Data Dictionary

The database is comprised of three types of data: Census, Health, and Circumstances of Death. Below you will find definitions for each field as well as the list of possible choices for each field (normative answer list) and applicable vocabulary/data standards.

CENSUS	HEALTH	CIRCUMSTANCES OF DEATH
Sex	Cancer	Primary cause of death
Birth year	Congenital and genetic disorders	Contributing cause of death
Death year	Chromosomal abnormalities	Manner of death
Zip code	Dental health as an adult	Identification method
Age in years	Dental health as a child	Bone density
Age in months	Scoliosis	Death city
Gender	History of broken bones	Death county/tribal land
Number of pregnancies	Facial trauma	Cadaver condition
Number of live births	Plastic surgery	Cadaver length
Marital status	Surgery	Cadaver weight
Living weight	Implants	CT scan settings
Living height	Radiation therapy	Time delay after death
Race	Medical diagnoses	Name of person entering data
Tribal affiliation	Notes on medical diagnoses	7
Ethnicity	Medications	7
Hispanic identification	Substance usage	
Birth weight	Quit date of substance	
Birth weight category	Years of substance usage	
Birthplace	Tobacco type	
Birth country	Tobacco usage	
Birth city	Drinking status	
Birth state	Dietary pattern	
Years in the US	Occupations	
Ancestor birthplace	Duration of occupations	
Ancestor birth city	Activities	7
Ancestor birth state	Strenuous lifting	
Ancestor birth country	Educational level	
	Socio-economic status as a child	
	Socio-economic status as an adult	
	Carcinogens	

Standards used:

LOINC: International standard for identifying health measurements and observations. https://LOINC.org/

SNOMED CT: International standard for health terms. http://www.snomed.org/

NCI: NCI Thesaurus (NCIt) provides reference terminology for many NCI and other systems. It covers vocabulary for clinical care, translational and basic research, and public information and administrative activities. https://NCIt.NCI.nih.gov/NCItbrowser/

Format of Data Dictionary

Variable Name Cardinality between variable and de-identified decedent (options: one to one, one to many) Definition Data source Answer List (if the answer is in a number format "X" is used as a placeholder)

CENSUS VARIABLES

<u>Sex</u>

LOINC code 21840-4 One to one Biological sex of the decedent Medical examiner database *Normative Answer List:*

Male Female Other (hermaphrodite) Transsexual Unknown

Birth Date- year only

LOINC code: 80904-6 One to one The year that the decedent was born Medical examiner database XXXX

Death date- year only

Modified SNOMED CT code: 399753006 One to one The year that the decedent died Medical examiner database XXXX

Current Zip Code

Modified LOINC 45401-7 One to one First three digits of the zip code of decedent's address at the time of death Medical examiner database XXX

Age in years at death

LOINC 39016-1 One to one The age of the decedent in years Medical examiner database XXX

Age in months at death

Modified LOINC 39016-1 One to one The age of the decedent in months Medical examiner database XXXXX

Gender

LOINC code 76691-5 One to one Gender identity of decedent Next of kin interview **Normative Answer List:** Identifies as male Identifies as female Female to male transsexual Male to female transsexual Identifies as non-conforming Other Unknown

Number of pregnancies

LOINC code: 11996-6 One to one Number of pregnancies, women only Next of kin interview XX

Number of live births

LOINC code: 11636-8 One to one Number of live births, women only Next of kin interview XX

Marital Status

LOINC code: 85431-5 One to one The marital status of the decedent at the time of death Medical examiner database and next of kin interview **Normative Answer List:** Married- spouse in household Married- spouse not in household Living as married Widowed Divorced Separated Never married Don't know

Living height

LOINC Code: 3137-7 One to one Height of the decedent in cm Next of kin interview XXXX

Living weight

LOINC code: 3141-9 One to one Weight of the decedent in kg Next of kin interview XXXX

<u>Race</u>

Modified LOINC code 80977-2 to include Hispanic and Unknown One to many The race of the individual Medical examiner database and next of kin interviews Normative Answer List: Native American Asian Indian Black or African-American Chinese Filipino Guamanian or Chamorro Japanese Korean Native Hawaiian Other Other Asian **Other Pacific Islander** Samoan Vietnamese White Hispanic Unknown

