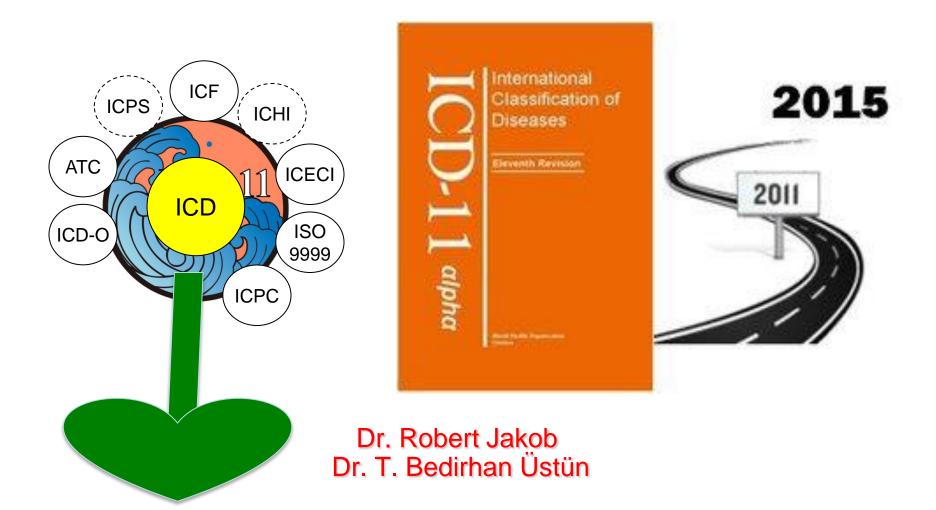
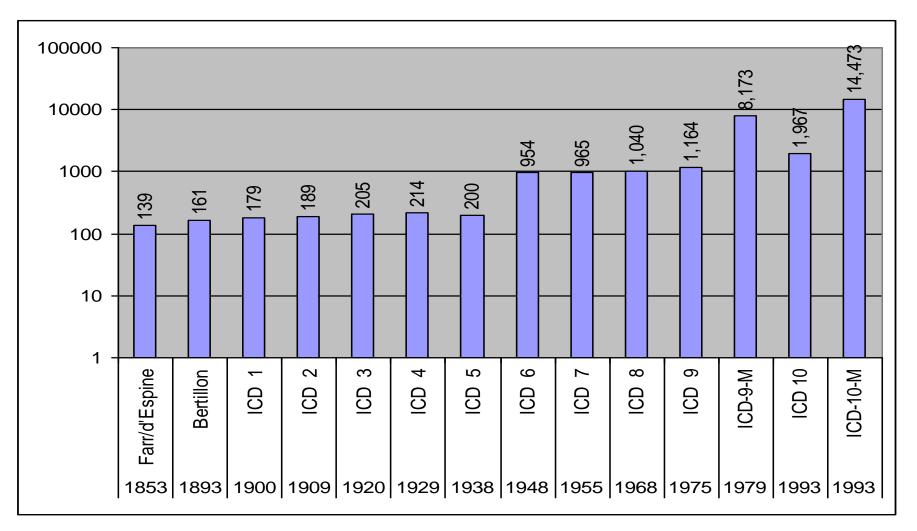
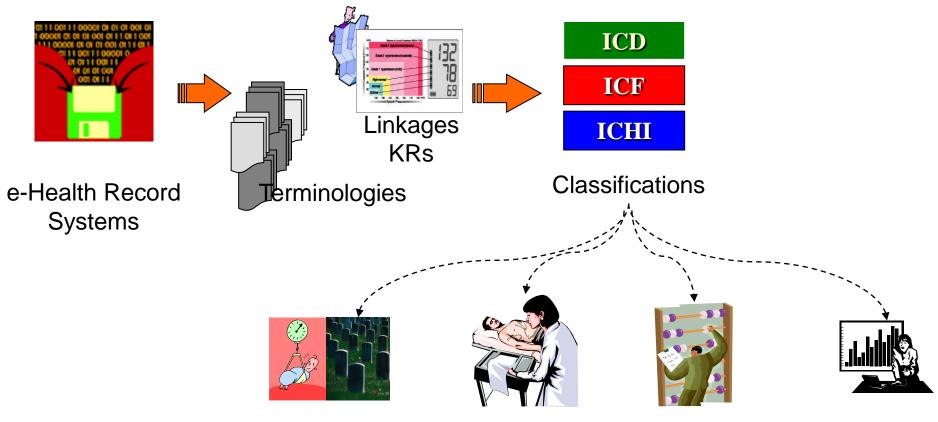
A new way ICD-11



ICD Revisions



Placing WHO Classifications in HIS & IT



Population Health

- Births
- Deaths
- Diseases
- Disability
- Risk factors

Clinical

- Decision Support
- Integration of care Resources
- Outcome

Administration

- Scheduling
- Billing

Reporting

- Cost
- Needs
- Outcome

Construction of ICD-11:

Revision Process in the 21st Century



- Internet-based permanent platform
 - All year round
 - Open to all people in a structured way
 - Content experts focus
- Digital curation
 - Wiki enabled collaboration
 - Ontology based
- Enhanced discussion & peer review
 - TAGs serve as the editorial group
- Electronic copy → print version
- Work in multiple languages
- Planned field tests
 - Based on Use Cases

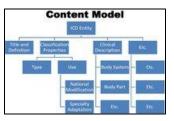




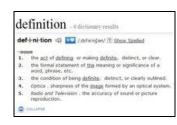
Internet Based Platform



Input from all Stakeholders



Content Model



Definitions



Field Trials for Use Cases



Electronic Health Record Ready

Multi Lingual Representations

Агаbic

This chinese
English
Français
French
Pyсский язык
Español

Arabic
Chinese
English
Frenglish
French
Russian
Spanish

Deutsch German
Português Portuguese

ICD-11 Revision Goals

- 1. Evolve a multi-purpose and coherent classification
 - Mortality, morbidity, primary care, clinical care, research, public health...
 - Consistency & interoperability across different uses
- 2. Serve as an international and multilingual reference standard
 - Scientific comparability
 - Communication purposes
- 3. Function in an electronic health records environment.
- Compatibility among the members of the WHO-Family of International Classifications

ATC, ICD-O, ICPC ...



