

DeCS

Health Sciences Descriptors

BIREME/PAHO/OMS

Unit: DeCS

Office: Sources of Referencial Information

Department: Information Sources Administration

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Summary

- What DeCS is
- Use
- DeCS in numbers
- Structure
- Main categories
- Term distribution by categories
- Annual growth
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What DeCS is

DeCS – the Portuguese acronym for Descritores em Ciências da Saúde, or Health Sciences Descriptors

- Controlled trilingual vocabulary created by BIREME in 1982.
- Developed from the Medical Subject Headings of the U.S. National Library of Medicine – MESH
- An integrating component of the VHL

Use

Its main goals are:

- To serve as a unique language for the indexing of scientific and technical health literature among the Latin American and Caribbean countries;
- To permit search and retrieval by subject in the scientific literature available in the bibliographic databases of the VHL;
- To provide a uniform dialog between the English, Spanish and Portuguese language communities on health topics.

DeCS in numbers

The DeCS vocabulary contains approximately 165.000 terms (descriptors and synonyms) being:

- 47.000 from MeSH
- 94.000 from MeSH descriptor translations
- 24.000 from other DeCS descriptors and synonyms and their translations and extra synonyms (or see cross references) added to MeSH descriptors

Source: 2005 DeCS

Structure

The DeCS vocabulary is divided into 19 categories (or areas):

- 15 categories coming from MeSH
- 4 categories created by BIREME in association with the specialized institutions (Science and Health, Homeopathy, Public Health and Health Surveillance)

Main Categories

- A - Anatomy**
- B - Organisms**
- C - Diseases**
- D - Chemicals And Drugs**
- E - Analytical, Diagnostic And Therapeutic Techniques And Equipment**
- F - Psychiatry And Psychology**
- G - Biological Sciences**
- H - Physical Sciences**
- HP - Homeopathy**
- I - Anthropology, Education, Sociology And Social Phenomena**
- J - Technology And Food And Beverages**
- K - Humanities**
- L - Information Science**
- M - Persons**
- N - Health Care**
- SH - Science And Health**
- SP - Public Health**
- VS - Health Surveillance**
- Z - Geographic Locations**

Category A: Anatomy

A- *Anatomy*

- A01- Body Regions**
- A02- Musculoskeletal System**
- A03- Digestive System**
- A04- Respiratory System**
- A05- Urogenital System**
- A06- Endocrine System**
- A07- Cardiovascular System**
- A08- Nervous System**
- A09- Sense Organs**
- A10- Tissues**
- A11- Cells**
- A12- Fluids and Secretions**
- A13- Animal Structures**
- A14- Stomatognathic System**
- A15- Hemic and Immune Systems**
- A16- Embryonic Structures**
- A17- Integumentary System**

Category B: Organisms

B- Organisms

B01- Animals

B02- Algae

B03- Bacteria

B04- Viruses

B05- Fungi

B06- Plants

B07- Archaea

Category C: Diseases

C- Diseases

C01- Bacterial Infections and Mycoses

C02- Virus Diseases

C03- Parasitic Diseases

C04- Neoplasms

C05- Musculoskeletal Diseases

C06- Digestive System Diseases

C07- Stomatognathic Diseases

C08- Respiratory Tract Diseases

C09- Otorhinolaryngologic Diseases

C10- Nervous System Diseases

C11- Eye Diseases

C12- Urologic and Male Genital Diseases

**C13- Female Genital Diseases and Pregnancy
Complications**

Category C: Diseases

(continued)

- C14- Cardiovascular Diseases**
- C15- Hemic and Lymphatic Diseases**
- C16- Congenital, Hereditary, and Neonatal Diseases and Abnormalities**
- C17- Skin and Connective Tissue Diseases**
- C18- Nutritional and Metabolic Diseases**
- C19- Endocrine System Diseases**
- C20- Immune System Diseases**
- C21- Disorders of Environmental Origin**
- C22- Animal Diseases**
- C23- Pathological Conditions, Signs and Symptoms**

Category D: Chemicals and Drugs

D- *Chemicals and Drugs*

D01- Inorganic Chemicals

D02- Organic Chemicals

D03- Heterocyclic Compounds

D04- Polycyclic Compounds

D05- Macromolecular Substances

D06- Hormones, Hormone Substitutes, and Hormone Antagonists

D07- Reproductive Control Agents

D08- Enzymes and Coenzymes

D09- Carbohydrates

D10- Lipids

D11- Growth Substances, Pigments, and Vitamins

D12- Amino Acids, Peptides, and Proteins

D13- Nucleic Acids, Nucleotides, and Nucleosides

Category D: Chemicals and Drugs

(continued)

