General principles of the WHO kits

- All medicines used in the kits are part of the WHO EML (latest updated version).
- Treatment protocols used are the latest WHO guidance available.
- Revision of the kits is done every 4 to 5 years, in between, if needed (major changes in treatment protocols).
- Large WHO standard kits have 2 suppliers. Content is the same but the brands used might vary as well as the packaging size.
- WHO holds a stock in Dubai to respond to emergencies.
The WHO standard kits – 07.2022

WHO standard emergency health kits

IEHK 2017
Interagency Emergency Health Kit (IEHK) 2017
Each kit serves 10,000 people for 3 months

Cholera kits 2020
Cholera kits 2020
Each kit serves 100 patients

TESK 2019
Trauma and Emergency Surgery Kit (TESK) 2019
Each kit serves 50 hospitalized trauma patients

NCDK 2016
Non communicable diseases kit (NCDK) 2016
Each kit serves 10,000 people for 3 months

Pneumonia kit 2020
Pneumonia kit 2020
Each kit serves 100 cases

PED/SAM 2020
PED/SAM 2020
Each kit serves Sick Children (including SAM)

https://www.who.int/emergencies/emergency-health-kits
The WHO standard kits – 07.2022

https://www.who.int/emergencies/emergency-health-kits
TIPS for quantifying / ordering WHO kits

- Pay attention to **the target population versus number of interventions**. While some kits are designed for blanket coverage of populations, others are designed for a specific number of interventions.

- A kit addresses **only certain types of health conditions**. It may be necessary to order different kits/modules to be used in conjunction.

- When quantifying kits to address needs, **consider ordering different numbers of the modules containing equipment versus those containing medicines and supplies** (especially in cases where you anticipate multiple orders as equipment can be reused).
TIPS for quantifying / ordering WHO kits

- Some kits offer modularised purchase options, so, **you can target the modules you need without having to purchase the entire kit**

- IEHK or PED-SAM kits **include malaria modules.** Check the national protocols and prevalence before ordering those modules

- **The lead time** for receiving a kit varies, depending on quantity and type of kits ordered

- Bear in mind that emergency health kits are a complete set of items to address a specific situation **and not for replenishment of specific medical items in the kit.**

- To ease the transition after the acute phase anticipate the **transition to bulk items** at an early stage!
Structure:
Basic module (PHC)
Supplementary module (hospital)

Purpose: the kit is designed to meet the priority health needs of a population affected by emergencies, who have limited access to routine health care services.

Target: design for an outreach population of 10’000 persons / 3 months

The kit is neither designed nor recommended for re-supplying existing health-care facilities. It is not designed for immunization, nutritional programmes, resuscitation/surgical activities and management of communicable diseases such as HIV/AIDS, tuberculosis or leprosy. Supplies related to these diseases should be identified based on a needs assessment.
IEHK-2017 structure

Basic module
- Basic module \( \times 10 \)
- Malaria unit \( \times 10 \)

Outreach population of 1'000 persons \( \times 10 \) => 10'000

Supplementary module:
- Medicines
- Medicines (controlled)
- Medicines (cold chain)
- PEP unit
- Malaria unit
- Equipment
- Renewable

Outreach population of 10'000

Interagency Health Kit 2017

Medicines and medical items for Outreach population of 10'000 persons

Approx. Weight: 1,200 kg
Approx. Volume: 6.5 m³
IEHK 2017) Technical background of each module

Basic module medicine & supply & equipment

✓ For Primary Health Care facility or OPD
✓ Only 1 antibiotics – Amoxicillin 250mg
✓ Can be handled by “nonqualified” health care workers (PHC- community)

No medicines for NCD, HIV or TB!

Basic malaria

✓ Artemether + Lumefantrine, tab 20mg + 120mg to treat uncomplicated malaria cases (P. falciparum):
  ✓ 150 babies
  ✓ 30 infants
  ✓ 30 toddler
  ✓ 300 adults
✓  + 800 RDTs

Supplementary medicines

✓ For hospital settings – general medicine unit
✓ Includes oral + injectable medicines
✓ Includes cold chain medicines (oxytocin/insulin)
✓ Includes some NCDs, some MH

ORDER Controlled medicines module separately!
Check the list of controlled medicines in your country

Supplementary Malaria

• Artesunate injection 60mg /ml to treat severe malaria cases:
  ✓ Children less than 20kg with an average of 3 vials / treatment
  ✓ children over 20kg and adults with an average of 6-7 vials / treatment