Definitions

- All ICD entities will have definitions:
 - key descriptions of the **meaning** of the category in human readable terms to **guide users**
 - Limited definition in Print Version 100 words
 - Detailed definitions ONLINE
- Definitions will be compatible with:
 - the Content Model
 - Diagnostic Criteria
 - across the whole classification and the versions

Definition of Disease

a set of dysfunction(s) in any of the body systems including:

with a known pattern of signs, symptoms & findings

» symptomatology - manifestations

probably with an underlying explanatory mechanism

» etiology

a distinct pattern of development over time

» course and outcome

a known pattern of response to interventions

» treatment response

with linkage to underlying genetic factors

» genotypes, phenotypes and endophenotypes

with linkage to interacting environmental factors

THE CONTENT MODEL

Any Category in ICD is represented by:

1. ICD Concept Title

1.1. Fully Specified Name

2. Classification Properties

- 2.1. Parents
- 2.2 Type
- 2.3. Use and Linearization(s)

3. Textual Definition(s)

4. Terms

- 4.1. Base Index Terms
- 4.2. Inclusion Terms
- 4.3. Exclusions

5. Body Structure Description

- 5.1. Body System(s)
- 5.2. Body Part(s) [Anatomical Site(s)]
- 5.3. Morphological Properties

6. Manifestation Properties

- 6.1. Signs & Symptoms
- 6.2. Investigation findings

7. Causal Properties

- 7.1. Etiology Type
- 7.2. Causal Properties Agents
- 7.3. Causal Properties Causal Mechanisms
- 7.4. Genomic Linkages
- 7.5. Risk Factors

8. Temporal Properties

- 8.1. Age of Occurrence & Occurrence Frequency
- 8.2. Development Course/Stage

9. Severity of Subtypes Properties

10. Functioning Properties

- 10.1. Impact on Activities and Participation
- 10.2. Contextual factors
- 10.3. Body functions

11. Specific Condition Properties

- 11.1 Biological Sex
- 11.2. Life-Cycle Properties

12. Treatment Properties

13. Diagnostic Criteria

ICD-11 Timeline

- 2011 : Alpha version (ICD 11 alpha draft)
 - +1 YR: Commentaries and consultations
- 2012 : Beta version & Field Trials Version
 - +2 YR : Field trials

- 2014 : Final version for public viewing
 - -2015: WHA Approval
- 2015+ implementation

ICD11 alpha



International Classification of Diseases

Eleventh Revision

World Health Organization Geneva http://www.who.int/classifications/icd/revision

Alpha – Browser & Print

10 look & feel + descriptions - code structure!

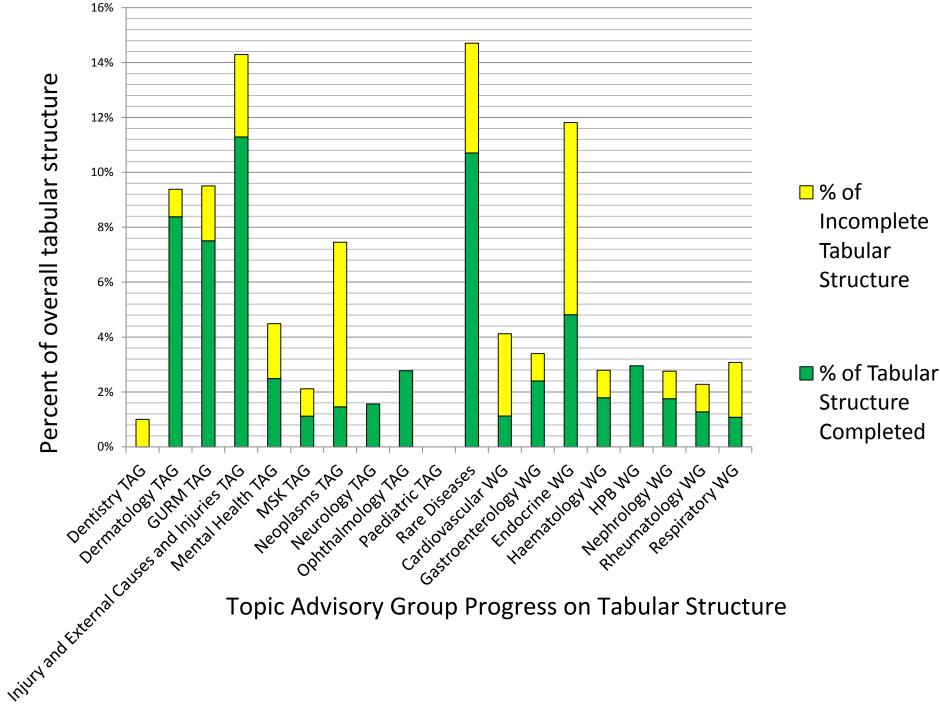


- ICD-11 alpha draft is INCOMPLETE
- updated on a daily basis
- NOT TO BE USED for CODING at this stage
- not yet been approved by the TAGs, RSG or WHO

