PARKS AND RECREATION DIRECTIVE #94-2

TO: All Staff

SUBJECT: Program safety guidelines for Recreation Councils during Stressful Weather Conditions

- 1. <u>Purpose</u> To anticipate and minimize the adverse affects of the environment on the health and safety of participants.
- 2. <u>Background</u> Harford County Department of Parks and Recreation has developed this procedure to assist and guide Recreation Councils in making wise decisions to protect the welfare of the public. Whenever environmental factors pose a threat to participants' well being, programs will be suspended or modified.
- 3. <u>Action</u> The attached guidelines define stressful weather conditions and the adverse affects these conditions may have on individuals. Furthermore, it suggests what action should be taken to lessen the consequence of these conditions.
- 4. <u>Effective</u> This directive is effective immediately and will remain in effect until canceled or superseded.

Actions for Canceling/Modifying Recreation Council Programs during Stressful Weather Conditions

Heat Stress

Exercise increases the bodies' core temperature. Under moderate environmental conditions, the temperature regulating mechanism of the body provides for adequate heat dissipation. However, under extremely hot and humid conditions, the body temperature will continue to rise, eventually presenting a serious danger to the individual.

Heat disorders can develop after prolonged exposure and physical exertion during times of heat and humidity. The intake of liquids is extremely important. You must provide and allow for sufficient liquid consumption. When weather conditions are questionable each person will respond differently. Participants should be closely monitored for signs of dizziness, cramping, loss of physical and/or mental coordination, and cold skin. Recreation Councils have the responsibility and authority to modify and/or cancel programs to protect the welfare of participants.

Humidity	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%
70°	59	61	63	65	67	69	71	73	75	77	79	81	83
75°	61	63	65	67	69	71	73	75	77	79	81	83	85
80°	63	65	67	69	71	73	75	77	79	81	83	85	87
85°	65	67	69	71	73	75	77	79	81	83	85	_ 87 _	89
90°	67	69	71	73	75	77	79	81	83	85	87	89	91
95°	69	71	73	75	77	79	81	83	85	87	89	91	93
100°	71	73	75	77	79	81	83	85	87	89	91	93	95
		All activities are good											
		Watch for heat related fatigue and symptoms, particularly for children under 13 and adults over 60											
		Limit activities for sports with helmets and pads, light work outs with light colored clothes preferred, frequent breaks, time to be given without helmets, activities should be limited in time and with frequent breaks for water											
		Cancel activities for sports with helmets and pads, may have light work outs with light colored clothes and no helmets and pads, other sports and outdoor activities should be closely monitored, all activities to be very limited											
		Cancel all activities											

Hypothermal Stress

Exercise usually generates enough heat to keep participants warm in cold weather. The primary concern in exposure to the cold is the prevention of injuries. Improper warm-up, inadequate clothing and extreme wind chill are the major contributors to musculoskeletal injury, chilblains (red itchy swelling of fingers, toes, ears, etc.), and frostbite. Cold air may make breathing feel uncomfortable, but there is little danger of damage to the lungs. The respiratory system has the ability to adequately warm and humidify the air we breathe.

The chart below indicates the equivalent temperature or wind chill index and the relative danger of freezing from exposure

ACTUAL THERMOMETER READINGS (°F)

Actual Temp °F	50°	40°	30°	20°	10°	0°		
Wind Speed MPH	Equivalent Temperature (°F)							
Calm	50	40	30	20	10	0		
5	48	37	27	16	6	- 5		
10	40	28	16	4	- 9	-21		
15	36	22	9	- 5	-18	-36		
20	32	18	4	-10	-25	-39		
25	30	16	0	-15	-29	-44		
30	28	13	- 2	-18	-33	-48		
35	27	11	- 4	-20	-35	-49		
40	26	10	- 6	-21	-37	-53		
Wind speeds greater than 40 MPH have little additional effect	LITTLE DANGER (for properly clothed person) INCREASING DANGER (from freezing of exposed fle							

As a general rule, when the temperature is 30° or less, it is mandatory that proper clothing be worn and all weather conditions be assessed, i.e., wind, rain, snow, etc., to determine if conditions are safe for participation.

Wind chill illustrates the effect of wind speed on heat loss from the body. When your body loses heat faster than it can be produced, you are undergoing what is known as exposure. To prevent exposure, the following guidelines should be practiced.

- Warm-up clothing and uniforms should be light, loose and in layers for best insulation;
- Layers should be removed before you begin to perspire and replaced as you cool down;
- If players become wet, have them dry off as soon as possible;
- Have players avoid excessive fatigue; and
- Participant's extremities and head should be protected.

NOTE: The red itching of chilblains is not dangerous, but is a warning that

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exposure is, at least, bordering excessive.

Inclement Weather

The decision regarding participation during inclement weather should be based solely on the welfare and safety of the participants. Whenever there is a risk of injury to participants, the activity must be canceled and rescheduled. The loss of a game or practice time must never influence one's decision to cancel or reschedule an event.

Unnecessary damage and abuse to playing fields must also be considered in the decision to conduct an event. When field conditions are wet and soft, damage to the turf is more prevalent and extensive. Activities must be canceled and rescheduled.

Thunderstorms and Lightning

Outdoor Activities - Whenever a thunderstorm is approaching or sighted, all field activities should be postponed until the storm has cleared. If it becomes apparent that the storm will not abate, the activity should be canceled.

Lightning Safety Rules

"When a thunderstorm threatens, get inside a home, a large building, or an all-metal (not convertible) automobile. Do not use the telephone except for emergencies.

If you are caught outside, do not stand underneath a tall isolated tree or a telephone pole. Avoid projecting above the surrounding landscape. For example, don't stand on a hilltop. In a forest, seek shelter in a low area under a thick growth of small trees. In open areas, go to a low place, such as a ravine or valley.

Get off or away from open water, tractors, and other metal farm equipment or small metal vehicles, such as motorcycles, bicycles, golf carts, etc. Put down golf clubs and take off golf shoes. Stay away from wire fences, clotheslines, metal pipes, and rails. If you are in a group of people spread out, keeping others several yards apart.

Remember -- lightning may strike some miles from the parent cloud. Precautions should be taken even though the thunderstorm is not directly overhead. If you are caught on a level field far from shelter and if you feel your hair stands on end, lightning may be about to strike you. Drop to your knees and bend forward, putting your hands on your knees. Do not lie flat on the ground.

Joseph E. Pfaff, Director