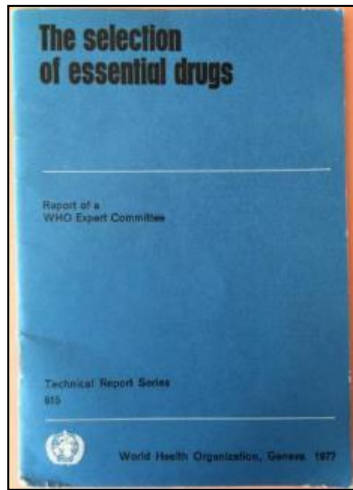


WHO Model List of Essential Medicines

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Essential Medicines
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The Model Lists of Essential Medicines (EML) 1977 - 2023

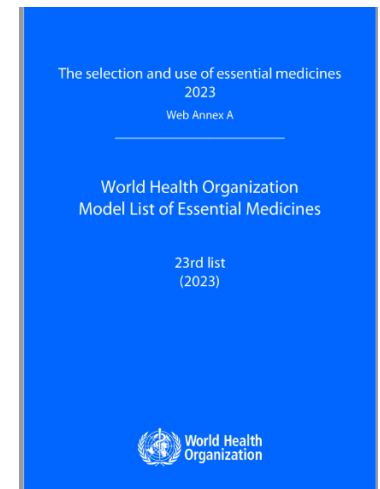


240 medicines



New additions / changes 2023 (85 applications)

- Medicines for multiple sclerosis (cladribine, glatiramer acetate and rituximab)
- Levetiracetam
- mhGAP guideline related updates
- Fixed-dose combinations for prevention of atherosclerotic cardiovascular disease
- Cancer medicines (pegylated liposomal doxorubicin, pegfilgrastim, new indications for children,...)
- Ravidasvir for hepatitis C
- Medicines for Ebola virus disease
- New sub-section medicines for COVID-19
- Reserve antibiotics (ceftolozane/tazobactam, tedizolid)
- Ready-to-use therapeutic food (RUTF) for severe acute malnutrition in children
- Pathogen-reduced cryoprecipitate
- Sevoflurane
- ...



EML: 502 medicines
EMLc: 351 medicines



Priority areas for management of price

Checkpoint inhibitors
(pembrolizumab and nivolumab)

Trastuzumab (**pertuzumab**)

Filgrastim

Insulin (human and analogues)

Osemertinib

GLP-1

Ustekinumab

CDK4/6

Ibrutinib

Bortezomib and lenalidomide

Abiraterone (enzalutamide)

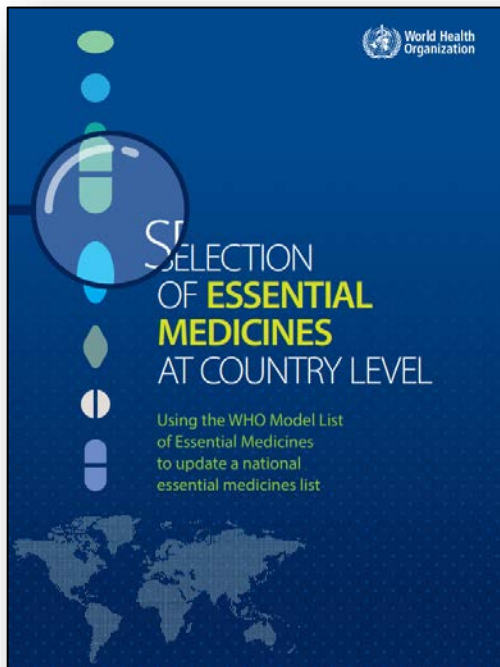
WHO updates list of essential medicines to include heart 'polypills,' MS treatments but not weight-loss drugs



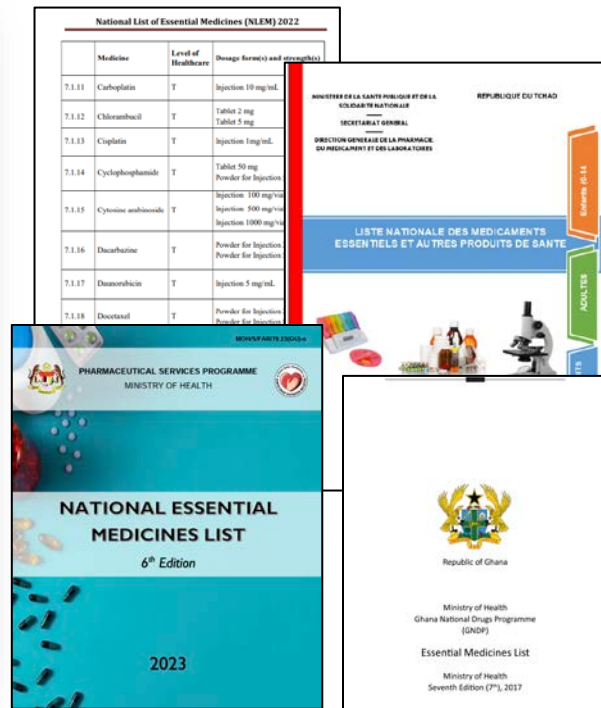
The EML as a model list for national lists of essential medicines

