





# **International Classification of Diseases**

11th Revision

in Occupational Health

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**Unit Lead** 

Classifications and Terminologies

## **International Classification of Diseases (ICD)**



Legally mandated health data standard\* – in effect from January 2022 (mortality and morbidity)

Conceptual framework independent of language and culture

Integration of terminology and classification

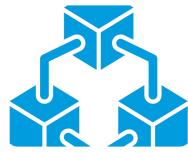
End-to-end digital solution (API, tools, online and offline)

Up-to-date scientific knowledge

Comparable statistics – semantic interoperability - for 150 years

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### WHO core classifications







International Statistical Classification of Diseases and related health problems – diagnoses, injuries, findings, primary care



### **ICF**

International Classification of Functioning, Disability and Health:

Describes functional health status and social impact (bio-psycho-social model).

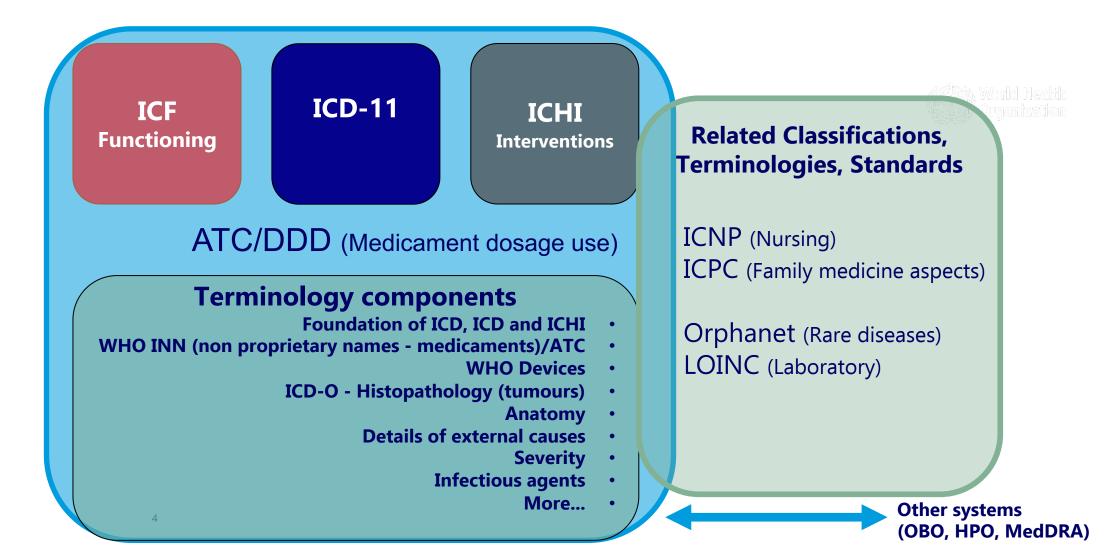


### **ICHI**

Interventions for treatment, prevention and diagnostics: Medical, nursing, rehabilitation, laboratory, imaging, ultrasound, public health...



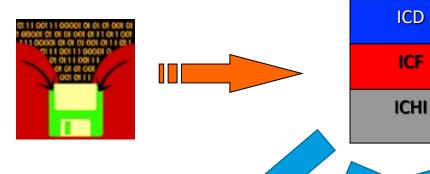
# The WHO Family of International Classifications and Terminologies (WHO-FIC)



# WHO-FIC Information and Interoperability



Health Records
Surveillance
Death certificates



Diseases, health related conditions

Functioning, Disability

Health interventions (individual and public health)