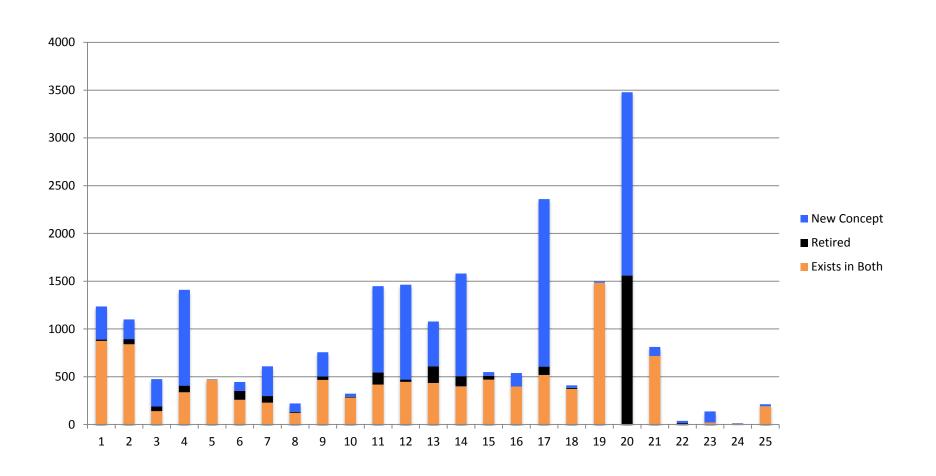
Good News



- "Alpha" has proven feasible
 - Continuity: respectful to ICD traditions break with non-essential features
 - Content Model proves useful & relevant
- Computerization is feasible
- Unprecedented linkage possibilities to:
 - SNOMED CT
 - ICF
 - other WHOFIC and UN Family of Classifications
 - other ontology, terminology and standard sources (QSM, TM, ICPS...)
- Better <u>Multilingual Production</u> opportunities



New, Retired, & Unchanged ICD Concepts as of 24 May 2011



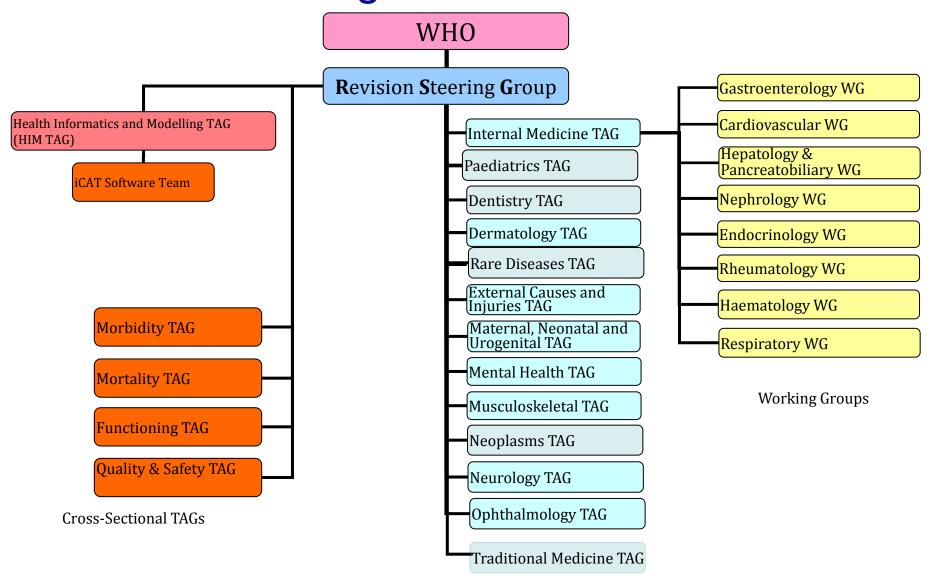
NOT so-good News



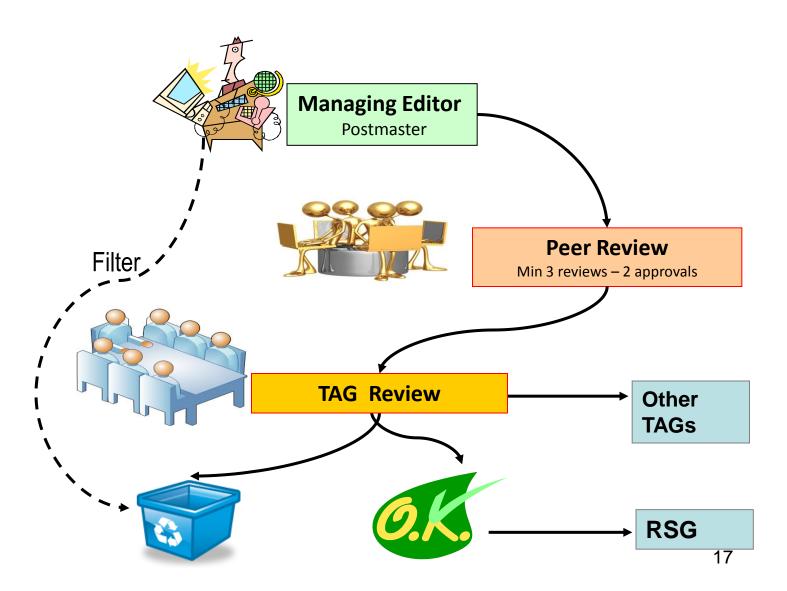
- Below expected targets yet
 - < 80% definitions
 - < 20% content model
- Not all TAGs are at similar development stage
- Engagement of international Stakeholders