<https://global.essentialmeds.org>

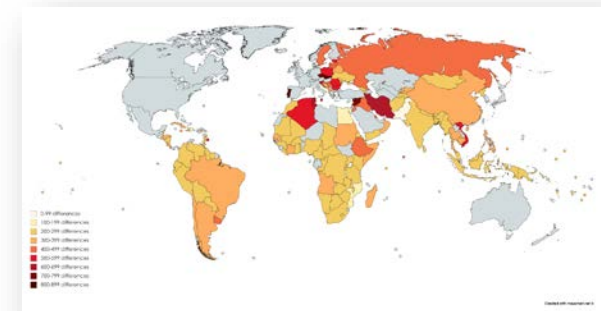
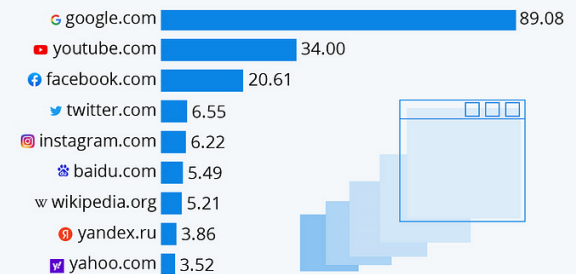
Global
Essential Medicines



<https://apps.who.int/iris/bitstream/handle/10665/330898/9789241515443-eng.pdf>



The World's Most Visited Websites



It is not enough that essential medicines are available and affordable

– They must be used appropriately

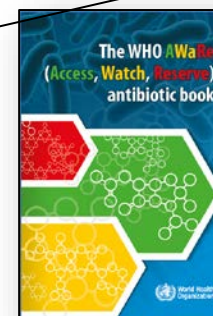
Appropriate use of essential medicines

In a report¹ to the Twenty-eighth World Health Assembly in 1975, the Director-General reviewed the main drug problems facing the developing countries and outlined possible new drug policies. The Director-General also referred to the experience gained in some countries where schemes of basic or essential drugs had been implemented. Such schemes were intended to extend the accessibility of the most necessary drugs to those populations whose basic health needs could not be met by the existing supply system. The Director-General pointed out that the selection of these essential drugs would depend on the health needs and on the structure and development of health services of each country, and that lists of essential drugs should be drawn up locally, and periodically updated, with the advice of experts in public health, medicine, pharmacology, pharmacy and drug management. He also considered that adequate information on the properties, indications and use of the drugs listed should be provided. By resolution WHA28.66, the Health Assembly requested the Director-General to implement the proposals contained in his report and, in particular, to advise Member States on the selection and procurement, at reasonable cost, of essential drugs of established quality corresponding to their national health needs.

“He also considered that adequate information on the properties, Indications and use of the drugs listed should be provided”

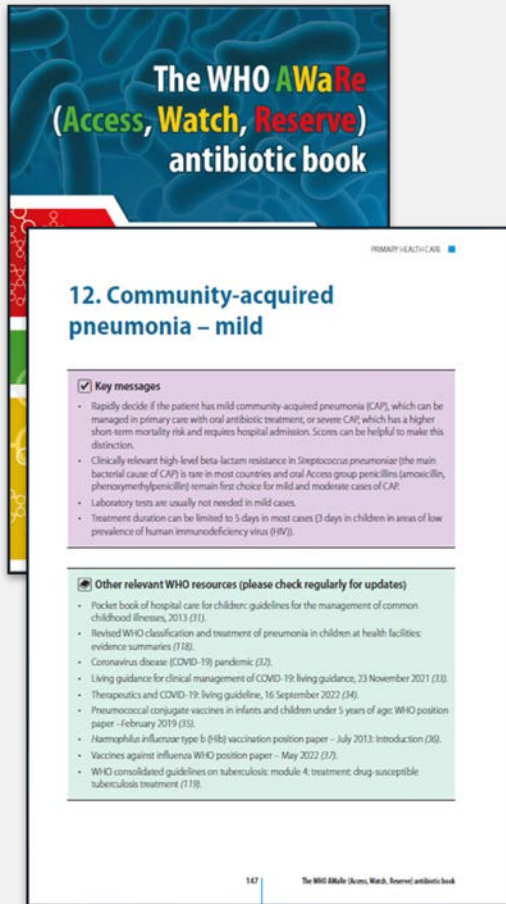


Dr Halfdan Mahler
(WHO DG 1973-1988)