#### **Population Health**

**Births** 

Deaths

Diseases

Disability

Risk factors

SDG



#### **Clinical**

Decision Support Integration of care Outcome

Guidelines



#### Administration

Scheduling Resources Billing



#### Reporting

Cost

Needs

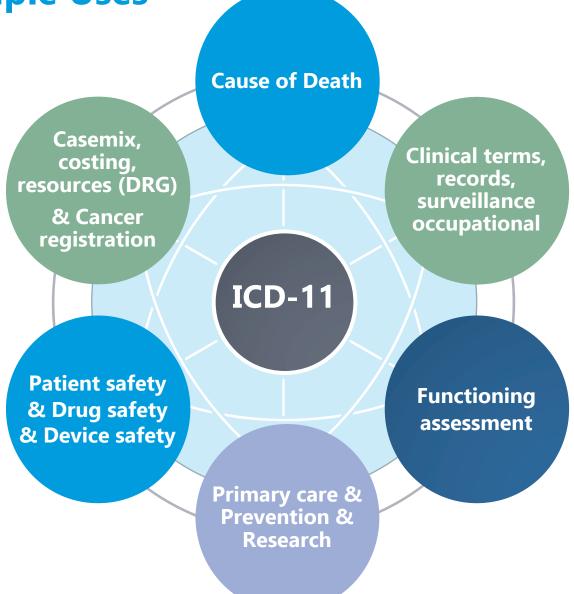
Outcome

**Epidemiology** 

Research









# **ICD-11 – more than diagnoses**



Traditional Classes and Terminology

Diagnoses

Injuries

Signs

**Symptoms** 

Findings

Reasons for encounter or health status

External causes of illness & death

Traditional medicine conditions

Functioning assessment – WHO-DAS2

Extension codes - Terminology

Anatomy

Laterality

Infectious agents and AMR



Histopathology (ICD-O)

Chemicals and Medicaments (INN)

Devices

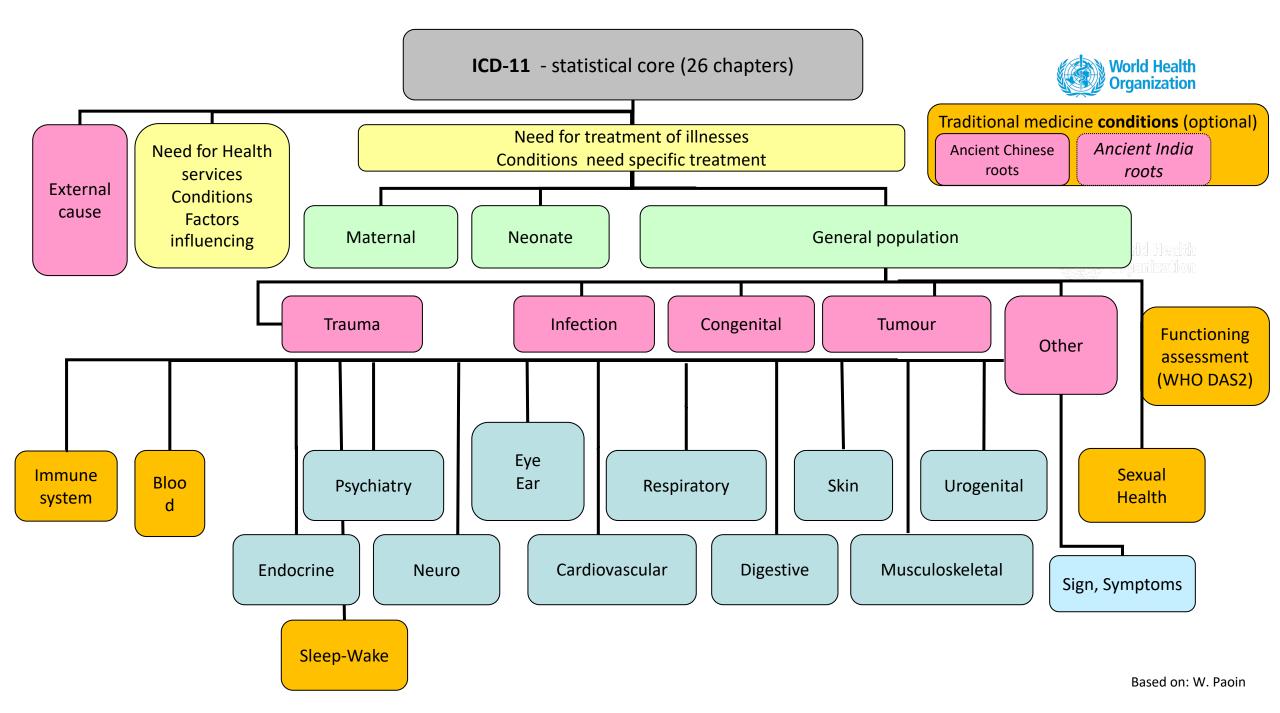
Mechanisms of harm (Safety)