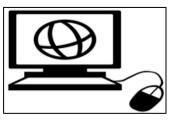


ICD Revision Organizational Structure - now



Life-cycle of a Proposal



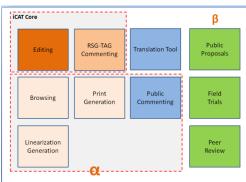


Internet Based Platform

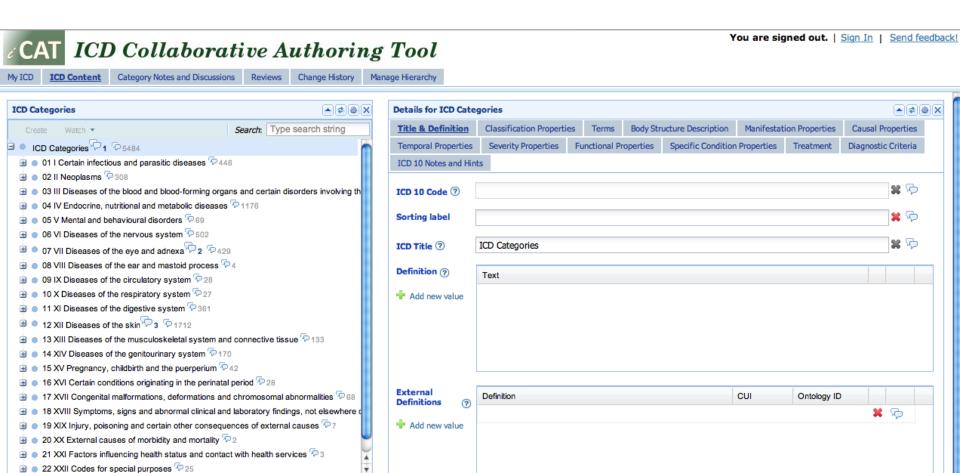
- Open all year round:
 - with continuous updates

- Open to all interested people
 - Health Care Providers, Information Managers
 - Structured review by experts (TAGs)

In a structured web platform:
 iCAT suite



iCAT



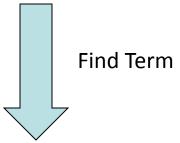
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ICD11 Components

Foundation: ICD categories with

- Definitions, synonyms
- Clinical descriptions
- Diagnostic criteria
- Causal mechanism
- Functional Properties







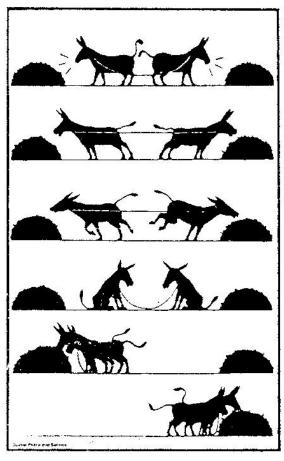
```
A0101
                                     Typhoid meningitis
                                     Typhoid fever with heart involvement
                                     Typhoid pneumonia
                                     Typhoid arthritis
                                     Typhoid osteomyelitis
                                     Typhoid fever with other complications
                                     Paratyphoid fever A
                                   Paratyphoid fever Paratyphoid fever Paratyphoid fever Paratyphoid fever Salmonella enteritis
                                    Paratyphoid fever
                                    Salmonella sepsis
                                    Localized salmonella infection, unspecified
                                     Salmonella meningitis
                                    Salmonella pneumonia
                                   Salmonella osteomyelitis
Salmonella pyelonephritis
                                    Salmonella with other localized infection
                          Cholera due to Vibrio cholerae 01, biovar cholerae
                           Cholera due to Vibrio cholerae 01, biovar eltor
                          Cholera, unspecified
                           Typhoid fever, unspecified
                           Typhoid meningitis
                           Typhoid fever with heart involvement
                           Typhoid pneumonia
                           Typhoid arthritis
                            Typhoid osteomyelitis
                           Typhoid fever with other complications
                           Paratyphoid fever A
                          Paratyphoid Even Por bidity
Paratyphoid Even Por bidity
Salmonella enteritis
                  A0220
                          Localized salmonella infection, unspecified
                           Salmonella meningitis
                  Δ0222
                           Salmonella nneumonia
                  10224
                          Salmonella osteomyelitis
Salmonella pyelonephritis
                          Salmonella with other localized infection
                  A028
                          Other specified salmonella infections
                                                            enteriae
Cholera due to Vibrio cholerae 01, biovar eltor
 Cholera, unspecified
                                                              /dii
Typhoid fever, unspecified
 Typhoid meningitis
 Typhoid fever with heart involvement
 Typhoid pneumonia
                                                             oli infection
 Typhoid osteomyelitis
 Typhoid fever with other complications
Paratyphoid fever A
Paratyphoid fever B
Paratyphoid fever C
Paratyphoid fever, unspecified
Salmonella enteritis
Salmonella sepsis
Locality principality (salmonella pneumonia
Salmonella pneumonia
Salmonella arthritis
Salmonella osteomyelitis
Salmonella pyelonephritis
Salmonella with other localized infection
Other specified salmonella infections
Salmonella infection, unspecified
Shigellosis due to Shigella dysenteriae
Shigellosis due to Shigella flexneri
Shigellosis due to Shigella boydii
Shigellosis due to Shigella sonnei
Other shigellosis
Shigellosis, unspecified
Enteropathogenic Escherichia coli infection
```

Cholera due to Vibrio cholerae 01, biovar cholerae Cholera due to Vibrio cholerae 01, biovar eltor

Cholera, unspecified Typhoid fever, unspecified

SNOMED-CT, International Classification of Functioning, Disability and Health (ICF)...

Why work together?