Tribal affiliation

Federally recognized tribes in New Mexico- Bureau of Indian Affairs One to many The tribal affiliation of Native American decedents Medical examiner database and next of kin interview *Normative Answer List:* Pueblo of Acoma Pueblo of Cochiti

Pueblo of Isleta Pueblo of Jemez Pueblo of Laguna Pueblo of Nambe Pueblo of Ohkay Owingeh **Pueblo of Picuris** Pueblo of Pojoaque **Pueblo of Sandia** Pueblo of San Felipe Pueblo of San Ildefonso Pueblo of Santa Ana Pueblo of Santa Clara Pueblo of Santo Domingo Pueblo of Taos Pueblo of Tesuque Pueblo of Zuni Pueblo of Zia Apache Fort Still Apache Tribe Jicarilla Apache Nation Mescalero Apache Tribe Navajo Nation

Ethnicity

Modified LOINC code 69490-1 modified to include Middle Eastern One to many The ethnicity of the decedent Medical examiner database and next of kin interview **Normative Answer List:** Hispanic or Latino Middle Eastern Not Hispanic, Latino or Middle Eastern Unknown

Subgroup of Hispanic

From Hunley KL, Edgar HJH, Healy M, Mosley C, Cabana G, West F. 2017. Social Identity in New Mexicans of Spanish-Speaking Descent Highlights Limitations of Using Standardized Ethnic Terminology in Research. Hum Biol 89(3):217-228.

One to many

The subgroup of "Hispanic" with which next of kin estimate decedents would have grouped themselves Next of kin interview

Normative Answer List:

Hispanic Latino Spanish Nuevomexicano/New Mexican Chicano Mexican American Mexican

Birth weight

LOINC code: 56056-5 One to one Weight of the decedent at birth in kg Next of kin interview XX

Birth weight categories

No defined standard One to one Category of birth weight for the decedent Next of kin interview SNOMED CT codes for Normative Answer List *Normative Answer List:* Small. 276610007 Average. 276613009 Large. 276613009

Birthplace of decedent

Modified LOINC Code: 63490-7 (temp code) One to one City, State and Country of the decedent's birthplace Medical examiner database and next of kin interview **Normative Answer List:** In the United States, list City and State In Mexico, List City and State Outside of the United States and Mexico, List City and Country

Number of years in the US if born elsewhere

LOINC code: 63585-4 One to one Number of years living in the United States if born outside of the US Next of kin interview XX

<u>Mother's Birthplace</u> Modified LOINC Code: 63515-1 (temp code) One to one Place of birth of the decedent's mother Next of kin interview *Normative Answer List:* In the United States, list City and State In Mexico, List City and State Outside of the United States and Mexico, List City and Country

Father's Birthplace

Modified LOINC Code: 63492-3 (temp code) One to one Place of birth of decedent's father Next of kin interview *Normative Answer List:* In the United States, list City and State In Mexico, List City and State Outside of the United States and Mexico, List City and Country

Mother's Mother Birthplace

Modified LOINC Code: 63493-1 (temp code) One to one Place of birth of maternal grandmother Next of kin interview **Normative Answer List:** In the United States, list City and State In Mexico, List City and State Outside of the United States and Mexico, List City and Country

Mother's Father Birthplace

Modified LOINC Code: 63494-9 (temp code) One to one Place of birth of maternal grandfather Next of kin interview **Normative Answer List:** In the United States, list City and State In Mexico, List City and State Outside of the United States and Mexico, List City and Country

Father's Mother Birthplace

Modified LOINC Code: 63495-6 (temp code) One to one Place of birth of paternal grandmother Next of kin interview *Normative Answer List:* In the United States, list City and State In Mexico, List City and State Outside of the United States and Mexico, List City and Country

Father's Father Birthplace

Modified LOINC Code: 63496-4 (temp code) One to one Place of birth of paternal grandfather Next of kin interview **Normative Answer List:** In the United States, list City and State In Mexico, List City and State Outside of the United States and Mexico, List City and Country

HEALTH VARIABLES

For the health variables if the familial field is listed as "no," it was the decedent who suffered from the condition. If the familial field is listed as "yes," then there is a family history of the condition.