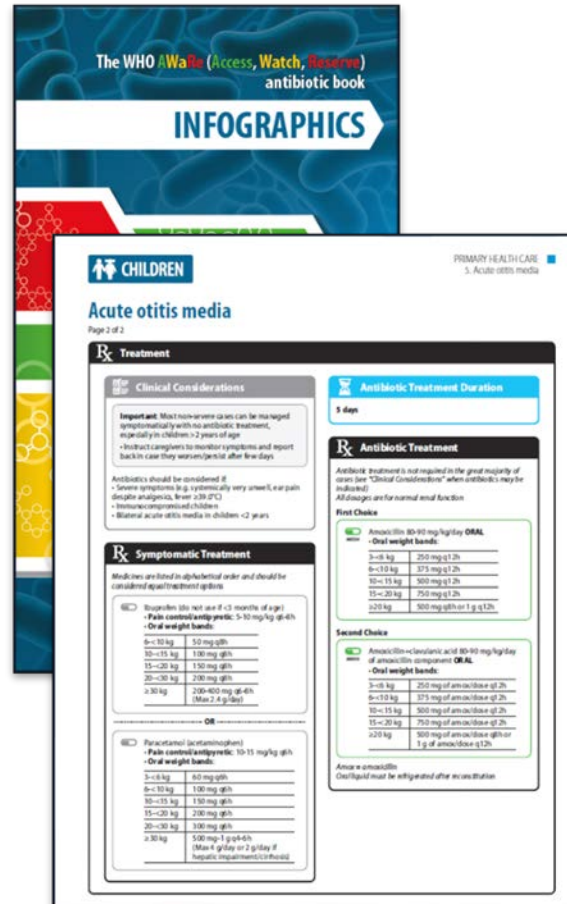


Several applications for addition of new Reserve antibiotics and one old antibiotic with activity against resistant pathogens

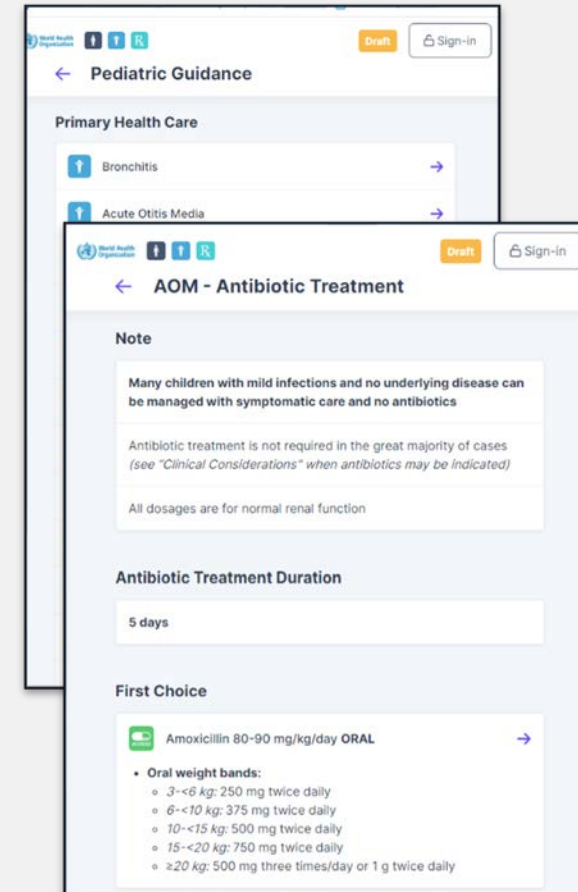
(1) Book



(2) Infographics



(3) App



General principles of AWARe Book

Optimise the use of narrow spectrum **Access** antibiotics (especially in primary care)

Standardisation of guidance for dose/duration/formulation across infections to simplify future implementation

Reserve antibiotics – criteria for selection and stewardship – linked to WHO AB Pipeline and Priority Pathogen List