- D14- Neurotransmitters and Neurotransmitter Agents**
- D15- Central Nervous System Agents**
- D16- Peripheral Nervous System Agents**
- D17- Anti-Inflammatory Agents, Antirheumatic Agents, and Inflammation Mediators**
- D18- Cardiovascular Agents**
- D19- Hematologic, Gastrointestinal, and Renal Agents**
- D20- Complex Mixtures**
- D21- Anti-Allergic and Respiratory System Agents**
- D22- Antineoplastic and Immunosuppressive Agents**
- D23- Dermatologic Agents**
- D24- Immunologic and Biological Factors**
- D25- Biomedical and Dental Materials**
- D26- Pharmaceutical Preparations**
- D27- Chemical Actions and Uses**

Category E: Analytical Diagnostic and Therapeutic Techniques and Equipment

E- *Analytical Diagnostic and Therapeutic Techniques and Equipment*

E01- Diagnosis

E02- Therapeutics

E03- Anesthesia and Analgesia

E04- Surgical Procedures, Operative

E05- Investigative Techniques

E06- Dentistry

E07- Equipment and Supplies

Category F: Psychiatry and Psychology

F- *Psychiatry and Psychology*

F01- Behavior and Behavior Mechanisms

F02- Psychological Phenomena and Processes

F03- Mental Disorders

F04- Behavioral Disciplines and Activities

Category G: Biological Sciences

G- *Biological Sciences*

G01- Biological Sciences

G02- Health Occupations

G03- Environment and Public Health

G04- Biological Phenomena, Cell Phenomena, and Immunity

G05- Genetic Processes

G06- Biochemical Phenomena, Metabolism, and Nutrition

G07- Physiological Processes

G08- Reproductive and Urinary Physiology

G09- Circulatory and Respiratory Physiology

G10- Digestive, Oral, and Skin Physiology

G11- Musculoskeletal, Neural, and Ocular Physiology

G12- Chemical and Pharmacologic Phenomena

G13- Genetic Phenomena

G14- Genetic Structures

Category H: Physical Sciences

H- Physical Sciences

H01 Natural Sciences

Astronomy

Biological Sciences

Chemistry

Electronics

Evolution, Chemical

Evolution, Planetary

Geography

Geology

Mathematics

Nanotechnology

Nature

Physics

Science

Time

Weights and Measures

Category HP: Homeopathy

HP- *Homeopathy*

HP1- Homeopathy

HP2- Homeopathic Clinics

HP3- Homeopathic Therapeutics

HP4- Materia Medica

HP5- Repertory

HP6- Homeopathic Semiology

HP7- Homeopathic Pharmacy

Categories I and J

I- *Anthropology, Education, Sociology and Social Phenomena*

I01- Social Sciences

I02- Education

I03- Human Activities

J- *Technology and Food and Beverages*

J01- Technology, Industry, and Agriculture

J02- Food and Beverages

Category K: Humanities

K- *Humanities*

K01- Humanities

Art

Awards and Prizes

Ethics

Knowledge

History

Literature

Music

Occultism

Philosophy

Religion

Secularism

Category L: Information Science

L- *Information Science*

L01- *Information Science*

Book Collecting

Chronology

Classification

Communication

Communications Media

Computer Security

Computing Methodologies

Copying Processes

Data Collection

Data Display

Informatics

Information Centers

Information Management

Information Services

Information Storage and Retrieval

Information Theory

Library Science

Medical Informatics

Pattern Recognition, Automated

Publishing

Systems Analysis

Category M: Persons

M- *Persons*

M01- Persons

Abortion Applicants

Adult Children

Age Groups

Caregivers

Child of Impaired Parents

Child, Abandoned

Child, Exceptional

Child, Unwanted

Consultants

Crime Victims

Disabled Persons

Famous Persons

Friends

Homebound Persons

Homeless Persons

Jehovah's Witnesses

Category M: Persons

(continued)

M01- Persons

Legal Guardians

Medically Uninsured

Men

Mentors

Minors

Multiple Birth Offspring

Occupational Groups

Parents

Patients

Population Groups

Prisoners

Refugees

Research Personnel

Research Subjects

Sexual Partners

Siblings

Single Person

Spouses

Category M: Persons

(continued)