Cancer

SNOMED CT code: 363346000 One to many Cancer diagnoses of the decedent or family Medical examiner database and next of kin interview SNOMED and NCI codes below for Normative Answer List (Modified list from Cancer.org) Normative Answer List: Acute Lymphoblastic Leukemia (ALL). 91857003 Acute Myeloid Leukemia (AML). 91861009 Adolescents, Cancer in Adrenocortical Carcinoma, 2227007 AIDS-Related Cancers. NCI code: C4046 AIDS-Related Lymphoma (Lymphoma). NCI code: C3471 Anal Cancer. 363490009 Appendix Cancer. 363411007 Astrocytomas, Childhood (Brain Cancer). 38713004 Atypical Teratoid/Rhabdoid Tumor, Childhood (Brain Cancer). NCI code: C68634 Atypical Teratoid/Rhabdoid Tumor, Childhood, Central Nervous System (Brain Cancer). NCI code: C68634 Basal Cell Carcinoma of the Skin. 275265005 Bile Duct Cancer. 363416002 Bladder Cancer. 399326009 Blood cancer. 129154003 Bone Cancer (includes Ewing Sarcoma and Osteosarcoma and Malignant Fibrous Histiocytoma). 428281000 Brain Tumors. 126952004 Breast Cancer. 254837009 Bronchial Tumors, Childhood. 126705004 Burkitt Lymphoma. 118617000 Cancer, other type Cancer, unknown type. CCPSS code: 0053761 Carcinoid Tumor (Gastrointestinal). 189607006 Carcinoma of Unknown Primary. 255052006 Cardiac (Heart) Tumors, Childhood Central Nervous System cancers Cervical Cancer. 363354003 Childhood Adrenocortical Carcinoma. Childhood Bladder Cancer Childhood Breast Cancer Childhood Cancer of Unknown Primary

Childhood Carcinoid Tumors

- Childhood Carcinoma of Unknown Primary
- Childhood Central Nervous System Germ Cell Tumors (Brain Cancer)
- Childhood Cervical Cancer
- Childhood Colorectal Cancer
- Childhood Esophageal Cancer. NCI code: C118812
- Childhood Extracranial Germ Cell Tumors
- Childhood Gastric (Stomach) Cancer
- Childhood Gastrointestinal Stromal Tumors
- Childhood Head and Neck Cancers
- Childhood Intraocular Melanoma
- Childhood Intraocular Melanoma
- Childhood Intraocular Melanoma
- Childhood Laryngeal Cancer and Papillomatosis
- Childhood Lung Cancer
- Childhood Melanoma
- Childhood Mesothelioma
- Childhood Nasopharyngeal Cancer
- Childhood Oral Cavity Cancer
- Childhood Ovarian Cancer
- Childhood Pancreatic Cancer
- Childhood Paraganglioma
- Childhood Pheochromocytoma
- Childhood Rhabdomyosarcoma (Soft Tissue Sarcoma). NCI code: C7705
- Childhood Salivary Gland Tumors
- Childhood Skin Cancer
- Childhood Stomach (Gastric) Cancer
- Childhood Testicular Cancer
- Childhood Thyroid Tumors
- Childhood Vaginal Cancer
- Childhood Vascular Tumors (Soft Tissue Sarcoma).
- Cholangiocarcinoma. 70179006
- Chordoma, Childhood. 50007008
- Chronic Lymphocytic Leukemia (CLL). 92814006
- Chronic Myelogenous Leukemia (CML). 92818009
- Chronic Myeloproliferative Neoplasms
- Colorectal Cancer. 781382000
- Craniopharyngioma, Childhood (Brain Cancer). NCI code: C7816
- Cutaneous T-Cell Lymphoma. 400122007
- Ductal Carcinoma In Situ (DCIS). 399935008
- Embryonal Tumors, Central Nervous System, Childhood (Brain Cancer). NCI code: C3264
- Embryonal Tumors, Childhood (Brain Cancer). NCI code: C3264
- Endometrial Cancer (Uterine Cancer). 254878006
- Ependymoma, Childhood (Brain Cancer). NCI code: C8578