- WHO & IHTSDO

- Coverage & Adequacy
- Quality Reliability Utility
- MultiLingual Applicability
- Interoperability
- Sustainability

– Member States:

Enable health care delivery and compile health information

SNOMED & WHO Classifications are synergistic and not antagonistic

ICD-11

- Simultaneous development in Multiple Languages
 - التصنيف الدولى للأمراض _
 - 國際疾病與相關健康問題統計分類
 - International Classification of Diseases
 - Classification internationale des maladies
 - Международная классификация болезней
 - Clasificación internacional de enfermedades



CAVEATS



can celik [Log Off]

A

ICD11 Alpha

Jun 20 - 11:02 UTC

Search

[Advanced Search]

Foundation

Linearizations

User

Info

- ICD11 Alpha
 - O Certain infectious and parasitic diseases
 - Neoplasms
 - Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism
 - © Endocrine, nutritional and metabolic diseases
 - Mental and behavioural disorders
 - Diseases of the nervous system
 - Diseases of the eye and adnexa
 - Diseases of the ear and mastoid process
 - Diseases of the circulatory system
 - Diseases of the respiratory system
 - Diseases of the digestive system
 - Diseases of the skin
 - Diseases of the musculoskeletal system and connective tissue
 - Diseases of the genitourinary system
 - Pregnancy, childbirth and the puerperium
 - Certain conditions originating in the perinatal period
 - Developmental anomalies
 - Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified
 - Injury, poisoning and certain other consequences of external causes
 - External causes of morbidity and mortality
 - Factors influencing health status and contact with health services
 - Codes for special purposes
 - Special tabulation lists for mortality and morbidity
 - Multisystem diseases
 - Supplementary information

ICD-11 Alpha Draft Caveats

ICD-11 alpha draft is:

- Incomplete
- · May contain errors, omissions or imperfections
- · The work in different chapters are at different stages
- · The alpha drafting work is going on by the WHO, Revision Steering Group and Topic Advisory Groups
- · The alpha draft is going to be updated on a daily basis
- . The alpha draft is NOT TO BE USED for CODING at this stage
- . The alpha draft has not yet been approved by the Topic Advisory Groups, Revision Steering Group or WHO





Browsing ICD Entities



[Log On]

K

ICD11 Alpha

Jun 20 - 11:02 UTC

Search

[Advanced Search]

Foundation

Linearizations

Info

- ▼ ICD11 Alpha
 - Certain infectious and parasitic diseases
 - Intestinal infectious diseases
 - Tuberculosis
 - Respiratory tuberculosis, bacteriologically and histologically confirmed
 - Respiratory tuberculosis, not confirmed bacteriologically or histologically
 - 1 Tuberculosis of nervous system
 - Tuberculosis of other organs
 - Miliary tuberculosis
 - Certain zoonotic bacterial diseases
 - Other bacterial diseases
 - Infections with a predominantly sexual mode of transmission
 - Other spirochaetal diseases
 - Other diseases caused by chlamydiae
 - ▶ Rickettsioses
 - Viral infections of the central nervous system
 - Arthropod-borne viral fevers and viral haemorrhagic fevers
 - Viral infections characterized by skin and mucous membrane lesions
 - Viral hepatitis
 - ▶ Human immunodeficiency virus [HIV] disease
 - Other viral diseases
 - Mycoses
 - Protozoal diseases
 - Infestation by parasitic flukes and tapeworms
 - Infestation by nematodes and unspecified parasitic worms
 - Pediculosis, acariasis and other infestations
 - Sequelae of infectious and parasitic diseases

ID: http://who.int/icd#A15-A19

Tuberculosis

Parent(s)

- · Certain infectious and parasitic diseases
- Selected cause is Tuberculosis

Definition

A progressive or chronic disease resulting from infection with Mycobacterium tuberculosis, usually acquired by inhalation.

Inclusions

infections due to Mycobacterium tuberculosis and Mycobacterium bovis

Exclusions

- · seguelae of tuberculosis
- silicotuberculosis
- pneumoconiosis associated with tuberculosis
- · congenital tuberculosis
- · human immunodeficieny [HIV] disease resulting in tuberculosis

Causal Mechanisms

· Mycobacterium tubercolosis complex





Help



can celik [Log Off]

ICD11 Alpha

Jun 20 - 11:02 UTC

Search

[Advanced Search]

Foundation

Linearizations

Use

Info

definition 🤌





Q

ICD11 Alpha

- Oertain infectious and parasitic diseases
 - Intestinal infectious diseases
 - Tuberculosis
 - Certain zoonotic bacterial diseases
 - Initial alpha definition is available comments are welcome
 - Other spirochaetal diseases
 - Other diseases caused by chlamydiae
 - Rickettsioses
 - Viral infections of the central nervous system
 - Arthropod-borne viral fevers and viral haemorrhagic fevers
 - Viral infections characterized by skin and mucous membrane lesions
 - Viral hepatitis
 - Human immunodeficiency virus [HIV] disease
 - Other viral diseases
 - Mycoses
 - O Protozoal diseases
 - Infestation by parasitic flukes and tapeworms
 - Infestation by nematodes and unspecified parasitic worms
 - Pediculosis, acariasis and other infestations
 - Sequelae of infectious and parasitic diseases
 - Bacterial, viral and other infectious agents
 - Other infectious diseases
- Neoplasms
- Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism
- Endocrine, nutritional and metabolic diseases
- Mental and behavioural disorders
- A Dicascoc of the persons system

Quick Search Help

Quick search helps you quickly navigate to a particular category. It searches only the titles and it works by starting to search as you type and provide you options in a dynamic dropdown list.

You may use this feature by simply typing the keywords that you're looking for and clicking on one of the items that appear in the dropdown list. The system will automatically load the item that you've picked.

You may as well use wildcards to find similar words or to simply save some typing.