M01- Persons

Students

Survivors

Terminally Ill

Tissue Donors

Transients and Migrants

Veterans

Visitors to Patients

Voluntary Workers

Vulnerable Populations

Women

N Category: Health Care

N- *Health Care*

N01- Population Characteristics

N02- Health Care Facilities, Manpower, and Services

N03- Health Care Economics and Organizations

N04- Health Services Administration

N05- Health Care Quality, Access, and Evaluation

SH Category: Science and Health

SH- *Science and Health*

SH1- **Health Sciences, Technology and Innovation Management**

SH1.010 - Policies and Cooperation in Science, Technology and Innovation

SH1.020 - Scientific and Technical Activities Resources for Research

SH1.040 - Scientific Communication and Diffusion

SH1.050 - Science, Technology and Society

Category SP: Public Health

SP- *Public Health*

SP1 - Health Administration and Planning

SP2 - Delivery of Health Care

SP3 - Demography

SP4 - Environmental Health

SP5 - Epidemiology and Biostatistics

SP6 - Nutrition

SP8 - Disasters

SP9 - Health Law

Category VS: Health Surveillance

VS- *Health Surveillance*

VS1- Health Surveillance System

VS2- Health Surveillance of Products

VS3- Health Surveillance of Health Services

VS4- Health Surveillance of Environments

Category Z : Geographic Locations

Z- *Geographic Locations*

Z01- Geographic Locations

Africa

Americas

Antarctic Regions

Arctic Regions

Asia

Atlantic Islands

Australia

Cities

Europe

Historical Geographic Locations

Indian Ocean Islands

Oceania

Oceans and Seas

Pacific Islands

Term Distribution by Categories

Areas	Percentages
Chemicals and Drugs [D]	23,5%
Anatomy [A], Organisms [B] and Biological Sciences [G]	21,3%
Diseases [C]	12,9%
Analytical, Diagnostic and Therapeutic Techniques and Equipment [E], Geographic Locations [Z] and the other MeSH categories	21,2%
Public Health [SP]	11,5%
Homeopathy [HP]	6,1%
Health Surveillance [VS]	2,8%
Science and Health [SH]	0,7%

Annual Growth

DeCS	2002	2003	growth
Descriptors	74.823	78783	5,3%
Synonyms	67.086	76.144	13,5%
Descriptors and Synonyms	141.909	154.927	9,4%

DeCS	2003	2004	growth
Descriptors	78783	80.550	2,2%
Synonyms	76.144	79.408	4,3%
Descriptors and Synonyms	154.927	159.958	3,2%

DeCS	2004	2005	growth
Descriptors	80.550	83.046	3,1%
Synonyms	79.408	81.455	2,6%
Descriptors and Synonyms	159.958	164.501	2,8%

