

UMLS Semantic types

Category code	Category description	Type code	TUI	Type description
ACTI	Activities & Behaviors	T052		Activity
ACTI	Activities & Behaviors	T053		Behavior
ACTI	Activities & Behaviors	T056		Daily or Recreational Activity
ACTI	Activities & Behaviors	T051		Event
ACTI	Activities & Behaviors	T064		Governmental or Regulatory Activity
ACTI	Activities & Behaviors	T055		Individual Behavior
ACTI	Activities & Behaviors	T066		Machine Activity
ACTI	Activities & Behaviors	T057		Occupational Activity
ACTI	Activities & Behaviors	T054		Social Behavior
ANAT	Anatomy	T017		Anatomical Structure
ANAT	Anatomy	T029		Body Location or Region
ANAT	Anatomy	T023		Body Part, Organ, or Organ Component
ANAT	Anatomy	T030		Body Space or Junction
ANAT	Anatomy	T031		Body Substance
ANAT	Anatomy	T022		Body System
ANAT	Anatomy	T025		Cell
ANAT	Anatomy	T026		Cell Component
ANAT	Anatomy	T018		Embryonic Structure
ANAT	Anatomy	T021		Fully Formed Anatomical Structure
ANAT	Anatomy	T024		Tissue
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T116</u>		<u>Amino Acid, Peptide, or Protein</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T195</u>		<u>Antibiotic</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T123</u>		<u>Biologically Active Substance</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T122</u>		<u>Biomedical or Dental Material</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T103</u>		<u>Chemical</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T120</u>		<u>Chemical Viewed Functionally</u>

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<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T104</u>		<u>Chemical Viewed Structurally</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T200</u>		<u>Clinical Drug</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T196</u>		<u>Element, Ion, or Isotope</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T126</u>		<u>Enzyme</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T131</u>		<u>Hazardous or Poisonous Substance</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T125</u>		<u>Hormone</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T129</u>		<u>Immunologic Factor</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T130</u>		<u>Indicator, Reagent, or Diagnostic Aid</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T197</u>		<u>Inorganic Chemical</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T114</u>		<u>Nucleic Acid, Nucleoside, or Nucleotide</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T109</u>		<u>Organic Chemical</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T121</u>		<u>Pharmacologic Substance</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T192</u>		<u>Receptor</u>
<u>CHEM</u>	<u>Chemicals & Drugs</u>	<u>T127</u>		<u>Vitamin</u>
CONC	Concepts & Ideas	T185		Classification
CONC	Concepts & Ideas	T077		Conceptual Entity
CONC	Concepts & Ideas	T169		Functional Concept
CONC	Concepts & Ideas	T102		Group Attribute
CONC	Concepts & Ideas	T078		Idea or Concept
CONC	Concepts & Ideas	T170		Intellectual Product
CONC	Concepts & Ideas	T171		Language
CONC	Concepts & Ideas	T080		Qualitative Concept
CONC	Concepts & Ideas	T081		Quantitative Concept
CONC	Concepts & Ideas	T089		Regulation or Law
CONC	Concepts & Ideas	T082		Spatial Concept
CONC	Concepts & Ideas	T079		Temporal Concept
DEVI	Devices	T203		Drug Delivery Device
DEVI	Devices	T074		Medical Device
DEVI	Devices	T075		Research Device
<u>DISO</u>	<u>Disorders</u>	<u>T020</u>		<u>Acquired Abnormality</u>
<u>DISO</u>	<u>Disorders</u>	<u>T190</u>		<u>Anatomical Abnormality</u>
<u>DISO</u>	<u>Disorders</u>	<u>T049</u>		<u>Cell or Molecular Dysfunction</u>
<u>DISO</u>	<u>Disorders</u>	<u>T019</u>		<u>Congenital Abnormality</u>
<u>DISO</u>	<u>Disorders</u>	<u>T047</u>		<u>Disease or Syndrome</u>
<u>DISO</u>	<u>Disorders</u>	<u>T050</u>		<u>Experimental Model of Disease</u>
<u>DISO</u>	<u>Disorders</u>	<u>T033</u>		<u>Finding</u>
<u>DISO</u>	<u>Disorders</u>	<u>T037</u>		<u>Injury or Poisoning</u>
<u>DISO</u>	<u>Disorders</u>	<u>T048</u>		<u>Mental or Behavioral Dysfunction</u>