For example, **tuber* confirmed** will hit both tuberculosis and tuberculous together with the word 'confirmed'

If you need to search other fields than the title that you may use the advanced search feature

syphilis, perinatal gonococcal infection and perinatal human immunodeficiency virus [HIV] disease]

- infectious and parasitic diseases complicating pregnancy, childbirth and the puerperium [except obstetrical tetanus]
- certain localized infections see body system-related chapters
- influenza and other acute respiratory infections

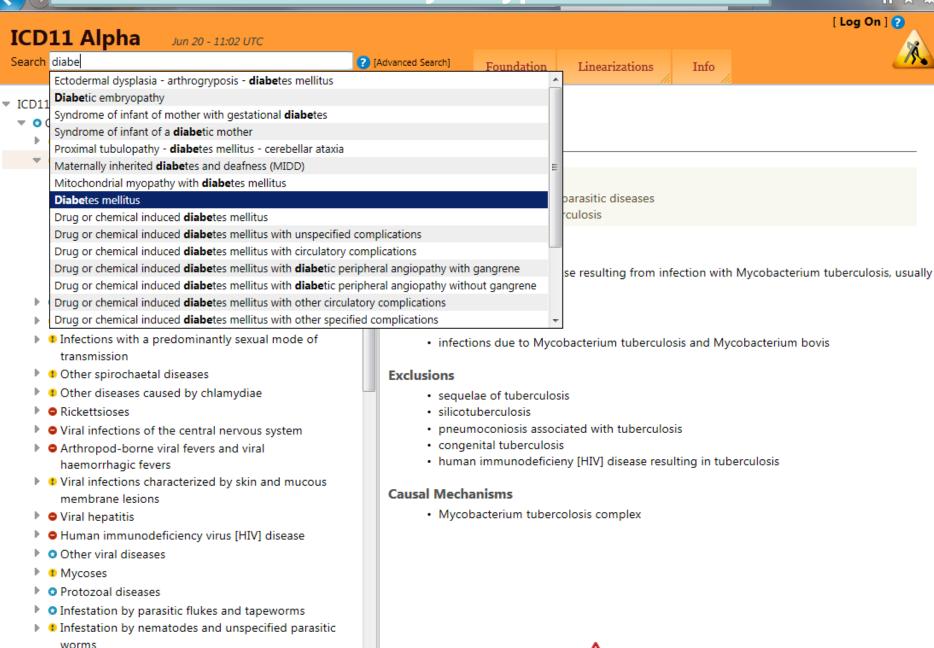


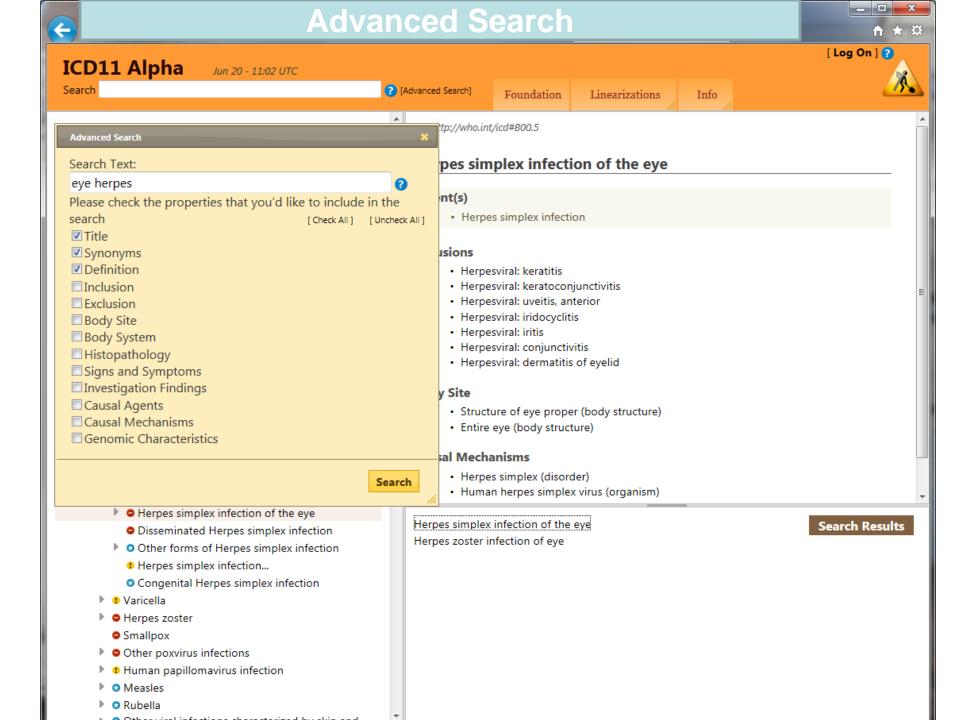


Pediculosis, acariasis and other infestations
 Sequelae of infectious and parasitic diseases

Search as you type









Search

Linearizations



[Log On]

ICD11 Alpha: Morbidity

Jun 20 - 11:02 UTC

[Advanced Search]

Foundation

Linearizations

Info

- ▼ ICD11 Alpha: Morbidity
 - 01 Certain infectious and parasitic diseases
 - Intestinal infectious diseases

 - 01A01 Typhoid and paratyphoid fevers
 - 01A02 Other salmonella infections
 - 01A03 Shigellosis
 - 01A04 Other bacterial intestinal infections
 - 01A05 Other bacterial foodborne intoxications. not elsewhere classified

 - ▶ 01A07 Other protozoal intestinal diseases
 - 01A08 Viral and other specified intestinal infections
 - 01A09 Other gastroenteritis and colitis of infectious and unspecified origin
 - Tuberculosis
 - Certain zoonotic bacterial diseases
 - Other bacterial diseases
 - ▶ Infections with a predominantly sexual mode of transmission
 - Other spirochaetal diseases
 - Other diseases caused by chlamydiae
 - Rickettsioses
 - Viral infections of the central nervous system
 - Arthropod-borne viral fevers and viral haemorrhagic fevers
 - Viral infections characterized by skin and mucous membrane lesions
 - Viral hepatitis
 - Human immunodeficiency virus [HIV] disease
 - Other viral diseases
 - Mycoses

ID: http://who.int/icd#A00

Cholera

Parent

Intestinal infectious diseases

Show all ancestors up to root [₹]

Definition

Acute bacterial enteric disease characterized in its severe form by sudden onset, profuse painless watery stools (rice-water stool) provoked by an enterotoxin that affects the small intestine; nausea; and profuse vomiting early in the course of illness.



