

WHO Collection, Testing and Transfusion kit 2021 (CTT kit 2021)**Rev1**

Please note that related information resources and training materials are available in the USB thumb drive included

Scope of the CTT kit

It is the first version of the CTT Kit 2021, which is a completely new kit designed to supply the necessary equipment for the collection, testing, and transfusion of 50 blood bags. It includes everything required for the entire process—from collecting and sampling to testing and transfusing blood.

The quantities in the kit are calculated to support 50 blood collections and transfusions.

Please note that in June 2024, during the contract extension, some of the modules (highlighted in yellow) underwent updates based on feedback from the field.

Structure and content of the CTT kit 2022

The CCT kit is divided in 4 different modules as below:

	KMEDCTTK5UC--A1	(CCT kit 2021) COLLECTION TESTING AND TRANSFUSION KIT 2021 (Rev.06 2024)
MODULE 1	KMEDCTTK5UM1-A1	(CTTK 2021) MODULE 1, COLD CHAIN
MODULE 2	KMEDCTTK5UM2-A1	(CTTK 2021) MODULE 2, TESTING
MODULE 3	KMEDCTTK5UM3-A1	(CTTK 2021) MODULE 3, COLLECTION & TRANSFUSION
MODULE 3a	KMEDCTTK5UM31A1	(CTTK 2021 rev.1) SUBMODULE 3A, COLLECTION
MODULE 3b	KMEDCTTK5UM32A1	(CTTK 2021 rev.1) SUBMODULE 3B, TRANSFUSION
MODULE 3c	KMEDCTTK5UM33A1	(CTTK 2021 rev.1) SUBMODULE 3C, VACUTAINERS (short shelf life)
MODULE 4	KMEDCTTK5UM40A1	(CTTK 2021 rev.1) MODULE 4, EQUIPMENT

changes
June 2024

Module 1 – Cold chain

The kit contains blood grouping testing reagents that require cold chain management. Please note that The Hemocue® control solution has been removed from this module, as the Hemocue® 301 equipment is no longer included in the kit.

Module 2 – Testing

Contains RDTs to test for Malaria, Hepatitis B and C, HIV, and syphilis. As well as pregnancy tests. Note that for HIV and syphilis, the RDT supplied is a Combo/duo test (HIV/Syphilis -WHO PQed).

Module 3- Collection & Transfusion

This module is now divided into three submodules:

- **Module 3a** for collecting blood.
- **Module 3b** for transfusing blood.
- **Module 3c** containing only vacutainers.

The vacutainers, which have a total shelf life of just 18 months, are now separated into their own submodule (3c) to extend the shelf life of module 3a.



- **Module 3a:** Primarily consists of single blood bags of various sizes (250ml, 350ml, 450ml), triple bags of 450ml, and small consumables.
- **Module 3b:** Contains IV set lines for blood administration and small consumables.
- **Module 3c:** Contains only three types of vacutainers (red, purple, and pink caps). Note that this submodule has a very short shelf life, so careful planning is required if requested.

Module 4- Equipment

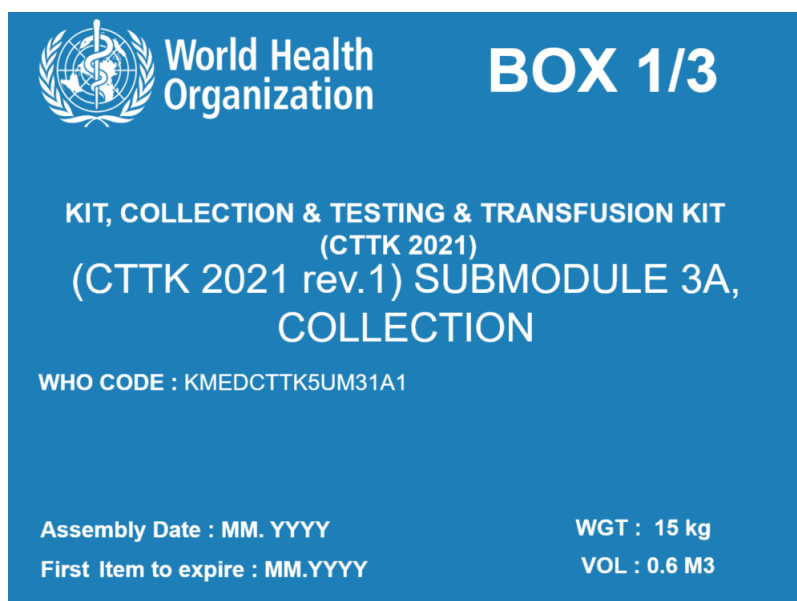
This module is mainly composed of equipment and has no shelf life. It includes items like sealing tube forceps, spring balances, scales, stethoscopes, timers, etc. The Hemocue® 301 and its consumable have been removed, in fact the microcuvettes have a very short shelf life, which compromise the total shelf life of the module.

