Building Resilient Communities presents the Group Conversation Packet

vs. 10-18-14



MISSION STATEMENT:

To facilitate preparedness for extreme heat and other weatherrelated emergencies at the neighborhood level in Southern Arizona.

TOPICS:

- 1. ASSESS YOUR READINESS
- 2. CHANGE VULNERABLE TO RESILIENT
- 3. PREPARE FOR A CHALLENGING FUTURE

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Vulnerable Communities and Neighborhoods Task Force, 2014
http://www.psr.org/chapters/arizona/climate-smart-southwest/working-groups.html

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Part One The Heat Emergency Scenario

- 1. A large high-pressure weather system is parked over the southwestern United States. After four days of record-breaking temperatures, demand on the electric system, combined with brownouts and fires in critical locations have caused the electricity to go out in the region extending from the border north to Phoenix, east to El Paso, and west to Los Angeles.
- **2.** Campgrounds in higher elevations are over capacity, and many have no water service. Police close the Mt. Lemmon Highway due overcrowding and unsafe fire conditions.
- **3.** Nighttime temperatures are over 90 degrees due to the heat island effect. Temperatures inside some homes exceed 85 degrees, the point at which the human body begins to reach temperatures that can lead to dehydration, heat exhaustion and stroke.
- **4.** Hospitals have closed emergency rooms due to unsafe crowding of hospital corridors and lack of cooling. Similar conditions exist at city "cooling centers."
- **5.** After 48 hours without electricity, city water pumps can no longer provide the pressure needed to move water to taps.
- **6.** Gas pumps at gas stations won't work as well as cash registers in stores and restaurants.
- **7.** Emergency services are swamped. Home care services are impacted and staffing may not be available.
- **8.** Cell phone service is spotty.
- **9.** Pharmacies are closed.

How can you help yourself, your family, and your neighbors to stay healthy and alive the next seven days in these conditions?

The Community Cohesion Scale [Several current studies integrated and simplified for informal discussion by Yvonne Merrill, Ph.D.]

Community cohesion means people who live in the same place sticking together as a group. They do this because they think they know each other and can trust and rely on **each other.** This feeling of trust seems to be caused by how often they talk to each other, how many different places they talk to the same people, and how much they talk about with them.

Rating	Descriptions of Neighborhood Trust Levels
5	Residents in Rating 5 neighborhoods
	Talk to each other in several ways (in person, by phone or email, and in meetings),
	 Have an organized association with officers and have several smaller social groups in the neighborhood who do things together,
	 Visit each other's homes and do things together outside the neighborhood because they are friends,
	 Ask for each other's advice or help and look out for each other out of respect and trust,
	 Feel that the neighborhood doesn't change much and is nice to live in,
	 Organize group activities for the good of the neighborhood, Think of the neighborhood as a community they are loyal to.
	Residents in Rating 4 neighborhoods
4	 Think other residents are mostly honest and trustworthy,
	 Think they share some personal background and interests with others in the neighborhood,
	 Assume their neighbors are friendly and cooperative,
	 Have one or two neighbors they think of as friends,
	 Will often band together to solve a common problem, such as
	crime, vandalism, rundown properties, disturbances, etc.
	Chose the neighborhood because of their lifestyle (job, free-time)
	activities, families with children),
3	Show pride in their homes and property. Paridents in Pating 2 and in the order
3	Residents in Rating 3 neighborhoods Don't usually think about their neighborhood and neither fear
	nor like their neighbors,
	Recognize most people on their block, but don't always greet
	them,
	 Usually trust the neighbors until they think they are dishonest or
	 mean, Think of a few neighbors as acquaintances, but probably not as
	friends,
	 Will ask a neighbor for help in an emergency but don't want to be

