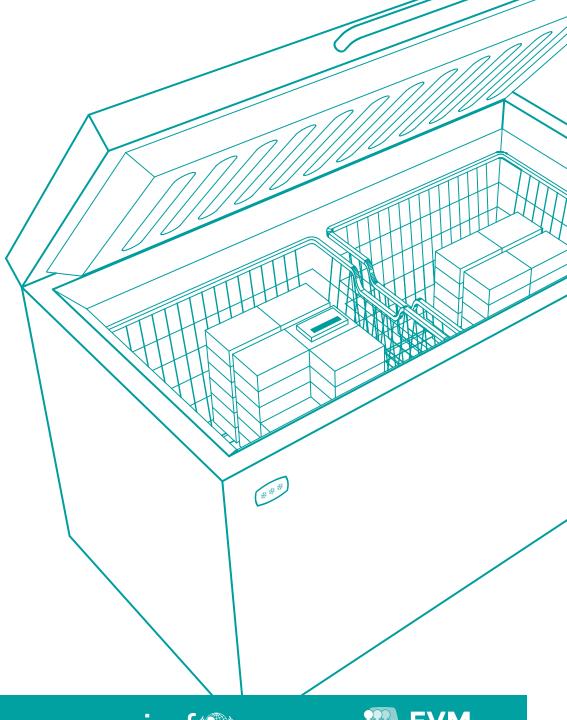
HOW TO CALCULATE VACCINE VOLUMES AND COLD CHAIN CAPACITY REQUIREMENTS

March 2017



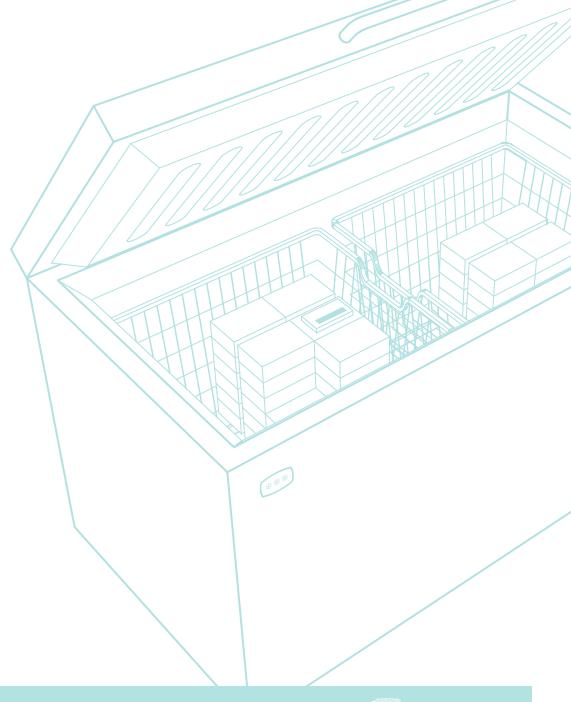






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How to use this module

This module of the WHO Vaccine Management Handbook (VMH) is a component of the World Health Organization/United Nations Children's Fund Effective Vaccine Management (EVM) Initiative. The handbook is written for decision-makers at national and subnational levels; its purpose is to provide technical advice on key topics related to immunization logistics to help countries develop and refine national policies. For more detailed guidance on specific operational activities, readers should refer to the EVM model standard operating procedures.¹

Advice in the VMH generally conforms to the guidance on good storage and distribution practice given in WHO Technical Report Series, No. 961, 2011, Annex 9: Model guidance for the storage and transport of time- and temperature-sensitive pharmaceutical products.²

¹ Effective Vaccine Management (EVM) Initiative Model Standard Operating Procedures. Geneva: World Health Organization; 2015 (http://www.who.int/immunization/programmes_systems/supply_chain/evm/en/index2.html, accessed 15 June 2016).

² WHO Expert Committee on Specifications for Pharmaceutical Preparations: forty-fifth report. Geneva: World Health Organization; 2011: Annex 9 (WHO Technical Report Series, No. 961; http://apps.who.int/medicinedocs/documents/s18683en/s18683en.pdf, accessed 15 June 2016).

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Abbreviations

AD autodisable

BCG bacille Calmette-Guérin vaccine

DTP diphtheria, tetanus and pertussis vaccine

EVM Effective Vaccine Management

HepB hepatitis B vaccine

Hib Haemophilus influenzae type b vaccine

IPV inactivated poliovirus vaccine

OPV oral poliovirus vaccine

PCV13 13-valent pneumococcal conjugate vaccine

PQS performance, quality and safety (WHO)
SIA supplementary immunization activity

SOP standard operating procedure

TT tetanus toxoid vaccine

UNICEF United Nations Children's Fund

VMH Vaccine Management Handbook

WIC walk-in cold room

WIF walk-in freezer room

WHO World Health Organization

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