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<u>DISO</u>	<u>Disorders</u>	<u>T191</u>	<u>Neoplastic Process</u>
<u>DISO</u>	<u>Disorders</u>	<u>T046</u>	<u>Pathologic Function</u>
<u>DISO</u>	<u>Disorders</u>	<u>T184</u>	<u>Sign or Symptom</u>
GENE	Genes & Molecular Sequences	T087	Amino Acid Sequence
GENE	Genes & Molecular Sequences	T088	Carbohydrate Sequence
GENE	Genes & Molecular Sequences	T028	Gene or Genome
GENE	Genes & Molecular Sequences	T085	Molecular Sequence
GENE	Genes & Molecular Sequences	T086	Nucleotide Sequence
GEOG	Geographic Areas	T083	Geographic Area
LIVB	Living Beings	T100	Age Group
LIVB	Living Beings	T011	Amphibian
LIVB	Living Beings	T008	Animal
LIVB	Living Beings	T194	Archaeon
LIVB	Living Beings	T007	Bacterium
LIVB	Living Beings	T012	Bird
LIVB	Living Beings	T204	Eukaryote
LIVB	Living Beings	T099	Family Group
LIVB	Living Beings	T013	Fish
LIVB	Living Beings	T004	Fungus
LIVB	Living Beings	T096	Group
LIVB	Living Beings	T016	Human
LIVB	Living Beings	T015	Mammal
LIVB	Living Beings	T001	Organism
LIVB	Living Beings	T101	Patient or Disabled Group
LIVB	Living Beings	T002	Plant
LIVB	Living Beings	T098	Population Group
LIVB	Living Beings	T097	Professional or Occupational Group
LIVB	Living Beings	T014	Reptile
LIVB	Living Beings	T010	Vertebrate
LIVB	Living Beings	T005	Virus
OBJC	Objects	T071	Entity
OBJC	Objects	T168	Food
OBJC	Objects	T073	Manufactured Object
OBJC	Objects	T072	Physical Object
OBJC	Objects	T167	Substance
OCCU	Occupations	T091	Biomedical Occupation or Discipline
OCCU	Occupations	T090	Occupation or Discipline
ORGA	Organizations	T093	HealthCare Related Organization
ORGA	Organizations	T092	Organization
ORGA	Organizations	T094	Professional Society
ORGA	Organizations	T095	Self-help or Relief Organization

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<u>PHEN</u>	<u>Phenomena</u>	<u>T038</u>		<u>Biologic Function</u>
<u>PHEN</u>	<u>Phenomena</u>	<u>T069</u>		<u>Environmental Effect of Humans</u>
<u>PHEN</u>	<u>Phenomena</u>	<u>T068</u>		<u>Human-caused Phenomenon or Process</u>
<u>PHEN</u>	<u>Phenomena</u>	<u>T034</u>		<u>Laboratory or Test Result</u>
<u>PHEN</u>	<u>Phenomena</u>	<u>T070</u>		<u>Natural Phenomenon or Process</u>
<u>PHEN</u>	<u>Phenomena</u>	<u>T067</u>		<u>Phenomenon or Process</u>
<u>PHYS</u>	<u>Physiology</u>	<u>T043</u>		<u>Cell Function</u>
<u>PHYS</u>	<u>Physiology</u>	<u>T201</u>		<u>Clinical Attribute</u>
<u>PHYS</u>	<u>Physiology</u>	<u>T045</u>		<u>Genetic Function</u>
<u>PHYS</u>	<u>Physiology</u>	<u>T041</u>		<u>Mental Process</u>
<u>PHYS</u>	<u>Physiology</u>	<u>T044</u>		<u>Molecular Function</u>
<u>PHYS</u>	<u>Physiology</u>	<u>T032</u>		<u>Organism Attribute</u>
<u>PHYS</u>	<u>Physiology</u>	<u>T040</u>		<u>Organism Function</u>
<u>PHYS</u>	<u>Physiology</u>	<u>T042</u>		<u>Organ or Tissue Function</u>
<u>PHYS</u>	<u>Physiology</u>	<u>T039</u>		<u>Physiologic Function</u>
PROC	Procedures	T060		Diagnostic Procedure
PROC	Procedures	T065		Educational Activity
PROC	Procedure	T058		HealthCare Activity
PROC	Procedures	T059		Laboratory Procedure
PROC	Procedures	T063		Molecular Biology Research Technique
PROC	Procedures	T062		Research Activity
PROC	Procedures	T061		Therapeutic or Preventive Procedure

We made two lists of semantic types:

- Semantic type list α which consists of 47 types (CHEM, DISO, PHEN and PHYS). The selected types are underlined ;
- Semantic type list β which is an extension of the previous list – with 85 types. The given types are bolded.