Can take a medium and state that the IEHK sup malaria is supporting the treatment of about 120 cases of severe malaria
Before ordering, make sure that the health care workers are familiar with the use of DTG for PEP
Structure:
Medicines (+ cold chain)
Supply & equipment

Purpose: Focus primarily on most common NCD amenable to PHC management: hypertension/CVD, Diabetes, Chronic respiratory diseases plus selected mental health and neurological conditions

Target: design for an outreach population of 10’000 persons/ 3 months
# New NCDK 2022

<table>
<thead>
<tr>
<th>Module</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 1</td>
<td>KMEDNCDK2MM--A1</td>
<td>(NCDK 2022) Module Medicines</td>
</tr>
<tr>
<td>Module 2</td>
<td>KMEDNCDK2MMH--A1</td>
<td>(NCDK 2022) Module Mental Health</td>
</tr>
<tr>
<td>Module 3</td>
<td>KMEDNCDK2MCC--A1</td>
<td>(NCDK 2022) Module Cold Chain</td>
</tr>
<tr>
<td>Module 4</td>
<td>KMEDNCDK2MR--A1</td>
<td>(NCDK 2022) Module Renewables</td>
</tr>
<tr>
<td>Module 5</td>
<td>KMEDNCDK2ME--A1</td>
<td>(NCDK 2022) Module Equipment</td>
</tr>
<tr>
<td>Module 6</td>
<td>KMEDNCDK2MG--A1</td>
<td>(NCDK 2022) Module Glucometer</td>
</tr>
</tbody>
</table>

**Medicines**

1. 
2. 
3.

**Supply & Equipment**

4. 
5. 
6.

**Supply & equipment**

4. Renewables
5. Equipment
6. Glucometer
Structure:
- SAM module
- Oral medicines module
- Injectable medicines module
- Malaria module
- Supply & equipment

Purpose:
To supply essential medicines to treat the most common childhood diseases including severe acute malnutrition with medical complications.

Target:
Children aged 6 months - 14 years old

Do NOT contain therapeutic FOOD/MILK. Order separately F-75 and F-100 on the WHO catalogue.
Beneficiaries of the PED-SAM 2020

**SAM module**
- Essential medicines to treat 50 children suffering from severe acute malnutrition with medical complications
- **Inpatient care** (hospital or stabilisation centre)
- **1 SAM module = 50 SAM children as beneficiaries**

**Oral module**
- Oral medicines, mainly antibiotics, pain killers and anti diarrheal medicines
- Child friendly formulation
- Used at paediatric ward, mobile clinic or outpatient service
- **Assumption is to support treatment for about 200 children.**

**Oral + Injectable module**
- Oral + injectable medicines mainly antibiotics, pain killers and anti diarrheal medicines
- **Inpatient care** (hospital)
- **Assumption is to support treatment for about 200 children.** (10-bed ward for about 3 months, stay 4-6 days = 10X90/5 = 180 children)

Measles kit 2021

Structure:
Severe measles cases
Mild measles cases
Supply & equipment

Purpose: to prepare for and support the treatment of non-severe and severe measles cases during outbreaks.

Target: Children population:
50 severe cases
20 mild cases

Do **NOT** contain therapeutic FOOD/ MILK. Order separately F-75 and F-100 on the WHO catalogue.
Measles simple cases module 8

- For outpatient (OPD or during outbreak investigation)
- Contains medicines and supply for the treatment of about 20 measles mild cases complications, mostly acute respiratory infections (otitis, laryngotracheobronchitis and pneumonia)
**PED-SAM / Measles kit**

The same kit but labelled differently for visibility:

<table>
<thead>
<tr>
<th>KIT, PAEDIATRIC-SAM (PED-SAM 2020), complete</th>
<th>KIT, Measles 2021 , complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODULE 1 (Kit PED-SAM 2020) MODULE, MEDICINES SAM</td>
<td>(kit Measles 2021) MODULE, MEDICINES SEVERE CASES</td>
</tr>
<tr>
<td>MODULE 2 (Kit PED-SAM 2020) MODULE, MEDICINES PED ORAL</td>
<td></td>
</tr>
<tr>
<td>MODULE 3 (Kit PED-SAM 2020) MODULE, MEDICINES PED INJECTABLES</td>
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</tr>
<tr>
<td>MODULE 4 (Kit PED-SAM 2020) MODULE, MEDICINES PED CONTROLLED</td>
<td>(kit Measles 2021) MODULE, MEDICINES PED CONTROLLED</td>
</tr>
<tr>
<td>MODULE 5 (Kit PED-SAM 2020) MODULE, MEDICINES MALARIA</td>
<td>(kit Measles 2021) MODULE, MEDICINES MALARIA</td>
</tr>
<tr>
<td>MODULE 6 (Kit PED-SAM 2020) MODULE, RENEWABLES</td>
<td>(kit Measles 2021) MODULE, RENEWABLES</td>
</tr>
<tr>
<td>MODULE 7 (Kit PED-SAM 2020) MODULE, EQUIPMENT</td>
<td>(kit Measles 2021) MODULE, EQUIPMENT</td>
</tr>
<tr>
<td>MODULE 8</td>
<td>(kit Measles 2021) MODULE, MEDICINES&amp;SUPPLY MILD CASES</td>
</tr>
</tbody>
</table>