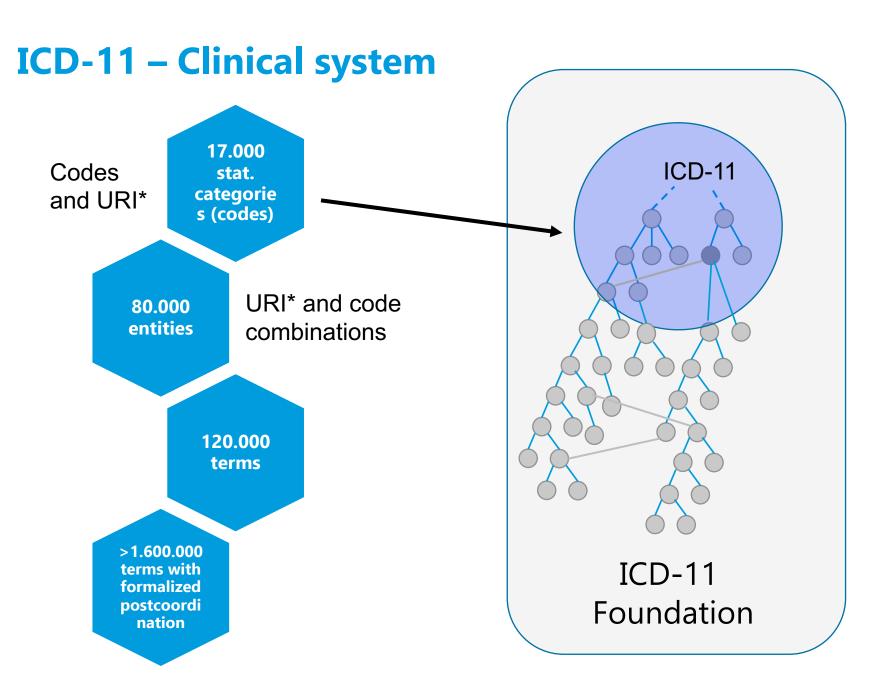
Activities

Places

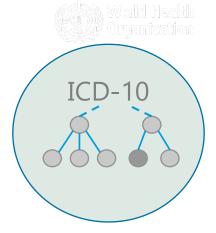
Objects

e.g. devices: IMDRF Terminology embedded









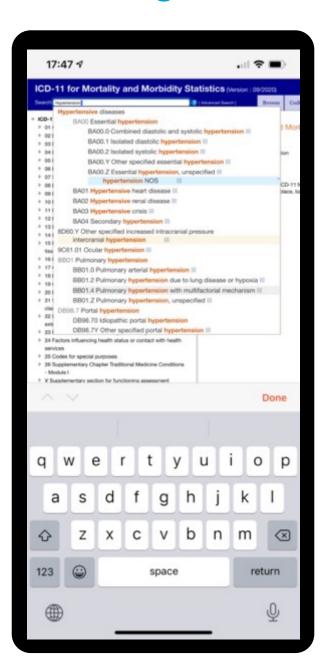
14000 categories
Separate text index
Separate rule base
Need terminology link
Outdated content

Statistical system used in clinical setting

\*URI: Uniform Resource Identifier - IT

## **ICD-11 Digital**





Tooling for use by humans

Modern ontology

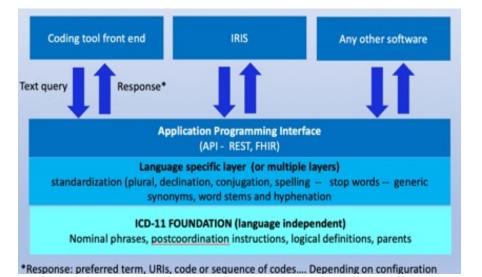
Fully digital

Portable: offline & online

Tools for use by software

Application Programming Interface (API)