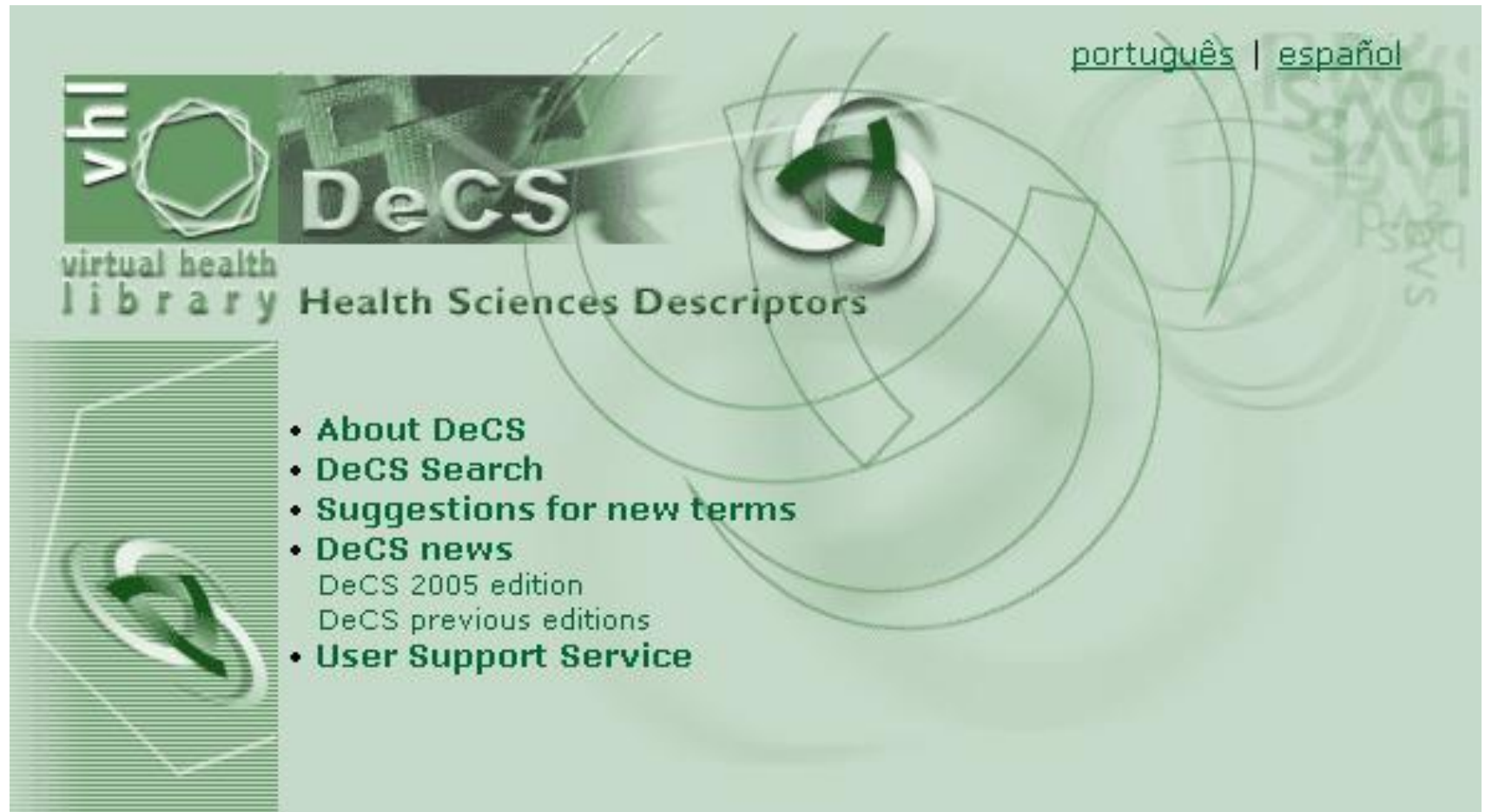
DeCS Site Options

The user finds the following options when he clicks on ***HEALTH TERMINOLOGY*** on the Regional VHL homepage:

- Texts ***ABOUT DECS***;
- The ***DECS SEARCH*** System;
- ***DECS NEWS*** (*latest annual changes which include new, modified and deleted descriptors, an overview of these changes, statistical data, and annual changes from previous years*);
- The ***SUGGESTIONS FOR NEW TERMS*** form;
- A ***USER SUPPORT SERVICE*** by e-mail.

DeCS Homepage

<http://decs.bvs.br>

The banner features a light green background with abstract geometric patterns of overlapping circles and lines. On the left, there is a logo for 'vhl' (Virtual Health Library) consisting of a stylized white circle with a green outline. To its right, the text 'DeCS' is written in a large, bold, white font. Below 'DeCS', the words 'Health Sciences Descriptors' are written in a smaller, dark green font. In the top right corner, the text 'português | español' is displayed in a dark green font. A central graphic shows a green and white interlocking knot-like structure. On the left side of the banner, there is a vertical list of menu items in dark green text, each preceded by a bullet point. At the bottom right, there are three small logos: 'bvs' (Biblioteca Virtual em Saúde), 'BIREME' (with 'OPAS' and 'OMS' below it), and a medical symbol (Rod of Asclepius).

[português](#) | [español](#)

vhl
virtual health
library

DeCS

Health Sciences Descriptors

- **About DeCS**
- **DeCS Search**
- **Suggestions for new terms**
- **DeCS news**
 - DeCS 2005 edition
 - DeCS previous editions
- **User Support Service**

DeCS Search



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DeCS Health Sciences Descriptors



DeCS Search



Language of Descriptors English Spanish Portuguese

Search by Word

- Word or Term
 Exact Descriptor

Search

Search by Index

- Alphabetic
 Keywords in Context
 Tree

Index

Setup interface language
and output layout

Config



Alphabetic Index

Enter a word or a root:

[Index](#)

or select a letter to initiate the index

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)