https://www.who.int/publications/i/item/9789240002869
Pneumonia kit 2020

Structure:
Medicines
Suppl & equipment

Purpose:
The kit contains live-saving treatment for pneumonia:
• fast breathing pneumonia with no chest indrawing with first-line treatment amoxicillin in child-friendly formulation.
• Severe pneumonia with first-line treatment parenteral ampicillin and gentamicin
• Including treatment for HIV-children with pneumonia ceftriaxone and empiric cotrimoxazole treatment for suspected Pneumocystis jirovecii (previously Pneumocystis carinii) pneumonia (PCP)

Target:
100 cases of pneumonia among which 60 cases of children ≥ 5 years old and 40 cases of children < 5 years old and adults.
Structure:
kit 1: Central reference kit
Kit 2: Periphery kit
Kit 3: Community kit
Kit 4: Hardware kit
Kit 5: Investigation kit
Kit 6: Laboratory kit/ check list

Purpose: designed to support the first month of initial cholera outbreak response (kits 1 to 4) and/or support alert and surveillance (kits 5-6).

Target: to support EXISTING structures at central, peripheral and community level with case management of 100 cases

Calculation tool: 
https://openwho.org/courses/cholera-kits
CENTRAL REFERENCE KIT
- Treatment for 100 patients
  - 80 severe cases
  - 20 moderate cases
  1) Central drugs module
  2) Central renewable sup. module
  3) Central equipment module
  4) Central logistics module

PERIPHERY KIT
- Treatment for 100 patients
  - 40 severe cases
  - 60 moderate cases
  1) Periphery drugs module
  2) Periphery renewable sup. module
  3) Periphery equipment module
  4) Periphery logistics module

COMMUNITY KIT
- Rehydration for 100 patients
  - 100 moderate cases
  1) Community drugs module
  2) Community based case module

when there is no infrastructure to host patients

HARDWARE KIT
- 1) Shelter module
- 2) Water module
- 3) Sanitation module
- 4) Support module
- 5) Fencing module
- 6) Motor pump module
- 7) Water tool box

INVESTIGATION KIT
- Material for 100 samples
- Collection swabs
- Rapid diagnostic tests
- Equipment for sample transportation
- Transport boxes

LABORATORY KIT / CHECKLIST
- Laboratory supplies for 100 samples
### Beneficiaries of the Cholera Kit 2020

<table>
<thead>
<tr>
<th>Central module</th>
<th>Peripheral module</th>
<th>Community module</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 central module contains medicines to treat 80 severe cases and 20 mild cases</td>
<td>1 peripheral module contains medicines to treat 60 severe cases and 40 mild cases</td>
<td>1 community module contains medicines to treat 100 mild cases</td>
</tr>
</tbody>
</table>

- All modules are to treat 100 cases of cholera

- Note that you can no longer order a full central, peripheral or community kit at once
- Order according to your needs (medicines / supply / logistics / equipment)
- You need the supply module when ordering medicines (injection supply)
- Supply logistics and equipment are about the same in central and peripheral modules
- Logistics are voluminous modules
- Equipment can be reused, quantification is one per health facility per year.
Beneficiaries of the Cholera kit 2020

- **Investigation module**
  - 1 investigation module contains supply to collect = 100 samples

- **Laboratory module**
  - 1 laboratory module contains supply to perform tests = 100 laboratory confirmation tests

Both modules are to collect & test 100 suspected samples of cholera.

