



Health  
Canada

Santé  
Canada

*Your health and  
safety... our priority.*

*Votre santé et votre  
sécurité... notre priorité.*

# **Guidelines for Time & Temperature Requirements for Potentially Hazardous Foods – A Guide for the Conveyance Industry and Environmental Health Officers (EHO)**



*Travelling Public Program/  
Le Programme du public voyageur*

**Canada**

**Health Canada is the federal department responsible for helping the people of Canada maintain and improve their health. We assess the safety of drugs and many consumer products, help improve the safety of food, and provide information to Canadians to help them make healthy decisions. We provide health services to First Nations people and to Inuit communities. We work with the provinces to ensure our health care system serves the needs of Canadians.**

Published by authority of the Minister of Health.

*Guidelines for Time & Temperature Requirements for Potentially Hazardous Foods – A Guide for the Conveyance Industry and Environmental Health Officers (EHO)*

is available on Internet at the following address:

[www.healthcanada.gc.ca/ http://www.hc-sc.gc.ca/hl-vs/travel-voyage/general/inspection-eng.php](http://www.healthcanada.gc.ca/http://www.hc-sc.gc.ca/hl-vs/travel-voyage/general/inspection-eng.php)

Également disponible en français sous le titre :

*Lignes directrices relatives aux exigences quant à la durée et à la température de conservation des aliments potentiellement dangereux : guide à l'intention de l'industrie des transports et des agents d'hygiène du milieu (AHM)*

This publication can be made available on request in a variety of alternative formats.

Contact:

Publications

Health Canada

AL 0900C2

Ottawa, Ontario K1A 0K9

Tel.: 613-957-2991

Toll free: 1-866-225-0709

Fax: 613-941-5366

TTY: 1-800-267-1245 (Health Canada)

Email: [publications@hc-sc.gc.ca](mailto:publications@hc-sc.gc.ca)

© Her Majesty the Queen in Right of Canada, represented by the Minister of Health, 2013

All rights reserved. No part of this information (publication or product) may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, or stored in a retrieval system, without prior written permission of the Minister of Public Works and Government Services Canada, Ottawa, Ontario K1A 0S5 or [copyright.droitdauteur@pwgsc.gc.ca](mailto:copyright.droitdauteur@pwgsc.gc.ca).

Pub.: 130017

Cat.: H164-168/2013E-PDF

ISBN: 978-1-100-22134-2

# **Guidelines for Time & Temperature Requirements for Potentially Hazardous Foods: A Guide for the Conveyance Industry and Environmental Health Officers (EHOs)**

by

**Health Canada  
Environmental Health Bureau  
Travelling Public Program  
Ottawa, Ontario**

**2010**

Maintaining temperature of food during storage and transportation is important in the prevention of foodborne illness. The purpose of establishing guidelines for food storage is to prevent the growth of pathogenic micro-organisms to harmful levels during storage. The following guidelines provide time and temperature requirements for potentially hazardous foods from source (e.g. airports, seaports, supply depots, food processors, flight kitchens or food caterers) to consumption onboard conveyances (e.g. airplanes, trains, ferries, and cruise ships). Time-temperature controls identified in Table 1 are based on the IFSA & AEA World Food Safety Guidelines for Airline Catering (2010) and the Food Retail and Food Services Code (2004). The Health Canada guidelines have been reviewed by Health Canada's Bureau of Microbial Hazards.

Ready-to-eat foods for distribution to consumers would include those provided by food processors, flight kitchens, food caterers, airport and passenger terminal food concessions and conveyances such as airlines, cruise ships, passenger trains and passenger ferries.

## **Potentially Hazardous Foods**

Potentially hazardous foods are foods in a form or state which is capable of supporting the rapid and progressive growth of infectious and/or toxigenic microorganisms. Such foods include, but are not limited to, milk or milk products, eggs, meat, poultry, fish, shellfish (edible mollusc and crustaceans), or any other ingredients (Food Retail and Food Service Code, 2004).

**Table 1 – Guidelines for Time & Temperature Requirements for Potentially Hazardous Foods**

ACTIVITY	TIME/TEMPERATURE GUIDELINE
<b>PREPARATION</b>	
Food preparation at flight kitchen, food caterer, food processor or onboard conveyance	<b>&gt;4°C (40°F) for short periods of time which cannot be &gt; 2 hours (total time from start to finish of preparation)</b>
<b>COLD STORAGE</b>	
Storage at flight kitchen, food caterer, food processor, or food storage facility	≤ 4°C (40°F) (at all times)
<b>TRANSPORTATION</b>	
Transport (from flight kitchen, food caterer or food processor to food storage facility and onto conveyance)  OR  Transport (from flight kitchen, food caterer or food processor directly onto conveyance)	≤ 8°C (46°F) if transport time ≤ 2 hours  OR  ≤ 4°C (40°F) if transport time > 2 hours
<b>FOOD STORAGE/SERVICE</b>	
On board conveyance	≤ 4°C (40°F) (at all times)  OR  >4°C (40°F) for short periods of time which cannot be > 2 hours (any leftover food at the end of 2 hours must not be served and discarded)
<b>REHEATING</b>	Potentially hazardous foods that have been cooked then cooled should be reheated until they reach an internal temperature of 74°C (165°F)
<b>HOT HOLDING</b>	Potentially hazardous foods that have been prepared, cooked, and are to be served hot, should be held at a temperature of at least 60°C (140°F).

**Temperature Monitoring**

There should be monitoring and recording of the temperature of equipment (refrigerator, transport equipment, storage units) to make sure it is keeping food under proper temperature controls at all times.

The temperature of potentially hazardous foods kept cool with the assistance of ice/dry ice/ice packs should be monitored with the use of a thermometer. As for the onboard service, if the temperature of the potentially hazardous foods reads greater than 4°C (40°F), the service should be done within 2 hours from the time the temperature goes above 4°C (40°F).

## REFERENCES

Canadian Food Inspection System Implementation Group. (2004). Food Retail and Food Service Code.

<http://www.cfis.agr.ca/english/regcode/frfsrc-amendmts/codeang-2004.pdf>

(September 2004).

International Flight Services (IFSA) and Association of European Airlines.(AEA). (2010). World Food Safety Guidelines for Airline Catering.

[http://www.ifsachoices.com/WFSG\\_2010\(updated\).pdf](http://www.ifsachoices.com/WFSG_2010(updated).pdf)

1 June 2010).