	bothered by neighbors the rest of the time,
	 Only talk to neighbors to greet the ones they recognize or see
	regularly,
	 Almost never go to a neighbor's home or contact them by phone,
	 Probably do not have any formal organization.
2	Residents in Rating 2 neighborhoods
	Keep to themselves,
	 Pay almost no attention to neighbors unless the neighbors are
	disturbing or annoying them,
	 Spend as little time as possible in their neighborhood, and their
	properties aren't taken care of,
	 Don't think they have much in common with other residents and
	think most of them are unfriendly, unattractive or possibly
	dishonest,
	 Would only ask a neighbor for help if their lives are threatened.
1	Residents in Rating 1 neighborhoods
	Rarely see their neighbors,
	 Don't usually recognize neighbors outside the neighborhood,
	 Know the names of three or fewer neighbors close to them and
	don't visit them [would not invite others in],
	 Would move somewhere else if they could,
	 Distrust the neighbors and are suspicious of strangers and won't
	talk to them,
	Feel like outsiders in the neighborhood,
	Rely only on family or friends even if they don't live nearby.

Sources Consulted:

Buckner, John C. "The Development of an Instrument to Measure Neighborhood Cohesion." *Am. J. of Community Cohesion*, Vol 16, No. 6, 1988.

Chin, Wynne W., Wm. David Salisbury, Allison W. Pearson, and Matthew J. Stollak. "Perceived Cohesion in Small Groups: . . ." Small Group Research, Vol. 30, No. 6, 1999.

Chavis, David, and Grace M.H. Pretty. "Sense of Community: Advances in Measurement and Application." Am. *Journal of Community Psychology*, Vol. 27, No. 6, 1999.

Hipp, J. R., and A. Perrin. "Nested Loyalties: Local Networks" Effects on Neighborhood and Community Cohesion." *Urban Studies*, 2006.

Part 2: Change Vulnerable to Resilient Managing Community Risks

Risk Assessment	Probability	Lack of Forewarning	Impact
Mitigation	Preventive Actions Owners/Tasks	Forewarning Indicators	Contingency Plan

What Risk Management Options are available to you?

- <u>Assume/Accept:</u> Acknowledge the existence of a particular risk, and make a deliberate decision to accept it without engaging in special efforts to control it.
- <u>Avoid</u>: Adjust requirements or constraints to eliminate or reduce the risk. This adjustment could be accommodated by a change in funding, schedule, or technical requirements.
- Control: Implement actions to minimize the impact or likelihood of the risk.
- <u>Transfer:</u> Reassign organizational accountability, responsibility, and authority to another stakeholder willing to accept the risk.
- <u>Watch/Monitor</u>: Monitor the environment for changes that affect the nature and/or the impact of the risk.

Forewarning Indicators

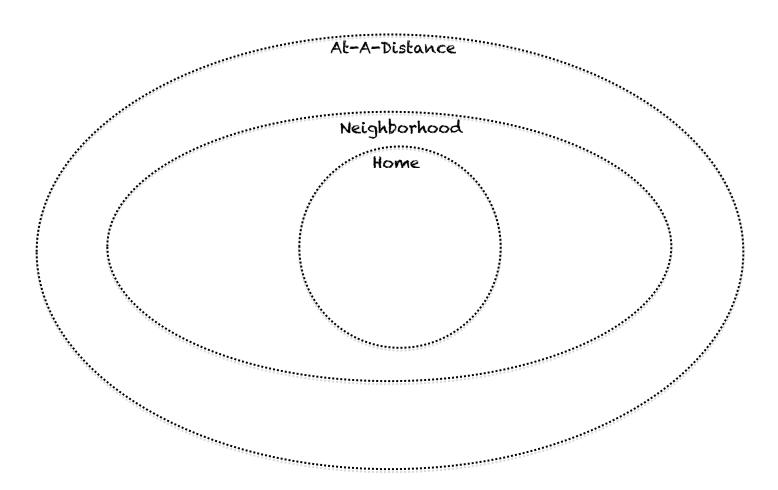
- 1. No nearby friends or family.
- 2. Age: Elderly and Children (especially those under 4 yrs old)
- 3. Health and ability to move: prisoners, disabled, homeless or drug dependent
- 4. Poorly insulated housing, no air conditioning, no shade trees.
- 5. Night time low temperatures above 85 degrees and high humidity.
- 6. Dehydration, heat exhaustion, heat stroke
- 7. No working phones, lights, or water service.
- $8.\ No\ emergency\ support\ from\ police\ or\ firemen.$
- 9. "Shelter in Place" is ordered, but there are no safe places nearby to get cool.