Esophageal Cancer. 372138000 Esthesioneuroblastoma . 68614005 Ewing Sarcoma (Bone Cancer). 76909002 Ewing Sarcoma (Bone Cancer). 76909002 Extracranial Germ Cell Tumor, Childhood. NCI code: C68627 Extragonadal Germ Cell Tumor. NCI code: C3918 Extragonadal Germ Cell Tumors. NCI code: C3918 Eye cancers. 363461003 Fallopian Tube Cancer. 363444001 Fibrous Histiocytoma of Bone, Malignant, and Osteosarcoma. 307576001 Gallbladder Cancer. 363353009 Gastric (Stomach) Cancer. 363349007 Gastrointestinal Carcinoid Tumor. 428701004 Gastrointestinal Stromal Tumors (GIST) (Soft Tissue Sarcoma). 420120006 Germ Cell Tumor, Childhood (Brain Cancer) Germ Cell Tumors. 402878003 Gestational Trophoblastic Disease. 609519004 Hairy Cell Leukemia. 118613001 Head and Neck Cancer. 255056009 Heart Tumors, Childhood Hepatocellular (Liver) Cancer. 93870000 Histiocytosis, Langerhans Cell. 65399007 Hodgkin Lymphoma. 14537002 Hypopharyngeal Cancer (Head and Neck Cancer). 363399006 Hypopharyngeal Cancer. 363399006 Intraocular Melanoma. NCI code: C7712 Intraocular Melanoma. NCI code: C7712 Islet Cell Tumors, Pancreatic Neuroendocrine Tumors. 128878003 Kaposi Sarcoma (Soft Tissue Sarcoma). 109385007 Kaposi Sarcoma (Soft Tissue Sarcoma). 109385007 Kaposi Sarcoma (Soft Tissue Sarcoma). 49937004 Kidney (Renal Cell) Cancer. 363518003 Langerhans Cell Histiocytosis. 65399007 Laryngeal Cancer (Head and Neck Cancer). 363429002 Leukemia. 93143009 Lip and Oral Cavity Cancer (Head and Neck Cancer). NCI code: C9315 Liver Cancer. NCI code: C7711 Lung Cancer (Non-Small Cell and Small Cell). 363358000 Lymphoma. 118600007 Male Breast Cancer. 372096000 Malignant Fibrous Histiocytoma of Bone and Osteosarcoma Melanoma, Intraocular (Eye). NCI code: C7712 Melanoma, 2092003

Merkel Cell Carcinoma (Skin Cancer). 253001006 Mesothelioma, Malignant. 62064005 Metastatic Cancer. NCI code: C19151 Metastatic Squamous Neck Cancer with Occult Primary (Head and Neck Cancer). NCI code: C7713 Midline Tract Carcinoma Involving NUT Gene Mouth Cancer (Head and Neck Cancer). 363505006 Multiple Endocrine Neoplasia Syndromes. 46724008 Multiple Myeloma/Plasma Cell Neoplasms. 109989006 Mycosis Fungoides (Lymphoma). 118618005 Myelodysplastic Syndromes, Myelodysplastic/Myeloproliferative Neoplasms. 109995007 Myelogenous Leukemia, Chronic (CML). 92818009 Myeloid Leukemia, Acute (AML). 91861009 Myeloproliferative Neoplasms, Chronic. 115248004 Nasal Cavity and Paranasal Sinus Cancer (Head and Neck Cancer). NCI code: C54293 Nasopharyngeal Cancer (Head and Neck Cancer). 187692001 Nasopharyngeal Cancer. 187692001 Neuroblastoma, 432328008 No known cancers Non-Hodgkin Lymphoma. 118601006 Non-Small Cell Lung Cancer. 254637007 Oral Cancer, Lip and Oral Cavity Cancer and Oropharyngeal Cancer (Head and Neck Cancer) Oropharyngeal Cancer. 363392002 Osteosarcoma and Malignant Fibrous Histiocytoma of Bone Osteosarcoma (Bone Cancer). 21708004 Ovarian Cancer. 123843001 **Ovarian Germ Cell Tumors** Pancreatic Cancer. 372142002 Pancreatic Neuroendocrine Tumors (Islet Cell Tumors). 237596009 Papillomatosis . 82049002 Paraganglioma. 302833002 Paranasal Sinus and Nasal Cavity Cancer (Head and Neck Cancer). NCI code: C54293 Parathyroid Cancer. 363481002 Penile Cancer. 363516004 Pharyngeal Cancer (Head and Neck Cancer). NCI code: C9466 Pheochromocytoma. 399343007 Pituitary Tumor. 127024001 Plasma Cell Neoplasm/Multiple Myeloma. 55921005 Pleuropulmonary Blastoma. 707670009 Pregnancy and Breast Cancer: CHV code:0000027395 Primary Central Nervous System (CNS) Lymphoma. 307649006 Primary CNS Lymphoma (Lymphoma). 307649006 Primary CNS Lymphoma. 307649006 Primary Peritoneal Cancer. 363492001

