

HEAT INDEX POLICY

In case of extreme weather conditions (e.g. very hot and humid temperatures), the official may grant a 10-minute rest period after the second set for any age category.

In general, the weather conditions are considered extreme when the heat index (HI, a combination of air temperature and relative humidity) reaches or exceeds 34,0°C (93,2°F), as indicated in the tables below (Appendices 1 and 2, in French only). However, the officials can use their judgement and allow a period of rest under lower temperatures should they feel that the welfare of the players warrants such a decision.

When the heat index reaches or exceeds 40.1°C (104.2°F), it is recommended to suspend the game.

Weather conditions can be declared extreme before the start of matches or at any moment during the day when matches are already in progress. Once informed that the weather conditions have been declared extreme, officials will inform the players at the next side change. If a change occurs in the conditions and if they are no longer considered as extreme, matches in progress will continue to follow regulations pertaining to extreme conditions.

Tennis Québec will use the following rule and temperatures for <u>16 years old and above</u> <u>categories</u>:

- 34,0°C (93,2°F) of HI Additional 10-minute break after the second set
- 40,1°C (104,2°F) of HI Suspension of play

For all the **14 years old and under categories**, Tennis Québec will deduct 2°C to the existing regulation:

- 32,0°C (89,6°F) of HI Additional 10-minute break after the second set
- **38,1°C** (100,6°F) of HI Suspension of play

See APPENDICES 1 and 2.



Definition of the HI used:

The HI results from a combination of air temperature/humidity.

It designates the heat sensation felt by the body due to the combined high level of air temperature and humidity (i.e. the opposite of "the wind chill index"). The diagram of the thermal strain (Appendices 1 and 2) is used to determine the HI.

- 1. The air temperature is indicated in the upper section of the diagram;
- 2. The **relative humidity** is indicated in the column on the left;
- 3. The combining of these two values corresponds to the **heath index** (HI).

Heat Index	Possible physiological problems in case of prolonged exposure to heat and/or physical activity
32.2 - 40.6°C 90 - 105°F	Potential risk of cramps or exhaustion due to the heat
40.6 - 54.4°C 105 - 130°F	High risk of cramps and exhaustion due to the heat; potential risk of heat stroke
54,4°C et plus 130°F et plus	Very high risk of heat stroke

Heat stroke

Heat stroke is the name associated to an acute syndrome caused by a dehydration phenomenon associated to an elevation of the internal body temperature. The troubles observed occur mainly when the heat and the hydrothermal degree are elevated, especially when the wind is low.

The symptoms and signs that characterise a heat stroke are, among others, excessive or unusual fatigue, headaches, nausea (with or without vomiting), cramps, vertigo, fainting and elevation of body temperature

Heat stroke is a medical emergency

Generally, people who are affected by a heat stroke seem to be suffering from an acute illness, have very elevated body temperature and are incapable of drinking.