Book designed to support the use of the AWARe system as a quality improvement tool (and assist with developing policy goals)

Policy & practice

The WHO AWARe (Access, Watch, Reserve) antibiotic book and prevention of antimicrobial resistance

Veronica Zanichelli,^a Michael Sharland,^b Bernadette Cappello,^a Lorenzo Moja,^a Haileyesus Getahun,^c Carmem Pessoa-Silva,^d Hatim Sati,^e Catharina van Weezenbeek,^d Hanan Balkhy,^e Mariângela Simão,^f Sumanth Gandra^g & Benedikt Huttner^g

Abstract Guidance on the appropriate use of antibiotics for common infections is lacking in many settings. The World Health Organization (WHO) has recently released *The WHO AWARe (Access, Watch, Reserve) antibiotic book* which complements the *WHO Model list of essential medicines* and *WHO Model list of essential medicines for children*. The book gives specific guidance on the empiric use of antibiotics in the model lists with a strong emphasis on the AWARe framework, which is centred around the risk of antimicrobial resistance development associated with the use of different antibiotics. Recommendations in the book cover 34 common infections in primary and hospital care both for children and adults. The book also includes a section on the use of the last-resort Reserve antibiotics, whose use should be restricted to very selected cases when an infection is confirmed or suspected to be caused by multidrug-resistant pathogens. The book highlights the use of first-line Access antibiotics or no antibiotic care if this is the safest approach for the patient. Here we present the background behind the development of the AWARe book and the evidence behind its recommendations. We also outline how the book could be used in different settings to help reach the WHO target of increasing the proportion of global consumption of Access antibiotics to at least 60% of total consumption. The guidance in the book will also more broadly contribute to improving universal health coverage.

Essential medicines as a global resource or concept: is it gaining momentum?

knowing that multifaceted contextualised methods are needed to implement recommendations. Such strategies

Box 1 The Wise List concept²⁰

- ▶ The Wise List ('Kloka Listan' in Swedish) was developed for the whole Stockholm Healthcare Region in 2000 (the name 'Wise List' was launched in 2001)
- ▶ Includes around 200 recommended core medicines for the treatment of common diseases in primary and hospital care
- ▶ Includes 100 complementary medicines for common diseases in specialised care (since 2007)
- ▶ Covers 24 therapeutic areas
- ▶ Is a pocket-sized booklet and also available in a web-version
- ▶ Respected experts and clinicians together with clinical pharmacologists, pharmacists and nurses agree on recommendations based on review of scientific evidence using transparent criteria, including cost-effectiveness evaluation
- ▶ Is a joint effort across disciplines and institutions and includes a policy for conflict of interest with annually renewed declarations. This policy contains rules and regulations for definitions of conflict of interest and how to handle them²¹
- ▶ Includes non-pharmacological advice for several therapeutic areas. For some therapeutic areas, there are stepwise recommendations linked to disease severity and concomitant diseases.
- ▶ The Wise List also includes around 10 'Wise piece of advice' (short, focused messages) selected yearly to improve certain pharmacotherapeutic practices for which there are potential for improvement in quality of medicine use, for example, 'Do not treat uncomplicated acute bronchitis with antibiotics'
- ▶ The Wise List is communicated through a comprehensive communication, branding and marketing strategy with experts in a key role and integrated with a programme for continuous medical education¹⁴ (Box 2)

Box 2 The Stockholm model for wise use of medicines

The core part of the model is The Wise List. The outer circle represents the Key Strategies and the Organisational Unit, which are a prerequisite for the collaborative work for a rational use of medicines. Since 1996, a new Swedish law stipulated that each healthcare region should have at least one Drug and Therapeutics Committee (DTC). This has provided mandate and organisational stability to issued recommendations by DTCs. The jigsaw puzzle shows key elements necessary for producing the Wise List and implementing its guidelines in medical practice in the Stockholm Healthcare region. Operative resources include an annual budget for staff, continuous medical education of our 200 experts, infrastructure, printing, distribution and marketing of the Wise List.



Wise List 2001•

Concept implemented through Drug and Therapeutic Committees

Attention to appropriate use of medicines, including • antibiotics, since inception



Bipartisan Essential Medicines Strategic • Stockpile Act

... would require the Department of • Health and Human Services to establish a list of 50 generic medications that are essential in public health emergencies, the same way the U.S. has a reserve of oil for energy-related emergencies.



Continue engaging with willing provinces and territories • towards **national universal pharmacare**, while proceeding with a national strategy on high-cost drugs for rare diseases and advancing the establishment of the Canada Drug Agency.