Prostate Cancer. 399068003

- Rectal Cancer. 363351006
- Recurrent Cancer. 452241000124100
- Renal Cell (Kidney) Cancer. 702391001
- Retinoblastoma. 19906005
- Retinoblastoma. 370967009
- Rhabdomyosarcoma, Childhood (Soft Tissue Sarcoma). NCI code: C7705
- Salivary Gland Cancer (Head and Neck Cancer). 255072001
- Sarcoma. 424413001
- Sézary Syndrome (Lymphoma). 118611004
- Skin Cancer. 372130007
- Small Cell Lung Cancer. 254632001
- Small Intestine Cancer. 363509000
- Soft Tissue Sarcoma.
- Squamous Cell Carcinoma of the Skin. 254651007
- Squamous Neck Cancer with Occult Primary, Metastatic (Head and Neck Cancer): NCI code: C7713
- Stomach (Gastric) Cancer. 363349007
- T-Cell Lymphoma, Cutaneous. 400122007
- Testicular Cancer. 363449006
- Testicular Cancer. 363449006
- Throat Cancer (Head and Neck Cancer): NCI code: C35506
- Thymoma and Thymic Carcinoma. 128717008
- Thyroid Cancer. 363478007
- Transitional Cell Cancer of the Renal Pelvis and Ureter (Kidney (Renal Cell) Cancer): NCI code: C7716 Unknown
- Unknown Primary, Carcinoma of. 255052006
- Ureter and Renal Pelvis, Transitional Cell Cancer (Kidney (Renal Cell) Cancer. NCI code: C8064
- Urethral Cancer. 363459007
- Uterine Cancer, Endometrial. 254878006
- Uterine Sarcoma. 254877001
- Uterine Sarcoma. 254877001
- Vaginal Cancer. 363445000
- Vascular Tumors (Soft Tissue Sarcoma). NCI code: C7388
- Vulvar Cancer. 363367000
- Wilms Tumor and Other Childhood Kidney Tumors. NCI code: C27730

Congenital and Genetic Disorders

ICD-10 Q00-Q89 One to many Congenital and Genetic disorders of the decedent and family Medical examiners database and next of kin interview **Normative Answer List:** Anencephaly and similar malformations

- Anophthalmos, microphthalmos and macrophthalmos
- Cleft lip
- Cleft palate
- Cleft palate with cleft lip
- Congenital absence, atresia and stenosis of large intestine
- Congenital absence, atresia and stenosis of small intestine
- Congenital deformities of feet
- Congenital deformities of hip
- Congenital hydrocephalus
- Congenital ichthyosis
- Congenital lens malformations
- Congenital malformation syndromes due to known exogenous causes, not elsewhere classified
- Congenital malformations of anterior segment of eye
- Congenital malformations of aortic and mitral valves
- Congenital malformations of breast
- Congenital malformations of cardiac chambers and connections
- Congenital malformations of cardiac septa
- Congenital malformations of ear causing impairment of hearing
- Congenital malformations of esophagus
- Congenital malformations of eyelid, lacrimal apparatus and orbit
- Congenital malformations of gallbladder, bile ducts and liver
- Congenital malformations of great arteries
- Congenital malformations of great veins
- Congenital malformations of larynx
- Congenital malformations of lung
- Congenital malformations of musculoskeletal system, not elsewhere classified
- Congenital malformations of nose
- Congenital malformations of ovaries, fallopian tubes and broad ligaments
- Congenital malformations of posterior segment of eye
- Congenital malformations of pulmonary and tricuspid valves
- Congenital malformations of spine and bony thorax
- Congenital malformations of trachea and bronchus
- Congenital malformations of uterus and cervix
- Congenital musculoskeletal deformities of head, face, spine and chest
- Congenital obstructive defects of renal pelvis and congenital malformations of ureter
- Cystic kidney disease
- Encephalocele
- Epidermolysis bullosa
- Hypospadias
- Indeterminate sex and pseudohermaphroditism
- Microcephaly
- No known congenital abnormalities
- Osteochondrodysplasia with defects of growth of tubular bones and spine