Part 2: Change Vulnerable to Resilient

Who is Vulnerable?

Instructions: On diagram below, chart the people and concerns raised by the self-assessments, in terms of your availability to help in a heat emergency as described by the scenario.

- In the "Home" circle. Put your name and others living in the same household in that circle.
- In the "Neighborhood" circle name those people who may need help in a heat emergency and are within walking distance of your home.
- In the "At-A-Distance" circle name people for whom you would be concerned in a heat emergency and require you to drive or use other forms of transportation to reach.



Part 2: Change Vulnerable to Resilient-Prepare for Weather-Related Emergencies

Dear Neighbors:

As our Tucson climate gets hotter and drier, we will lose electricity for longer periods from overloaded or fire-damaged lines. This can cause us to lose water, gas, phone, and even food services. Such breakdowns in public services and communications lead to serious health problems, injuries, and deaths.

This home worksheet is to help you find out how prepared your household is for these new climate conditions and whether you have vulnerable people in your home who will need special help in long power outages. Disabled people, children under 4, elderly people, people with chronic health problems, and renters may need assistance getting enough water, getting to a cool and/or shaded place, getting a ride to emergency or cooling centers, finding refrigerators for their medicines, and having someone to look after them.

The first part of this worksheet describes the people in your home and helps you find out what resources you have. The second part is to help you know which people in your house will have a health risk in a heat emergency and will need help.

How me	any people in your home	are in each age group?
0-10	31-40	61-70
11-20	41-50	71-80
21-30	31-40 41-50 51-60	Over 80
How mo	any pets do you have?	
	nds are they?	
	is each?	
Do You	Have Any Emergency Res	source People in Your Home?
DDC	o any have military emergency an any give emergency rides? an any cook and deliver emerg our Home Have Any of The	nining? What types? y training?
	radio? Circle which kind: batte	ry/electrical/solar
		your home to shade and cool it and you?
	battery fan?	
		kind and how big?
Fil	lled water containers? How ma	any and what size?
	king/camping water purifier k	it?
Te		
Но	ome telephone? Cell ph	ione?

People who can't drive? People who can't walk by themse People who can't see or can't see People who can't hear or can't he People who can't breathe easily? People who can't talk well? People who can't take care of the People with mental problems? People with missing or disabled to Do you have someone in the neighbor emergencies? Yes No	e well? ear well? emselves? arms or legs?	How old? How old? How old? How old? How old? How old?										
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People who can't walk by themse												
-		How old?										
		How old?										
Do Any People in Your Home have ages for each limitation, including info			l their									
Do Any People in Your Home hay	e disabilitie:	S? [Give the number of people and	l their									
Chronic illnesses?	How old?	What types?										
Dependence on drugs or alcohol	? How old?											
Liver failure?	How old?											
Breathing problems or smokers?												
High blood pressure? High cholesterol?	How old? How old?											
Which People in Your Home Have each condition and give their ages]	? Heaith Kisk	<i>IS?</i> [Give the <u>number of people</u> w	no have									
	-	-2 rat 1										
Emergency home generator (gas) Gas for the generator (48 hours w												
Egg-laying chickens?	noworod)2											
Home food garden?												
Cisterns or other water storage sy	ystem?											
Independent solar system for hon												
Emergency, non-perishable foods? Portable carport, camp shelter or canopy for shade? Swimming pool for cooling and drinking?												
						Г	Camping stove and fuel? Flashlights, candles, large area battery or propane lights?					
Camping stove and fuel? Flashlights, candles, large area ba												
Outdoor grill and fuel? Camping stove and fuel? Flashlights, candles, large area ba												
Camping stove and fuel? Flashlights, candles, large area ba												

Part 2: Change Vulnerable to Resilient

Make Help Available

Record your thoughts in response to the questions below, then hear the thinking of each person in the group, listening rather than judging other's responses. Keep a personal record of the commitments to action you are making.