Alphabetic Index

Search on: OSTEOPOROSIS

Displaying: 1 .. 4

From: OSTEOPOROSIS

To: OSTEOPOROSIS, SENILE

OSTEOPOROSIS
OSTEOPOROSIS, AGE-RELATED
OSTEOPOROSIS, POST-TRAUMATIC
OSTEOPOROSIS, POSTMENOPAUSAL
OSTEOPOROSIS, SENILE

[New Search](#)

[Index](#)

[Show](#)

[Tree](#)



Keywords in Context Index

Enter a word or a root:

[Index](#)



Keywords in Context Index

Search on: OSTEOPOROSIS

Descriptors Found: 8

Displaying: 1 .. 8

From: age-related OSTEOPOROSIS

To: senile OSTEOPOROSIS

age-related OSTEOPOROSIS
OSTEOPOROSIS
OSTEOPOROSIS, age-related
OSTEOPOROSIS, post-traumatic
OSTEOPOROSIS, postmenopausal
OSTEOPOROSIS, senile
postmenopausal OSTEOPOROSIS
senile OSTEOPOROSIS

[New Search](#)

[Index](#)

[Show](#)

[Tree](#)



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Tree Index

Enter a descriptor:

Index

or navigate from tree top

[ANATOMY +](#)

[ORGANISMS +](#)

[DISEASES +](#)

[CHEMICALS AND DRUGS +](#)

[ANALYTICAL, DIAGNOSTIC AND THERAPEUTIC TECHNIQUES AND EQUIPMENT +](#)

[PSYCHIATRY AND PSYCHOLOGY +](#)

[BIOLOGICAL SCIENCES +](#)

[PHYSICAL SCIENCES +](#)

[HOMEOPATHY +](#)

[ANTHROPOLOGY, EDUCATION, SOCIOLOGY AND SOCIAL PHENOMENA +](#)

[TECHNOLOGY AND FOOD AND BEVERAGES +](#)

[HUMANITIES +](#)

[INFORMATION SCIENCE +](#)

[PERSONS +](#)

[HEALTH CARE +](#)

[PUBLIC HEALTH +](#)

[GEOGRAPHIC LOCATIONS +](#)



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DeCS Health Sciences Descriptors



New Search

Index

Config

V

The descriptor
osteoporosis belongs to [DISEASES](#)
the following categorie:

[DISEASES](#)

[Musculoskeletal Diseases](#)

[Bone Diseases](#)

[Bone Diseases, Metabolic](#)

[Bone Demineralization, Pathologic +](#)

[Mucopolidoses](#)

[Osteomalacia](#)

[Osteoporosis](#) ▲

[Osteoporosis, Postmenopausal](#)

[Pseudohypoparathyroidism +](#)

[Rickets](#)

New Search

Index

Config

Λ

Search on: GENERIC DRUGS
 Descriptors Found: 1
 Displaying: 1 .. 1

A Sample DeCS Record

1/1 **DeCS**

Descriptor *English*: **Drugs, Generic**

Descriptor *Spanish*: **Medicamentos Genéricos**

Descriptor *Portuguese*: **Medicamentos Genéricos**

Synonyms *English*:
 Drugs, Nonproprietary
 Generic Drugs

Tree Number: [D26.360](#)
[SP1.030.238.748.135](#)
[VS2.002.001.003](#)

Definition *English*: Drugs whose drug name is not protected by a trademark. They may be manufactured by several companies.

Indexing Annotation *English*: GEN only or unspecified; D25-26 qualif; for specific drug as a generic, coord IM with drug (IM)

History Note *English*: 92

Allowable Qualifiers *English*:

administration & dosage	adverse effects
analysis	chemistry
classification	chemical synthesis
contraindications	diagnostic use
economics	history
isolation & purification	metabolism
pharmacology	pharmacokinetics
poisoning	radiation effects
supply & distribution	standards
toxicity	therapeutic use

Record Number: 30149

Unique Identifier: D016568

Vocabulary Characteristics

- 3 LANGUAGES
- POLYHIERARCHY
- QUALIFIERS
- CHECK TAGS (OR LIMITS)
- PUBLICATION TYPES
- PRECOORDINATION

Polyhierarchy

There are two kinds of polyhierarchies in the DeCS structure.