Linearizations - 2

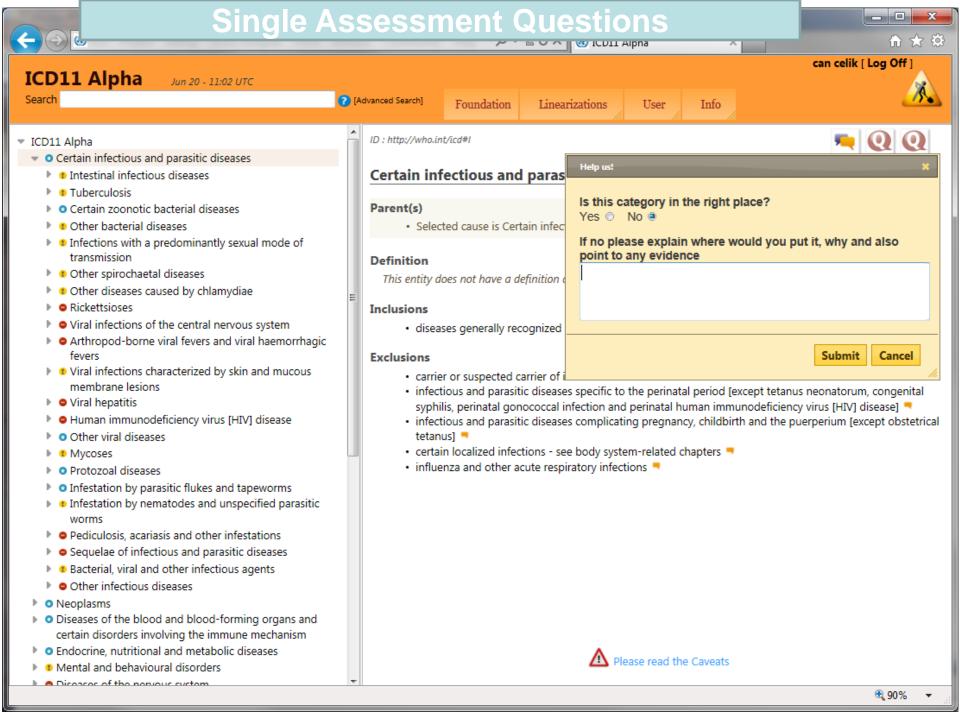
ICD11 Alpha: Morbidity

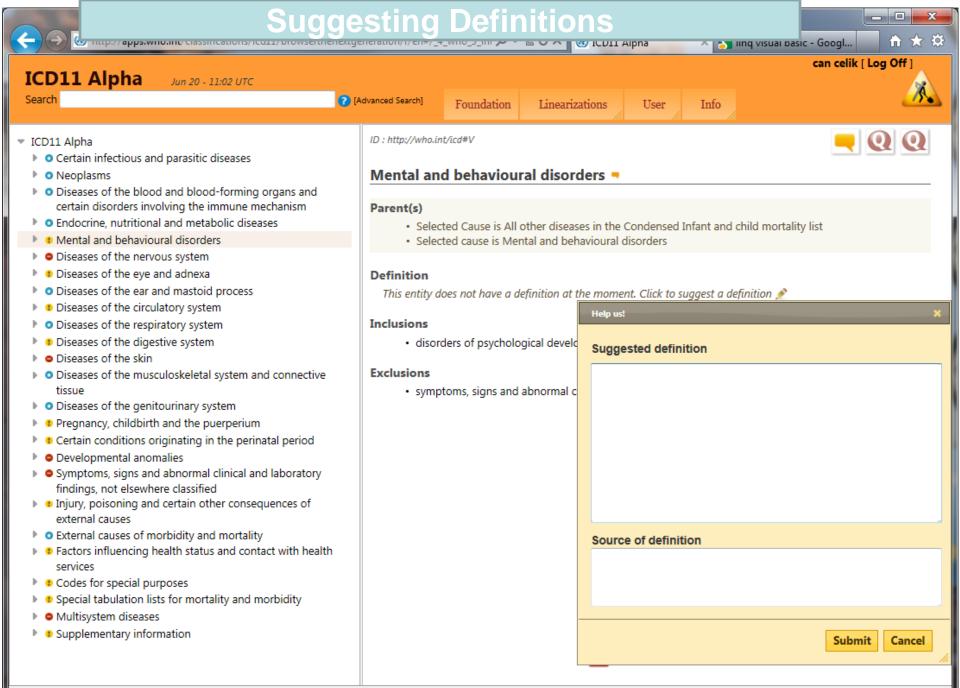
Jun 20 - 11:02

Search

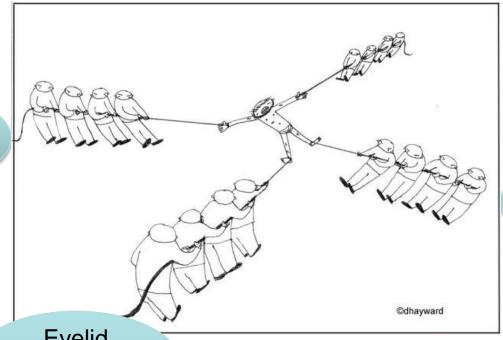
- 04 Endocrine, nutritional and metabolic diseases
- 05 Mental and behavioural disorders
- 06 Diseases of the nervous system
- ▶ 07 Diseases of the eye and adnexa
- 08 Diseases of the ear and mastoid process
 - Diseases of external ear
 - Diseases of middle ear and mastoid
 - • 08A30 Nonsuppurative otitis media
 - 08A31 Suppurative and unspecified otitis media
 - 0 08A32 Eustachian salpingitis and obstruction
 - 0 08A33 Other disorders of Eustachian tube
 - 08A34 Mastoiditis and related conditions
 - 1 08A35 Cholesteatoma of middle ear
 - 08A36 Perforation of tympanic membrane
 - 0 08A37 Other disorders of tympanic membrane
 - 08A38 Other disorders of middle ear and mastoid
 - 1 01A33.00.07 Tuberculous mastoiditis
 - 01A33.06.00 Tuberculous otitis media
 - 12A01.09.00.00 Otitis media in streptococcal toxin-mediated reactions involving skin
 - 01D27.03 Measles complicated by otitis media
 - 25A42 Otitis media in diseases classified elsewhere
 - 25A43 Other disorders of middle ear and mastoid in diseases classified elsewhere
 - Diseases of inner ear.
 - Other disorders of ear
- 09 Diseases of the circulatory system
- 0 10 Diseases of the respiratory system
- ▶ 11 Diseases of the digestive system
- 12 Diseases of the skin
- 13 Diseases of the musculoskeletal system and