The Hemocue® assortment is now available in the WHO catalogue, with different models for blood glucose and haemoglobin analysis

Kit Label

The label colour for the NCD kit 2022 is “blue”. You find useful information on the label such as:

- **Kit name:** “CCT kit 2021) COLLECTION TESTING AND TRANSFUSION KIT 2021”
- **Module name:** e.g. “SUBMODULE 3A, COLLECTION”
- **Number of boxes per module:** “Box 1/3”, in the example below, indicates that three boxes of the “collection” module were provided in total and that the label pertains to box 1
- **WHO code for the module (not the kit):** KMEDCTTK5UM31A1
- **Expiration date of the first item to expire in the module:** this (these) specific item(s) should be in the box#1. Box#1 always contains the short shelf life item(s).



How to read the data logger

A data logger and a freeze tag are added to the cold chain module (module 1)

Cold chain module:

- The temperature is maintained between 2-8°C, with the data logger pre-configured by the supplier to trigger alarms if there are any excursions outside this range.
- The data logger is placed inside the cold chain box, positioned next to the medicines.
- Open the cold chain box only inside a cold room or directly next to the refrigerator. Do NOT open the cold chain boxes at customs or during transit.
- Retrieve the data logger and press the “stop” button. Don't worry if you cannot stop the data logger by pressing the bottom “Stop”, just connect the USB port in a computer and it will automatically stop the reading.
- To read the data logger, connect it to a USB port, and a PDF report will be generated automatically.
- Freezing indicator (Freeze-tag®) is an irreversible freezing indicator which allows the quality of the cold chain to be checked by indicating whether products have been exposed for more than 1 hour to a temperature below 0 °C. Before reading, keep the Freeze-tag® at a temperature above 0 °C for at least 2 minutes.

If there is an alarm a cross appears in the window.



= OK display



= ALARM

- Request a technical officer to validate the shipment upon arrival. Temperature excursions do not necessarily mean that the medicines are unusable. If uncertain, consult with an expert, such as a logistician or pharmacist.

For more information watch our cold chain video: <https://www.who.int/emergencies/emergency-health-kits>

Useful resources and WHO Guidelines

- Safe blood and blood products: distance learning materials:
 - [Guidelines and Principles for Safe Blood Transfusion Practice: Introductory Module](#)
 - [Module 1: Safe Blood Donation](#)
 - [Module 2: Screening for HIV and Other Infectious Agents](#)
 - [Module 3: Blood Group Serology](#)
- Clinical use of blood in Medicine Obstetrics Paediatrics Surgery & Anaesthesia Trauma & Burns (Training modules)

https://www.who.int/bloodsafety/clinical_use/en/Manual_EN.pdf?ua=1
- Clinical use of blood in Medicine Obstetrics Paediatrics Surgery & Anaesthesia Trauma & Burns (Handbook)

https://www.who.int/bloodsafety/clinical_use/en/Handbook_EN.pdf?ua=1

- Safe blood and blood products: manual on the management, maintenance and use of blood cold chain equipment
<https://apps.who.int/iris/handle/10665/43359>
- Screening donated blood for transfusion-transmissible infections: recommendations.
<https://apps.who.int/iris/handle/10665/44202>