1) A descriptor may belong to more than one category;

Example: **Ethics** (F01.829.500.519,
K01.316,
K01.752.256,
N05.350)

The screenshot shows the DeCS interface for the descriptor 'Ethics'. It includes the following information:

- 1 / 1
- DeCS
- Descriptor *English*: **Ethics**
- Descriptor *Spanish*: **Ética**
- Descriptor *Portuguese*: **Ética**
- Tree Number: [F01.829.500.519](#), [K01.316](#), [K01.752.256](#), [N05.350](#), [SP1.060.067](#)
- Definition *English*: The philosophy or code pertaining to what is ideal in human character and conduct. Also, the field of study dealing with the principles of morality.
- Allowable Qualifiers *English*: [classification](#) [history](#)
- Record Number: 5080
- Unique Identifier: D004989

Belongs to 3 distinct categories:

Psychology and Psychiatry (F)
Humanities (K)
Health Care (N)

2) A term may belong to several branches of the same category.

Example: **Environmental Education**

1 / 1	DeCS
Descriptor <i>English</i> :	Environmental Education
Descriptor <i>Spanish</i> :	Educación Ambiental
Descriptor <i>Portuguese</i> :	Educação Ambiental
Tree Number:	SP4.173.188 SP8.946.234.262
See Related <i>English</i> :	SANITARY ENGINEERING EDUCATION HEALTH EDUCATION
Record Number:	32453

It belongs to 2 branches of the same category:

Public Health (SP)
Environmental Health (SP4)
Disasters (SP8)

Qualifiers

Terms that stand next to the descriptors for defining different aspects and points of view.

Examples:

disease/therapy

disease/drug therapy

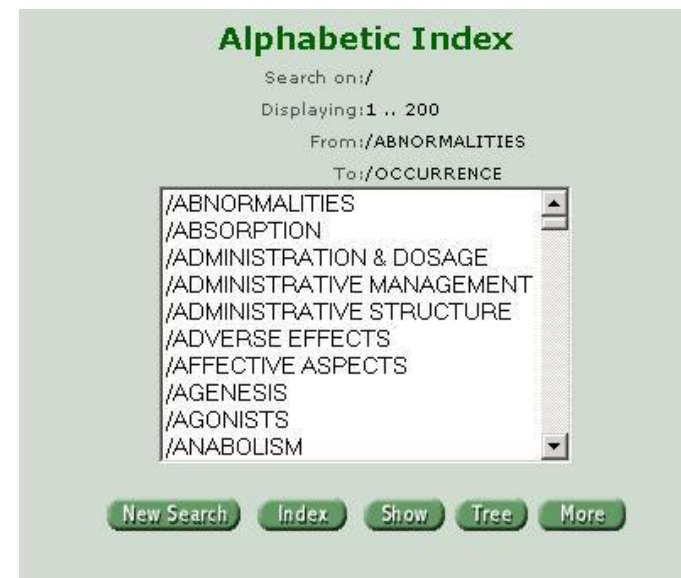
disease/surgery

disease/diagnosis

disease/epidemiology

pharmaceutical preparations/adverse effects

pharmaceutical preparations/therapeutic use



The qualifiers and their synonyms may be found in DeCS preceding them by a slash / in the alphabetical index, because this is the way the system recognizes the term as being a qualifier. For 2007, there will be a decrease from the present 83 qualifiers to only about 40.

Check tags (or Limits)

Terms used to specify limits in the scope of research subjects. Differently than the qualifiers, which are related to health, these are generic, and deal with genre (e.g., Male), and type of research (In Vitro). Some, such as some organism terms (e.g., Animals, Humans), and age groups (e.g., Adult), may also be used as regular descriptors.

A complete list may be obtained in the search index of the bibliographic databases of the VHL.

Publication Types

Terms used for describing the document format.

Examples:

LETTER, COMENTARY, EDITORIAL

Today the complete list is accessible through the “keyword context index, by writing “publication” or in the “publication type” index of the bibliographical databases. For the 2006 DeCS these will have hierarchical codes (or tree numbers) and will be visible in the tree structure.

Precoordinated

There are two types of precoordination:

a) Descriptor1/qualifier use Descriptor2

Example: HEART/abnormalities use
“HEART DEFECTS, CONGENITAL”
PREGNANCY/complications use
“PREGNANCY COMPLICATIONS”

b) Descriptor1 and Descriptor2 use Descriptor3

Example: “WOUNDS AND INJURIES” and
HEART use “HEART INJURIES”
TRANSPLANTATION and KIDNEY
use “KIDNEY TRANSPLANTATION”

Thank you very much.