Software applications on all devices and OS



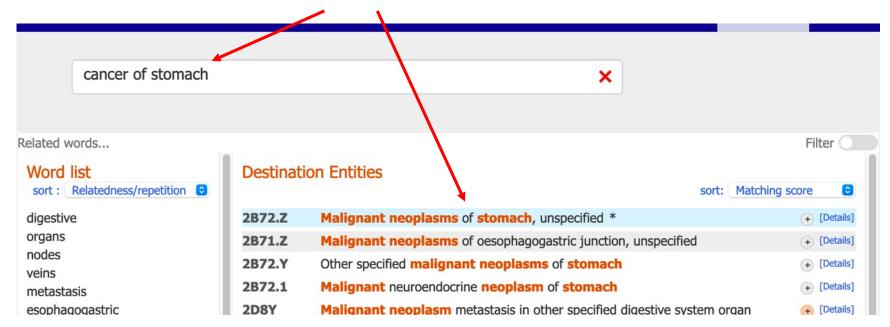


## Easy to use

Type a diagnostic statement into the Coding Tool

#### e.g. **cancer of stomach**





The Coding Tool will find the best match

Training 30 minutes = 88% correct coding

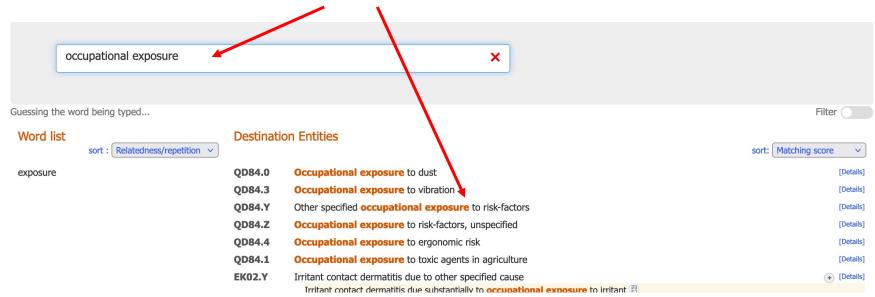


# Easy to use

Type a diagnostic statement into the Coding Tool

#### e.g. occupational exposure



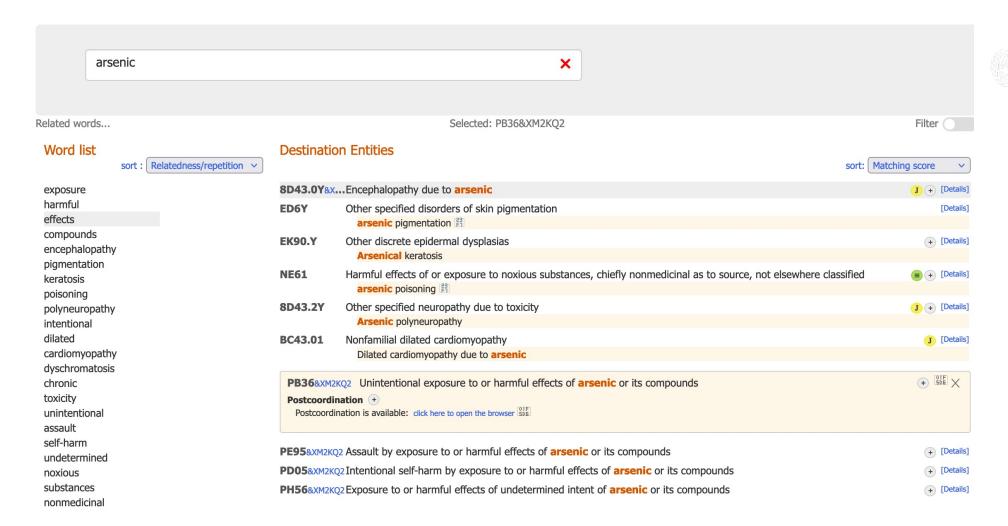


The Coding Tool will find the match



# Easy to use

#### Searching for codes after exposure to arsenic





# **Coding occupational diseases**

All conditions of the ILO list of occupational diseases included in ICD-11

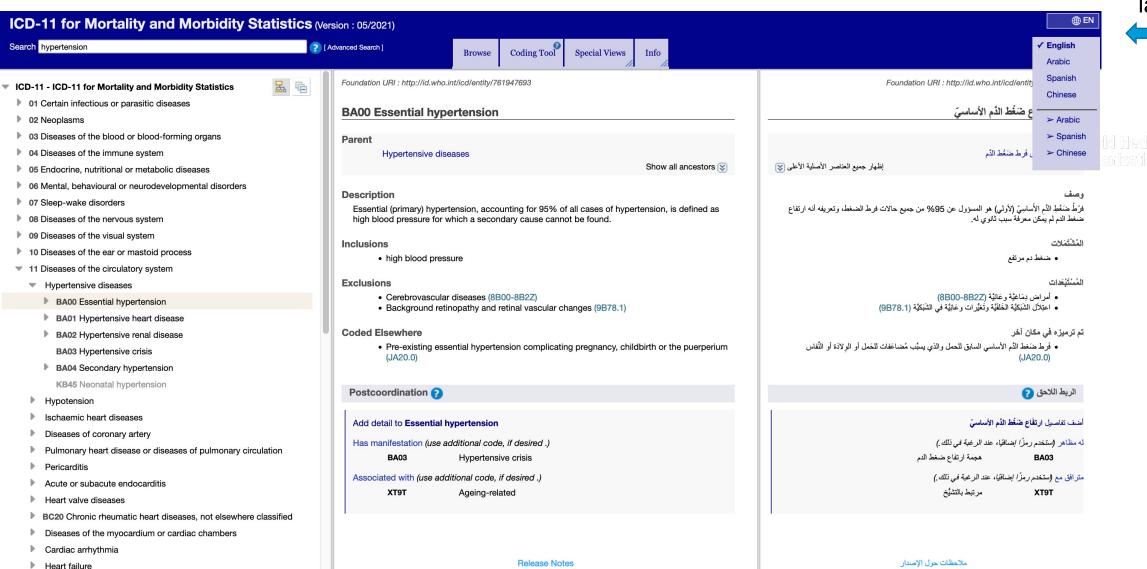


Some categories specifically with the label "occupational"

Other conditions can be flagged for occupational relevance, and all the context (paid, site, activity, functional impact) can be described

# Multilingual (23 more languages in translation)







### **Tools for Users**

Guides for Training **API- Integration** Coding implementation and with IT (WHO-FIT) use ANACOD 3 – Casemix Mappings to ICDquality assessment Causes of death (development of cause of death started) statistics Software assisted selection cause of Translation Proposals death (testing prototype)





# A Patient's Path

### Person has problem with right olecranon – goes to doctor

**ICD-11** Code the worry of the patient

Data inform planning of prevention

#### Practitioner identifies olecranon bursitis

**ICD-11** Code reason for encounter - infection

Data inform resource planning and epidemiology

Severity increases and referral to secondary care, intervention indicated, relationship with work and details of occupational context identified

**ICD-11** Code reason for stay

**ICHI** Code therapies

Data inform resource planning, DRG, service availability, occupational protection and insurance

### Rehabilitation and monitoring of fitness

**ICD-11** Monitoring fitness (WHODAS 2)

ICHI Code diagnostic test

ICF Code full functioning detail

Data inform epidemiology, coding, service availability, reintegration and recompensation