A heat emergency with many, if not all, the conditions listed in the scenario <u>can</u> occur. Review your first meeting assessments. The negative impacts are preventable. What can you do to help yourself, your family, neighbors and more distant people you care about to handle such an emergency?

Who are you committed to helping?

What human resources and supplies need to be available. How can they be accessed and safely stored?

How can you and your neighbors coordinate assistance for people in your neighborhood who are unable to care for themselves in a heat emergency?

Prepare for a Challenging Future

You can improve the safety of your home and neighborhoods. Adapting to extreme weather will be a long-term project. It will take many people and groups working together. What are some of the activities you can imagine helping your community become more resilient in the face of extreme conditions? List a few ideas below:

In small groups share your response to these questions. Take notes in the space provided beneath each question.

What can you and your neighbors do to create resilience to withstand heat and other forms of neighborhood stress?

What are the longer term projects you will make a commitment to complete? Consider who will do what within what timeframe. How will costs be shared?

Extreme Weather Challenge Meeting Series Evaluation

Please give your feedback about how these Extreme Weather Challenge conversations made a difference in relationships with others in your community. Circle the answer that best describes your experience.

By participating in the Heat Emergency conversations...

1)	I met some of r 1-2 neighbo			learned thei 6-10		
2)	I subsequently Yes	talked to	neighbo	rs outside th	ne meeting times.	
3)	I shared my ex Family	perience o Friends		_	th:	
4)	Do you know v information ar Yes				ould you go to se	ek
5)	I learned abou the impact of l		of heat,	causes of he	at and ways to le	ssen
6)	I am taking act Yes	ion to less No	en the li	kelihood of	a hotter climate.	
7)	Comments:					

Thank you for taking the time to complete this evaluation. We invite comments on how we can improve the materials and approach. Ask

your facilitator to forward evaluations to Michael Ray at 232 E. Limberlost Dr. Tucson, AZ 85705

References

Home Energy Conservation A list of titles available at Pima County Public Library

Four fish: the future of the last wild food / Paul Greenberg. New York: Penguin Press, 2010.

The Home Energy Diet: how to save money by making your house energy-smart / Paul Scheckel. Gabriola Island, BC: New Society Publishers, c2005.

Energy efficient homes for dummies /Rik DeGunther. Hoboken, N.J.: Wiley; Chichester: John Wiley [distributor], 2008.

Sara Snow's fresh living: the essential room-by-room guide to a greener, healthier family, and home, New York, N.Y.: Bantam Dell, 2009

Sustainability

The Necessary Revolution: how individuals and organizations are working together to create a sustainable world / Peter Senge ... [et al.]. New York: Doubleday, c2008.

Hot, flat, and crowded [electronic resource] / **Thomas L. Friedman.** North Kingstown, R.I. : Sound Library, p2008.

Green chic: saving the Earth in style / Christie Matheson. Naperville, Ill: Sourcebooks, c2008.

Confessions of an eco-sinner: tracking down the sources of my stuff / Fred Pearce. Boston: Beacon Press, c2008.

The gorgeously green diet: how to live lean and green / Sophie Uliano. New York: Dutton, Penguin Group USA, 2009.

Big green purse: use your spending power to create a cleaner, greener world / Diane Maceachern. New York: Avery, c2008.

The citizen-powered energy handbook: community solutions to a global crisis / Greg Pahl; foreword by Richard Heinberg. White River Junction, Vt.: Chelsea Green Pub. Co., c2007.

Heat Wave: a social autopsy of disaster in Chicago / Eric Klinenberg. Chicago: University of Chicago Press, c2002.

Countdown: our last, best hope for a future on earth? / Alan Weisman. New York: Little, Brown and Company, c2013.

Community Resources for Building Neighborhood Resiliency

Arizona Department of Health Services Heat Emergency Response Plan (May 2013) at: http://www.azdhs.gov/phs/oeh/pdf/ADHS_HeatEmergencyResponsePlan.pdf

- especially "Tips to avoid heat-related illness" on page 18 and "CDC Frequently Asked Questions about Extreme Heat" on page 23, and "How your body handles heat" on pg. 27-33.