ANNEXE 1
DIAGRAMME D'INDICE DE CONTRAINTE THERMIQUE POUR LES CATÉGORIES 16 ANS ET PLUS

TEMPÉRATURE DE L'AIR	21,1°C	23,9°C	26,7°C	29,4°C	32,2°C	35°C	37,8°C	40,6°C	43,3°C	46,1°C	48,9°C	
(Celsius / Farenheit)	70°F	75°F	80°F	85°F	90°F	95°F	100°F	105°F	110°F	115°F	120°F	
HUMIDITÉ RELATIVE	INDICE DE CHALEUR (IC) (INDICE RÉSULTANT DE LA COMBINAISON TEMPÉRATURE DE L'AIR / HUMIDITÉ RELATIVE)											
0%	17,8°C 64°F	20,6°C 68°F	22,8°C 73°F	25,6°C 78°F	28,3°C 83°F	30,6°C 87°F	32,8°C 91°F	35°C 95°F	37,2°C 99°F	39,4°C 103°F	41,7°C 107°F	
10%	18,3°C 65°F	21,1°C 70°F	23,9°C 75°F	26,7°C 80°F	29,4°C 85°F	32,2°C 90°F	35°C 95°F	37,8°C 100°F	40,6°C 105°F	43,9°C 111°F	46,7°C 116°F	
20%	18,9°C 66°F	22,2°C 72°F	25°C 77°F	27,8°C 82°F	30,6°C 87°F	33,9°C 93°F	37,2°C 99°F	40,6°C 105°F	44,4°C 112°F	48,9°C 120°F	54,4°C 130°F	
30%	19,4°C 67°F	22,8°C 73°F	25,6°C 78°F	28,9°C 84°F	32,2°C 90°F	35,6°C 96°F	40,1°C 104,2°F	45°C 113°F	50,6°C 123°F	57,2°C 135°F	64,4°C 148°F	
40%	20°C 68°F	23,3°C 74°F	26,1°C 79°F	30°C 86°F	33,9°C 93°F	38,3°C 101°F	43,3°C 110°F	50,6°C 123°F	58,3°C 137°F	66,1°C 151°F		
50%	20,6°C 69°F	23,9°C 75°F	27,2°C 81°F	31,1°C 88°F	35,6°C 96°F	41,7°C 107°F	48,9°C 120°F	57,2°C 135°F	65,6°C 150°F			
60%	21,1°C 70°F	24,4°C 76°F	27,8°C 82°F	32,2°C 90°F	37,8°C 100°F	45,6°C 114°F	53,6°C 132°F	65°C 149°F				
70%	21,1°C 70°F	25°C 77°F	29,4°C 85°F	33,9°C 93°F	41,3°C 106°F	51,1°C 124°F	62,2°C 144°F					
80%	21,7°C 71°F	25,6°C 78°F	30°C 86°F	36,1°C 97°F	45°C 113°F	57,8°C 136°F		Jeu sans cha	angement de	es temps de i	repos	
90%	21,7°C 71°F	26,1°C 79°F	31,1°C 88°F	38,9°C 102°F	50°C 122°F		-	10 min de pause après 2e manche Arrêt de la rencontre				
100%	22,2°C 72°F	26,7°C 80°F	32,8°C 91°F	42,2°C 108°F								

Source: US National Oceanic and Atmospheric Administration

ANNEXE 2
DIAGRAMME D'INDICE DE CONTRAINTE THERMIQUE POUR LES CATÉGORIES 14 ANS ET MOINS

TEMPÉRATURE DE L'AIR	21,1°C	23,9°C	26,7°C	29,4°C	32,2°C	35°C	37,8°C	40,6°C	43,3°C	46,1°C	48,9°C	
(Celsius / Farenheit)	70°F	75°F	80°F	85°F	90°F	95°F	100°F	105°F	110°F	115°F	120°F	
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10%	18,3°C 65°F	21,1°C 70°F	23,9°C 75°F	26,7°C 80°F	29,4°C 85°F	32,2°C 90°F	35°C 95°F	37,8°C 100°F	40,6°C 105°F	43,9°C 111°F	46,7°C 116°F	
20%	18,9°C 66°F	22,2°C 72°F	25°C 77°F	27,8°C 82°F	30,6°C 87°F	33,9°C 93°F	37,2°C 99°F	40,6°C 105°F	44,4°C 112°F	48,9°C 120°F	54,4°C 130°F	
30%	19,4°C 67°F	22,8°C 73°F	25,6°C 78°F	28,9°C 84°F	32,2°C 90°F	35,6°C 96°F	40,1°C 104,2°F	45°C 113°F	50,6°C 123°F	57,2°C 135°F	64,4°C 148°F	
40%	20°C 68°F	23,3°C 74°F	26,1°C 79°F	30°C 86°F	33,9°C 93°F	38,3°C 101°F	43,3°C 110°F	50,6°C 123°F	58,3°C 137°F	66,1°C 151°F		
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Source: US National Oceanic and Atmospheric Administration