

Virginia Department of Fire Programs

Policy and Procedures Manual



PROCEDURE: Outdoor Training Activities
During Extreme Weather Conditions

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Virginia Department of Fire Programs

Outdoor Training Activities During Extreme Weather Conditions

Policy and Procedures

Purpose: This policy shall serve as a guide to the instructor in making reasonable judgments and decisions with regard to outdoor training activities under extreme weather conditions.

Policy: It is the responsibility of each instructor to monitor weather conditions and use the following guidelines to adjust or cancel related activities as conditions warrant. It is also the responsibility of the instructor to monitor students individually during extreme weather conditions, as age, physical condition, and other factors may influence an individual's limitations to physical activity. VDFP Staff reserves the right to cancel or modify classes where weather conditions may be of concern.

The heat and wind chill indexes as developed by the National Weather Service will be used as the guide for determining extreme heat and cold conditions. Weather information local to the class site should be used. Where VDFP courses are being conducted in jurisdictions that have established more stringent weather policies with regard to training or outdoor activities, those policies shall be followed.

Procedure: I. Extreme Heat:

A. Outside training activities requiring physical activity or full protective clothing shall not be conducted when the heat index reaches more than 110°F. Consideration should be given to the factors that full protective clothing may add 10° to the heat index value, and age/physical condition of individual students may affect susceptibility to heat disorders. Direct sunlight may also add an additional 10° to the heat index value. Where the heat index is between 100° and 110° F, conditions may be considered hazardous. The instructor shall use discretion with regard to outside activity cancellation/modification (other factors such as time of day and type of activity may influence the instructor's decision). Outside training activities requiring physical activity or full protective clothing may be conducted under the following conditions:

1. Live-fire and structural burns should be evaluated case by case. Activities other than live fire fighting can be safely conducted with reduced protective clothing (i.e., helmet, gloves, and boots or safety shoes). An adequate supply of cool drinking water is available at the training site. Strenuous physical activity is monitored and limited to 15 to 20 minutes. A rehabilitation area is established for rest and rehydration (a cool, shady area is preferred).

HEAT INDEX CHART

		AIR TEMPERATURE °F									
		70	75	80	85	90	95	100	105	110	115
H U M I D I T Y	0%	64	69	73	78	83	87	91	95	99	103
	10%	65	70	75	80	85	90	95	100	105	111
	20%	66	72	77	82	87	93	99	105	112	120
	30%	67	73	78	84	90	96	104	113	123	135
	40%	68	74	79	86	93	101	110	122	137	151
	50%	69	75	81	88	96	107	120	135	150	
	60%	70	76	82	90	100	114	132	149		
	70%	70	77	85	93	106	124	144			
	80%	71	78	86	97	113	136	157			
	90%	71	79	88	102	122	150	170			
	100%	72	80	91	108	133	166				

II. Extreme Cold:

A. Wind chill factors may vary depending on the training location's proximity to wind barriers. Frostbite is possible at temperatures less than 0 degrees F and temperatures are considered dangerous at 20 degrees F. Outside training activities should not be conducted when the wind chill factor is less than 20 degrees F, unless:

B. Students are properly dressed for an appropriate cold weather activity;

C. The cold weather will not affect the safe and proper function of tools, equipment, and apparatus;

- D. An adequate supply of warm liquids and/or food is available at the training site;
- E. Strenuous physical activity is monitored and limited to 15 to 20 minutes;
- F. A heated indoor rehabilitation area is in close proximity to the training site;
- G. When conducting outside training activities in temperatures where climbing/walking surfaces are subject to freezing and may create a slip hazard, instructors shall exercise due caution.

WIND CHILL CHART

		AIR TEMPERATURE - °F								
		10	15	20	25	30	35	40	45	50
W I N D C H I L L	15	-18	-11	-5	3	9	16	23	29	36
	20	-25	-17	-10	-3	4	12	19	26	33
	25	-29	-22	-14	-7	1	8	16	23	30
	30	-33	-25	-18	-10	-2	6	13	21	29
	35	-35	-28	-20	-12	-4	4	12	20	27
	40	-37	-29	-21	-14	-6	3	11	19	26
	45	-38	-30	-22	-13	-7	2	10	18	26

III. Other Conditions:

A. Instructors shall consider other extreme weather-related conditions and modify or cancel outside training activities accordingly. These conditions include but are not limited to:

- High winds
- Snow or snow on ground
- Ice
- Sleet
- Hail
- Rain
- Lightning
- Thunderstorm warning
- Tornado warning

Instructors assigned to VDFP training programs should coordinate decisions on class cancellation or activities in extreme weather-related conditions with both the local representative and the assigned VDFP Division Chief. While instructor and student safety is primary, the desires of the host locality and the employee/student situation will affect any decisions.