Pima County Emergency Preparedness Department "Are You Ready?" information: http://webcms.pima.gov/cms/one.aspx?portalId=169&pageId=41627

Trees for Tucson – Home Shade Trees at:

https://tucsoncleanandbeautiful.org/trees-for-tucson/low-cost-shade-trees/home-shade-trees-tep-customers/

How Neighborhoods Can Impact City Risk Management Strategies:

http://issuu.com/mytempaccnt/docs/harlan---ruddell---climite-change-cities-mitigatio

- Sharon Harlan and Darren Rudell at Arizona State University conduct research on the variety of strategies available to neighborhoods to mitigate the heat of global warming.
- Sharon also has a useful slide presentation at: http://www.sonoraninstitute.org/images/stories/pdfs/Webinars/uhipresentation_harlan-2012.pdf

http://bepreparedtucson.com/

Be Prepared Tucson. home auto children pets. Create Your 72-Hour Kit Today. What would your family do if there was no power in your home for 3 days?

http://www.fema.gov/community-emergency-response-teams

The **Community Emergency Response Team (CERT)** Program educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations.

Preventing Heat-Related Illness

Arizona Department of Health Services Heat Emergency Response Plan (May 2013) at: http://www.azdhs.gov/phs/oeh/pdf/ADHS HeatEmergencyResponsePlan.pdf

Your body keeps itself cool by letting heat escape through the skin, and by evaporating sweat (perspiration). If your body does not cool properly or does not cool enough, you might suffer from a heat-related illness. Anyone can be susceptible to heat-related illness. Those at greatest risk are children under 4, adults over 65. homeless people, outdoor workers, people who are overweight, and people who are ill or on certain medications. Heat-related illness may be serious or even deadly if unattended. Staying healthy during the summer is easier if you take the time to protect yourself by making sure you are

drinking enough water and limiting your exposure to the heat. Follow these simple rules:

- Drink water. Even people that stay mostly indoors all day should drink at least 2 liters of water per day. People that spend time outdoors should drink 1 to 2 liters per hour that they are outdoors. People that do strenuous activity outdoors should be very careful, being your body can lose up to 4 liters of water per hour during strenuous activity. You should carry water with you and drink even if you do not feel thirsty. Be heat safe and avoid alcohol and caffeine, which dehydrate the body. Avoid using salt tablets unless directed to do so by a physician.
- **Dress for the heat.** Wear lightweight, light-colored clothing. Light colors will reflect away some of the sun's energy. It is also a good idea to wear hats or to use an umbrella. Always apply sunscreen to
- **Eat small meals and eat more often.** Avoid foods that are high in protein which increase metabolic
- Slow down. Avoid strenuous activity. If you must do strenuous activity, do it during the coolest part of the day, which is usually in the morning between 4:00 a.m. and 7:00 a.m.
- Stay indoors when possible.
- Take regular breaks when engaged in physical activity on warm days. Take time out to find a cool place. If you recognize that you, or someone else, are showing symptoms of a heat-related illness, stop activity and find a cool place. Remember, have fun, but stay cool!

Signs & Symptoms of Heat-Related Illness

When temperatures are on the rise, watch for the following symptoms:

- **Thirst:** By the time your body tells you that you are thirsty, you are already mildly dehydrated.
- **Heat cramps:** Heat cramps are muscular pains and spasms due to heavy exertion. They usually involve the abdominal muscles or the legs. The loss of water and salt from heavy sweating causes heat cramps.
- **Heat Exhaustion:** Heat exhaustion is less dangerous than heat stroke. It typically occurs when people exercise heavily or work in a warm, humid place where body fluids are lost through heavy sweating. Fluid loss causes blood flow to decrease in the vital organs, resulting in a form of shock. With heat exhaustion, sweat does not evaporate as it should, possibly because of high humidity or too many layers of clothing. As a result, the body is not cooled properly. Signals include cool, moist, pale, flushed or red skin; heavy sweating; headache; nausea or vomiting; dizziness; and exhaustion. Body temperature will be near normal.
- **Heat Stroke:** Also known as sunstroke, heat stroke is life-threatening. The victim's temperature control system, which produces sweating to cool the body, stops working. The body temperature can rise so high that brain damage and death may result if the body is not cooled quickly. Signals include hot, red and dry skin; changes in consciousness; rapid, weak pulse; and rapid, shallow breathing. Body temperature can be very high—sometimes as high as 105° F.