Short expiry due to the nature of the goods! Re-order frequently.
Structure:

MODULE 1: DRUGS & RENEWABLES, for 50 patients hospitalized
SUB-MODULE 1A: 7 sets of medicines
SUB-MODULE 1B : 11 sets of renewable commodities
SUB-MODULE 1C: 3 sets supplementary renewables

MODULE 2 : SURGICAL INSTRUMENTS
24 Sets of surgical instruments

Purpose: WHO TESK is intended to provide the resources needed for surgical procedures in operating theatres.

Target: to meet the needs of 50 patients requiring surgical care in emergency situations, assuming an average of two operations per patient.
<table>
<thead>
<tr>
<th>Product category</th>
<th>WHO item code</th>
<th>WHO item description</th>
<th>UoM</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIT</td>
<td>KMEDTESTK1------A1</td>
<td>KIT, TRAUMA &amp; EMERGENCY SURGERY KIT (TESK 2017), for 50 patients hospitalized</td>
<td>Kit</td>
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</tr>
<tr>
<td>MODULE 1</td>
<td>KMEDTESTM1-----A1</td>
<td>(TESK 2019) MODULE 1, DRUGS &amp; RENEWABLES, for 50 patients hospitalized</td>
<td>Kit</td>
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<tr>
<td>MODULE 1A</td>
<td>KMEDTESTM1A------A1</td>
<td>(TESK 2019) MODULE 1A, DRUGS</td>
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<td>SET1A1</td>
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<td>SET1A2</td>
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<td>(TESK 2019 module 1A) SET, DRUGS, CONTROLLED</td>
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<td>SET1A3</td>
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<td>SET1A4</td>
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<td>SET1A7</td>
<td>KMEDTESTM1AD------A1</td>
<td>(TESK 2019 module 1A) SET, DRUGS, DISINFECTIONTS</td>
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<tr>
<td>MODULE 1B</td>
<td>KMEDTESTM1B------A1</td>
<td>(TESK 2019) MODULE 1B, RENEWABLES COMMODITIES, for 50 patients</td>
<td>Kit</td>
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<td>SET1B1</td>
<td>KMEDTESTM1B0------A1</td>
<td>(TESK 2019 module 1B) SET, RENEWABLES, GLOVES</td>
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<td>SET1B2</td>
<td>KMEDTESTM1BA------A1</td>
<td>(TESK 2019 module 1B) SET, RENEWABLES, ANAESTHESIA, basic material</td>
<td>Set</td>
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<td>SET1B3</td>
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<td>(TESK 2019 y module 1B) SET, RENEWABLES, INJECTION MATERIAL</td>
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<td>SET1B4</td>
<td>KMEDTESTM1BD------A1</td>
<td>(TESK 2019 module 1B) SET, RENEWABLES, DRESSING MATERIAL</td>
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<tr>
<td>SET1B5</td>
<td>KMEDTESTM1BD------A1</td>
<td>(TESK 2019 module 1B) SET, RENEWABLES, DRESSING MATERIAL, BURNS</td>
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<tr>
<td>SET1B6</td>
<td>KMEDTESTM1BPC------A1</td>
<td>(TESK 2019 module 1B) SET, RENEWABLES, PLASTER CASTING MATERIAL</td>
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<tr>
<td>SET1B7</td>
<td>KMEDTESTM1BST------A1</td>
<td>(TESK 2019 module 1B) SET, RENEWABLES, STERILISATION, for autoclave</td>
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<tr>
<td>SET1B8</td>
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<td>SET1B9</td>
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<td>(TESK 2019 module 1B) SET, RENEWABLES, SUTURENS</td>
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<td>SET1B10</td>
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<td>SET1B11</td>
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<td>(TESK 2019 module 1B) SET, RENEWABLES, SURGICAL MISCELLANEOUS MATERIAL</td>
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<tr>
<td>MODULE 1C</td>
<td>KMEDTESTM1C------A1</td>
<td>(TESK 2019) MODULE 1C, SUPPLEMENTARY, RENEWABLES COMMODITIES, for 50 patients</td>
<td>Kit</td>
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<tr>
<td>SET1C1</td>
<td>KMEDTESTM1CA------A1</td>
<td>(TESK 2019 module 1C) SET, SUPPLEMENTARY, ANAESTHESIA MATERIAL</td>
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<tr>
<td>SET1C2</td>
<td>KMEDTESTM1CE------A1</td>
<td>(TESK 2019 module 1C) SET, SUPPLEMENTARY, EXTRICATION COLLARS</td>
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<tr>
<td>SET1C3</td>
<td>KMEDTESTM1CS------A1</td>
<td>(TESK 2019 module 1C) SET, SUPPLEMENTARY, SPLINTS, for 15-20 fracture cases</td>
<td>Set</td>
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<tr>
<td>SET1C4</td>
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<td>(TESK 2019 module 1C) SET, SUPPLEMENTARY, INTUBATION &amp; LARYNGOSCOPE</td>
<td>Set</td>
<td>1</td>
</tr>
</tbody>
</table>
Module (TESK 2019 module 1A) 
SET, DRUGS, BASIC 

