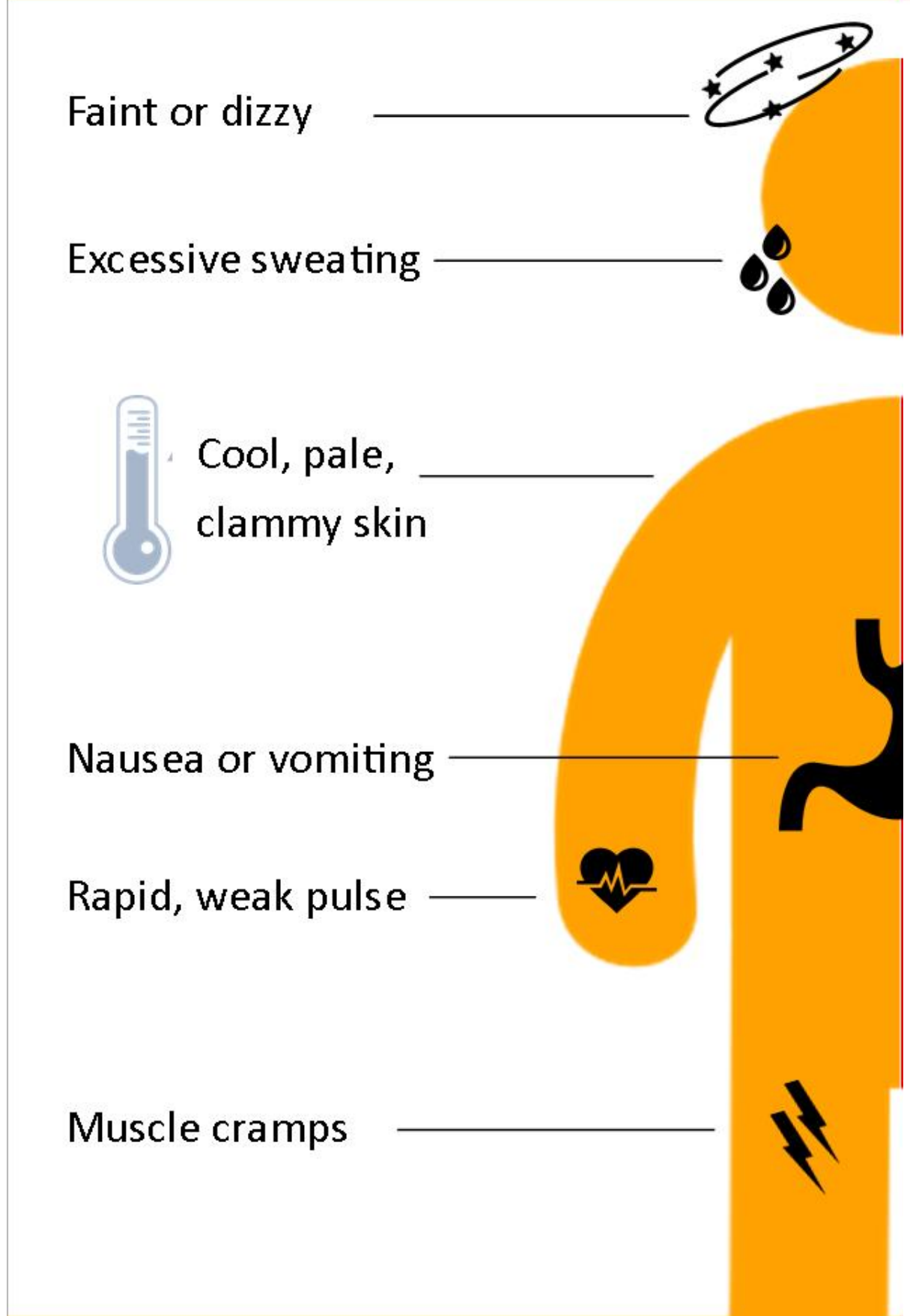
OR

**HEAT
STROKE**

HEAT EXHAUSTION


OR

HEAT STROKE



Faint or dizzy

Excessive sweating

 Cool, pale, clammy skin

Nausea or vomiting

Rapid, weak pulse

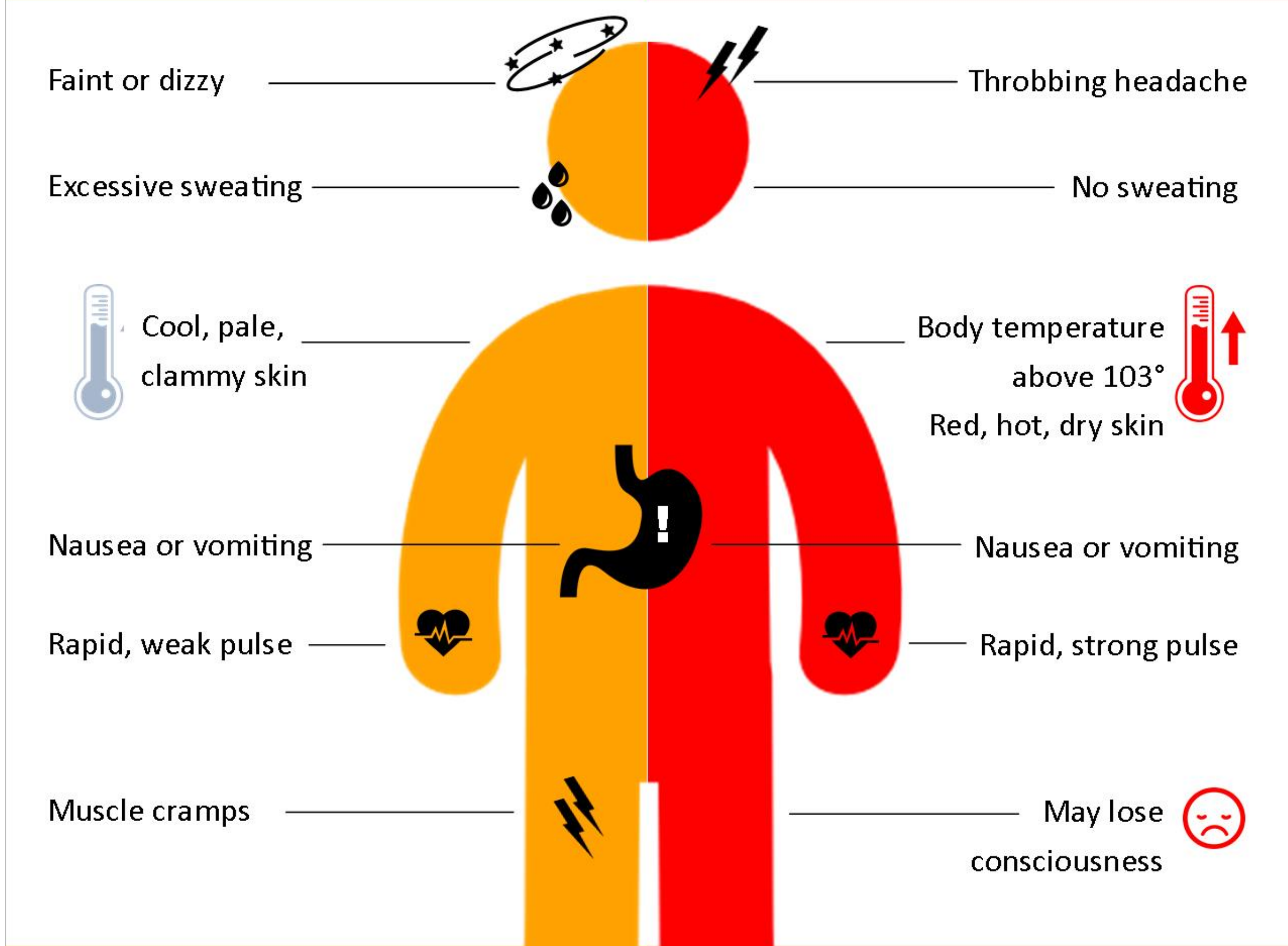
Muscle cramps

- Get to a cooler, air conditioned place
- Drink water if fully conscious
- Take a cool shower or use cold compresses

HEAT EXHAUSTION

OR

HEAT STROKE



- Get to a cooler, air conditioned place
- Drink water if fully conscious
- Take a cool shower or use cold compresses

- ## CALL 9-1-1
- Take immediate action to cool the person until help arrives

Use Natural Cooling

- Cool your home when temperatures are lowest by opening windows and doors.
 - Sleep with doors and windows locked.
- Close up your windows and doors as soon as your home is cool.
- Close blinds and curtains; turn off lights during the day.
- Do not open doors and windows while the air outside is hotter than inside. Use your air conditioning when needed, being mindful of overuse to save stress on the power grid.

Staying Cool

- In a heat emergency, Rose Villa will set up cooling centers, if possible
- If you lose cooling or if your home loses power and you do not want to stay in a cooling center, you do not have to stay at Rose Villa. Please call ext. 3289 and leave a message if you leave.
- Residents who are Avencia clients and residents who we know need additional assistance will be contacted individually for check-ins during the heat event. They will be cared for.

Food Services

- In past heat emergencies, meals have been delivered with no delivery charge (exception: North/South Main)
- Harvest Grill hours and menu options may be limited

Courtesy Services & Transportation

In a heat emergency:

- Non-essential package delivery may be delayed.
- Save non-essential business until after the heat wave subsides.
- Avoid non-essential surrey rides in the heat of the day. Stay at home as much as possible.
- Transportation staff thank you!

Other Things You can Do

- Keep hydrated - drink water!
- Don't go out in the heat!
- Cool down: Wrap a wet bandanna around the back of the neck or wet towels/ tee shirts on your head, or around your shoulders
- Hottest between 4pm and 8pm so plan your day around that
- If you have any signs of heat exhaustion or heat stroke, get help!
- Check on your neighbors - by phone!

Questions?



Preparing for Summer Heat & Smoke