Stages of Heat-Related Illness

Heat-related illness usually comes in stages. The signal of the first stage is thirst. Drinking water at this stage can prevent you from progressing to the more serious kinds of heat related illnesses. The next stage is muscle cramps. These cramps can be mild or very painful. If you are caring for a person who has heat cramps, have him or her stop activity and rest. If the person is fully awake and alert, have him or her drink small amounts

of cool water or a commercial sports drink. Gently stretch the cramped muscle and hold the stretch for about 20 seconds, then gently massage the muscle. Repeat these steps if necessary. If the victim has no other signals of heat-related illness, the person may resume activity after the cramps stop.

The signals of the next, more serious stage of a heat-related illness (often called **heat exhaustion**) include:

- Cool, moist, pale skin (the skin may be red right after physical activity).
- Headache.
- Dizziness and weakness or exhaustion.
- Nausea.
- The skin may or may not feel hot.

The warning signs of the most serious stage of a heat-related illness (often called **heat stroke** or **sun stroke**) vary but may include:

- Vomiting.
- Confusion.
- Throbbing headache.
- Decreased alertness level or complete loss of consciousness.
- High body temperature (sometimes as high as 105° F).
- Skin may still be moist or the victim may stop sweating and the skin may be red, hot and dry.
- · Rapid, weak pulse.
- · Rapid, shallow breathing.
- Seizures.

NOTE: Heat stroke is life threatening. Call 9-1-1 or the local emergency number if you are suffering from any of the above symptoms.

General Care for Heat Emergencies

General care for heat emergencies include **cooling the body**, **giving fluids**, and **minimizing shock**. For specific heat-related emergencies, follow these steps:

- For heat cramps or heat exhaustion: Get the person to a cooler place and have the person rest in a comfortable position. If the person is fully awake and alert, give a half glass of cool water every 15 minutes. Do not let him or her drink too quickly. Do not give liquids with alcohol or caffeine in them, as they can make conditions worse. Remove or loosen tight clothing and apply cool, wet cloths such as towels or wet sheets or mist with water. Get the person into an air conditioned space if possible. Call 9-1-1 or the local emergency number if the person refuses water, vomits or loses consciousness.
- **For heat stroke**: *Heat stroke* is a life-threatening situation! Help is needed fast. Call 9-1-1 or your local EMS number. Move the person to a cooler place. Quickly cool the body using any means available, including cool water and ice. If you have ice packs or cold packs, wrap them in a cloth and place them on each of the victim's wrists and ankles, in the armpits and on the neck to cool the large blood vessels. (Do not use rubbing alcohol because it closes the skin's pores and prevents heat loss.) Wrap wet sheets around the body and place the person in front of a fan or air conditioner. Watch for signals of breathing problems and make sure the airway is clear. Keep the person lying down.

WHAT TO DO WHEN THE POWER GOES OUT

Planning in Advance for a Heat Emergency: Power outage for 72 Hours or longer A Project of Climate Smart Southwest – PSR, AZ Chapter

The focus of this guide is on four areas of neighborhood resilience: water security, coolness without a power source, food security and communications: This resource sheet addresses (1) planning in advance and (2) what to have ready for a heat emergency

Planning Water Security:

- 1. INSTALL or identify a NEIGHBORHOOD WATER CISTERN
- 2. Need cisterns to be kept full. Keep large bottles of water in your freezer.
- 3. Need filter to make water potable. Need two gallons of water per person per day in summer.
- 4. Need research on compostable toilets and other options to minimize water need.
- 5. Identify any other resources you may need:

Identify The Cool Places In Your Neighborhood:

- 1. Safe parks or community facilities
- 2. Homes with basements, if neighbors willing to share
- 3. Locations with lots of trees

Keep Cool Supply list:

- 1. Hat, spray bottles, water bottles, shade cloth.
- 2. Identify places to hang wet sheets for power free swamp cooling
- 3. Have freeze dried camp foods in stock

Planning Food Security:

- 1. ACQUIRE SOLAR OVEN(S) & LOCATE IN CENTRAL SPOT FOR ALL TO USE
- 2. Rethink kinds of food purchased buy more dried or canned; less frozen or needing refrigeration.
- 3. Grow your own fresh vegetables and fruits; plant a citrus tree (grapefruit hardiest, lemon least hardy.
- 4. For cooking, use solar ovens, BBQ, wood and fire pit. Avoid adding heat to interiors. Cook outdoors.
- 5. Identify available generator to re-cool selected refrigerators.

Keeping cool with batteries and generators or other power sources:

- 1. Battery-operated desk fan available at Ace Hardware.
- 2. A generator could be used at central location the during heat of the day (with installation of appropriate electrical panel). Options are a gas-powered generator or one powered by solar panels and connected to a portable inverter.
- 3. Also could use electric car batteries as limited power source.

Communication Resources:

- 1. NEED RADIO POWERED BY BATTERIES, HAND CRANK OR SOLAR POWER IN THE NEIGHBORHOOD
- 2. Need source of news and resources when radio, TV, cell phone, computer not powered.
- 3. Decide on site for posting notices of news or needs. Publicize date/time and source of posting.

Critical Questions for your Neighborhood

- 1. Are we willing to share resources among our neighbors?
- 2. Would those with basements and cooler locations be willing to share space?
- 3. Where is the nearest cooling place, trees with grass?
- 4. Who among neighbors has certain expertise or skills?
- 5. Who has mobility limits or medical needs?
- 6. What about folks who don't prepare?

What to do in a Heat Emergency: Finding Coolness And Safety Without Electric Power Goal is to meet sustainable health need of 4 hours daily in areas with 85° F or less.

Keep Cool: Goal: meet sustainable health need of 4 hours daily in areas with 85°F or less.

- 1. IDENTIFY THE COOL PLACES IN YOUR NEGHBORHOOD
- 2. Find shelter in the middle unit of multi-family housing or home with a basement.
- 3. Open windows at night; cover sunny windows in day; Use shade cloth to keep sun off windows
- 4. Wet your shirt as a portable evaporative cooler
- 5. Stay near trees
- 6. Use a spray bottle to dampen neck, inside of elbows and knees to feel cooler.
- 7. Hang wet sheets in breeze at slightly open doors and windows
- 8. Dip in a pool; rest in the shade

Keep Hydrated with Water:

- 1. Resources you already have: Stored water? Bathtubs (line with clean plastic sheeting) Cisterns? Pool?
- 2. Remember to drink water before you feel thirsty; in hot weather you can sweat out more fluid than your body can absorb in the same time period.
- 3. Drink before exposure, during and after heat exposure 16-32 oz./hour in hot weather according to the Arizona Department of Health Services.
- 4. Avoid alcoholic beverages which will cause more dehydraton.

Communicate with neighbors and emergency resources:

- 1. KEEP IN TOUCH WITH YOUR NEIGHBORS, ESPECIALLY THOSE MOST VULNERABLE:
- 2. Organize community events, such as cooking, cooling areas, communication responsibility, etc.
- 3. Use message boards to post help, coordination and information update notices
- 4. Identify and use battery operated radios to keep in touch with current events
- 5. Charge cell phones with solar powered battery chargers
- 6. Organize emergency response when needed
- 7. Offer emotional support for distressed members of your community

References:

- Arizona Department of Health Services Heat Emergency Response Plan (May, 2013) http://www.azdhs.gov/phs/oeh/pdf/ADHS_HeatEmergencyResponsePlan.pdf
- "Tips to avoid heat related illness" on page 18 and
- "CDC Frequently Asked Questions about Extreme Heat" on page 23.
- Also see: Pima County: http://www.pimahealth.org/heat/