Compose of 5 boxes:

box 1 to 5 about 120kg = half pallet
Structure:
Testing: RDTs + blood grouping (cold chain)  
Collection (3a) & Transfusion (3b)  

Equipment

Purpose: To provide supply & equipment to collect, test and transfuse 50 blood bags.

Target: Surgery & trauma care unit, blood donation center

https://www.who.int/news-room/fact-sheets/detail/blood-safety-and-availability
Structure:
One module for each type of supply for sampling:

- Blood
- Cerebral spinal fluid - CFS (meningitis kit)
- TB samples with 3 different methods: respiratory samples, sputum induction, nasopharyngeal aspiration
- Stool
- Skin
- Urine
- Transport

Purpose: The CSK kit contains the necessary supply for the collection and transport of various biomedical samples

Target: hospitals, laboratories, epidemiologists' team, etc.
# WHO Kit Color Label

<table>
<thead>
<tr>
<th>Kit Name</th>
<th>Colour Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEHK</td>
<td>Green</td>
</tr>
<tr>
<td>NCDK</td>
<td>Yellow</td>
</tr>
<tr>
<td>PED-SAM kit</td>
<td>Purple</td>
</tr>
<tr>
<td>Measles kit</td>
<td>Pink</td>
</tr>
<tr>
<td>TESK</td>
<td>Red</td>
</tr>
<tr>
<td>Cholera kits</td>
<td>Orange</td>
</tr>
<tr>
<td>Pneumonia kit</td>
<td>White</td>
</tr>
<tr>
<td>Other</td>
<td>Blue</td>
</tr>
</tbody>
</table>

---

**BOX 1/1**
- **Interagency Emergency Health Kit – 2017**
- **(IEHK 2017, SUPPLEMENTARY) MODULE CONTROLLED MEDICINES**
- **WHO CODE**: KMEDIE/HEMS/A-1

**Assembly Date**: 05.2020
**First Item to expire**: 06.2023

---

**BOX 3/4**
- **KIT, Measles 2021**
- **(kit Measles 2021) MODULE, MEDICINES&SUPPLY BASIC CASES**
- **WHO CODE**: KMEDMEAS/A1

**Assembly Date**: 06.2022
**First Item to expire**: 06.2024

---

**BOX 1/2**
- **NON-COMMUNICABLE DISEASES KIT (NCDK), 2022,**
- **(NCDK 2021) MODULE, MEDICINES COLD CHAIN**
- **WHO CODE**: KMEDNCDKMC/4-A1

**Assembly Date**: 06.2022
**First Item to expire**: 06.2026

---

**BOX 3/9**
- **KIT, CHOLERA CENTRAL REFERENCE (1) 2021**
- **(kit cholera central) MODULE, DRUGS (1.1)**
- **WHO CODE**: KMEDCHOL/1-A1

**Assembly Date**: 06.2021
**First Item to expire**: 06.2024

---

**BOX 1/1**
- **TRAUMA & EMERGENCY SURGERY KIT (TESK 2019)**
- **(TESK 2017 module 2B) SET, ORTHO. SURGERY INSTRUMENTS, AMPUTATION**
- **WHO CODE**: KMEDTESM/2B-A1

**Assembly Date**: n/a
**First Item to expire**: n/a

---

**BOX 3/9**
- **KIT, PNEUMONIA, 100 cases (66 cases < 5 years, 40 cases 5 years+)**
- **(kit pneumonia 100 cases) MODULE, MEDICINES**
- **WHO CODE**: KMEDPNEUMA1-A1

**Assembly Date**: 02.2022
**First Item to expire**: 08.2025

---

**BOX 1/2**
- **MODULE, GLUCOMETER, 300 tests & lancets**
- **WHO CODE**: KMEDGLU300/LA1

**Assembly Date**: 06.2021
**First Item to expire**: 06.2024

---

**BOX 1/1**
- **WHO CODE**: KMEDGLU300/LA1
Thank you

WHO
20, Avenue Appia
1211 Geneva
Switzerland