Linearization view can show other children categories even when they are not children in the linearization





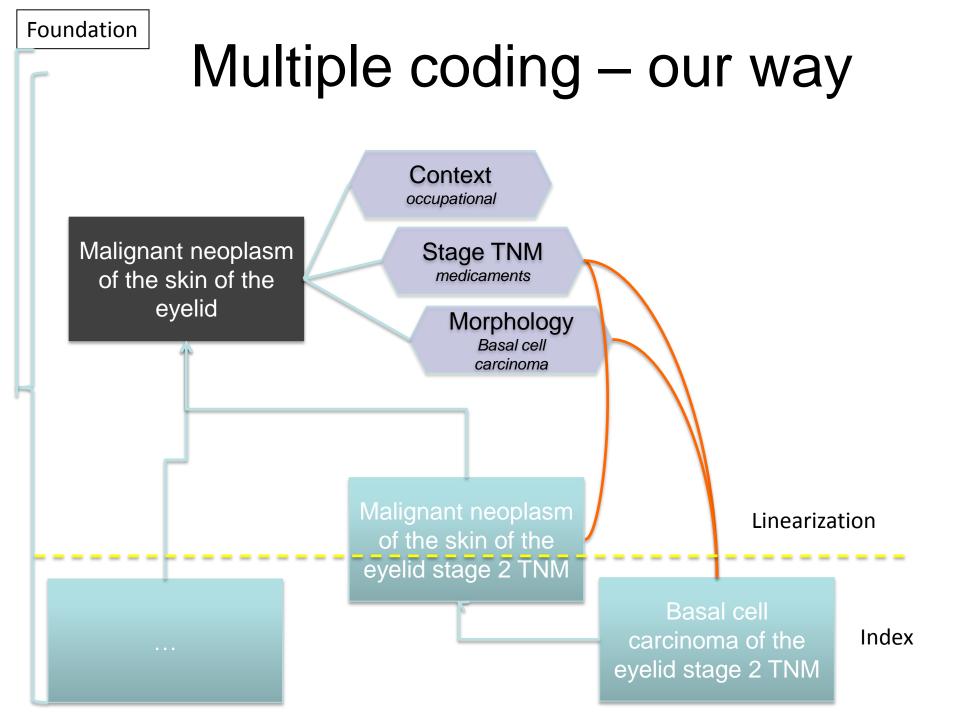
Tumour of the skin of the eyelid

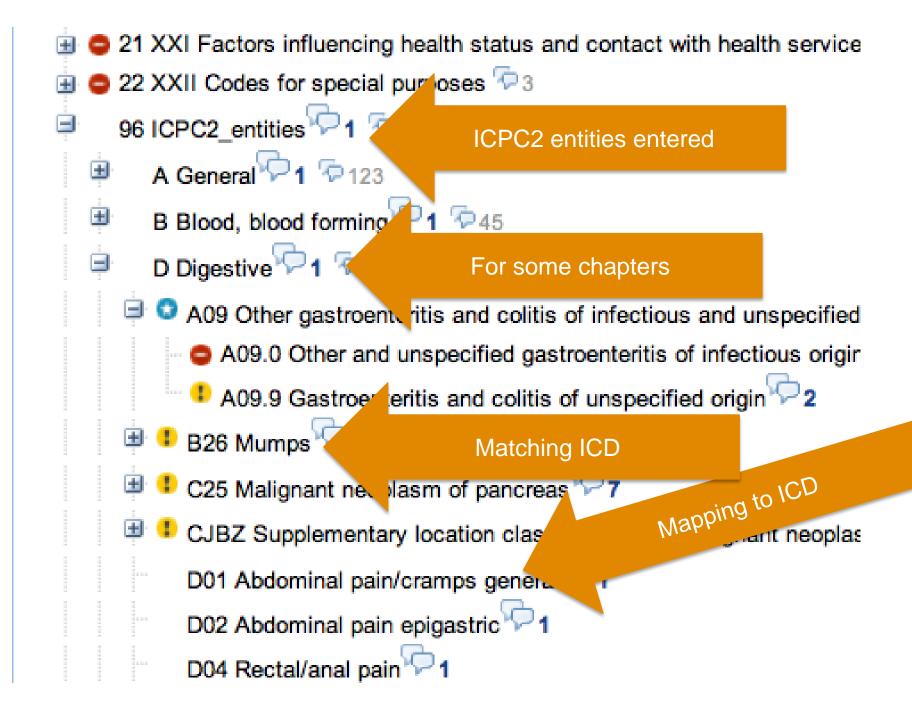


Basal cell carcinoma

Eyelid tumor Stage 2 TNM

My way!





Matching entities – different terms

ICD-10		ICPC-2	
R52	Pain, not elsewhere classified	A01	Pain general/multiple sites
R50	Fever of other and unknown origin	A03	Fever
R55	Syncope and collapse	A06	Fainting/syncope
	•••	• • •	
B05	Measles	A71	Measles
B01 [chicke	Varicella enpox]	A72	Chickenpox

Working together