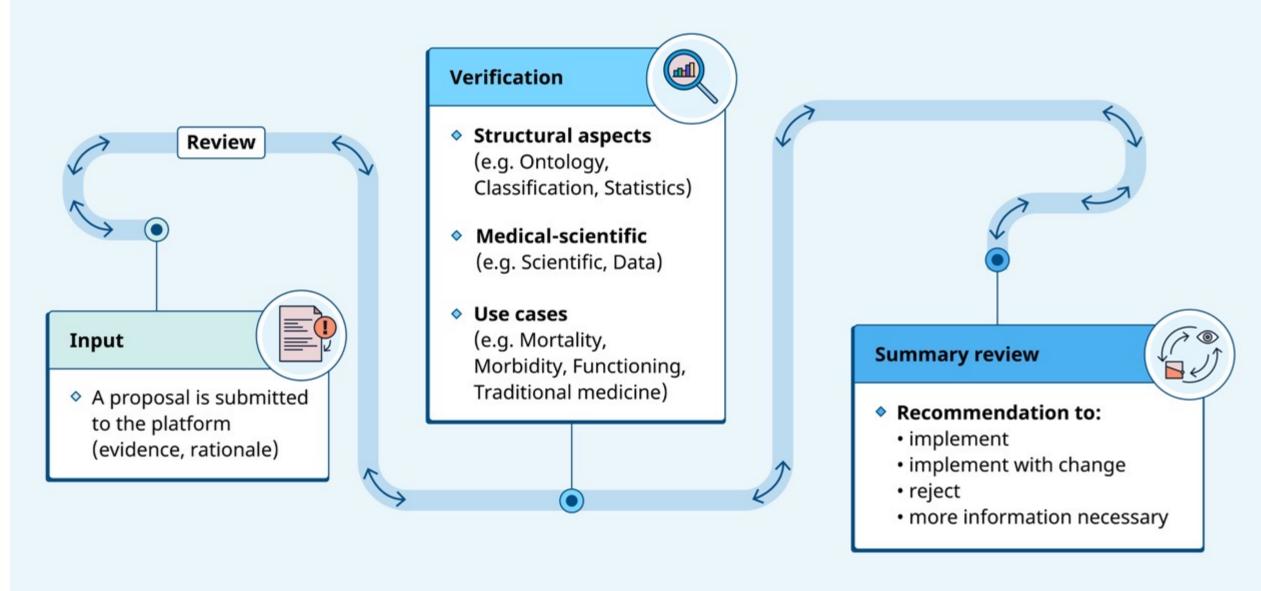
# **Participation**

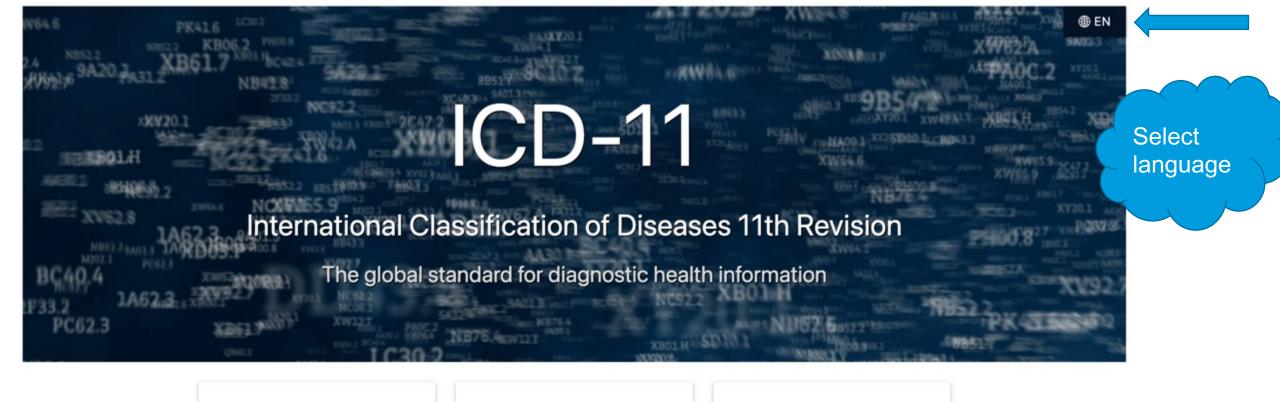
ICD empowers patients, care workers, clinicians, public health to participate in the design of the system

that improves care and improves use of resources.



# ICD-11 maintenance is a transparent public process





### Use ICD-11

ICD-11 Browser

for seeing the content

ICD-11 Coding Tool

for coding with ICD-11

ICD-API

web services to get programmatic access to ICD-

ICD-11 Implementation or **Transition Guide** 

#### Learn More

ICD Home Page

ICD-11 Reference Guide

ICD-11 Fact Sheet

ICD Video

Older versions

ICD-10 Browser

#### Be Involved

Our maintenance platform

provides various ways to

contribute

Comments Proposals

Translations

Register, submit proposal



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