Other congenital malformations of brain Other congenital malformations of circulatory system Other congenital malformations of digestive system Other congenital malformations of ear Other congenital malformations of eye Other congenital malformations of face and neck Other congenital malformations of female genitalia Other congenital malformations of heart Other congenital malformations of integument Other congenital malformations of intestine Other congenital malformations of kidney Other congenital malformations of limb(s) Other congenital malformations of male genital organs Other congenital malformations of nervous system Other congenital malformations of peripheral vascular system Other congenital malformations of respiratory system Other congenital malformations of skin Other congenital malformations of skull and face bones Other congenital malformations of spinal cord Other congenital malformations of tongue, mouth and pharynx Other congenital malformations of upper alimentary tract Other congenital malformations of urinary system Other congenital malformations, not elsewhere classified Other congenital musculoskeletal deformities Other osteochondrodysplasias Other specified congenital malformation syndromes affecting multiple systems Phakomatoses, not elsewhere classified Polydactyly Reduction defects of lower limb Reduction defects of unspecified limb Reduction defects of upper limb Renal agenesis and other reduction defects of kidney Spina bifida Syndactyly Undescended and ectopic testicle Unknown

Chromosomal abnormalities

ICD-10 Q90-99 One to many Chromosomal abnormalities of the decedent or family Medical examiners database and next of kin interview *Normative Answer List:* Down syndrome Trisomy 18 and Trisomy 13 Other trisomies and partial trisomies of the autosomes, not elsewhere classified Monosomies and deletions from the autosomes, not elsewhere classified Balanced rearrangements and structural markers, not elsewhere classified Turner's syndrome Other sex chromosome abnormalities, female phenotype, not elsewhere classified Other sex chromosome abnormalities, male phenotype, not elsewhere classified Other chromosome abnormalities, not elsewhere classified No known chromosomal abnormalities

Dental health as an adult

No defined standard One to many Oral health of the decedent as an adult Medical examiners database and next of kin interview SNOMED CT codes for Normative Answer List below

Normative Answer List:

Dental cavities. 80967001 Dental trauma. 397869004 Dental abscess. 299709002 Periodontal disease. 2556008 Tooth loss. 25540007 Oral cancer. 363505006 Fungal, bacterial, or viral infection Healthy Unknown None

Dental health as a Child

No defined standard One to many Oral health of the decedent as a child Next of kin interview SNOMED CT codes for Normative Answer List below *Normative Answer List:* Dental cavities. 80967001 Dental trauma. 397869004 Dental abscess. 299709002 Periodontal disease. 2556008 Tooth loss. 25540007 Oral cancer. 363505006 Fungal, bacterial, or viral infection Healthy Unknown None

Scoliosis

SNOMED CT code: 298382003 One to one Presence or absence of scoliosis in the decedent Medical examiners database and next of kin interview *Normative Answer List:*

Present Absent Unknown

History of Broken Bones

SNOMED CT code: 125605004 One to many Location of any broken bones during the decedent's lifetime Medical examiners database and next of kin interview **Normative Answer List:**

Arm. 182245002 Wrist/hand. 8205005/ 85562004 Leg. 61685007 Ankle/foot. 344001/ 56459004 Ribs. 113197003 Neck. 45048000 Spine-not neck. 421060004 Pelvis. 12921003 Head. 69536005 None Unknown

Facial Trauma

No defined standard One to many Facial trauma that the decedent underwent at any time in their lifetime Medical examiners database and next of kin interview *Normative Answer List:* Trauma to upper face- hairline to glabella

Trauma to middle face-glabella to anterior nasal spine Trauma to lower face- anterior nasal spine and below trauma to face, area unknown None Unknown

Plastic surgery

SNOMED CT code: 286553006 One to many Any plastic or cosmetic surgery that the decedent had in their lifetime Medical examiners database and next of kin interview SNOMED CT codes for Normative Answers below

Normative Answer List:

Cosmetic surgery- Tummy tuck. 177250006 Cosmetic surgery- Liposuction. 302441008 Cosmetic surgery-Face surgery. 1417002 Cosmetic surgery-Breast surgery. 392090004 Plastic surgery- Hand surgery. 112746006 Plastic surgery- Reconstructive surgery. 122465003 Plastic surgery- Trauma surgery. 310166001 Plastic surgery-Disorders Plastic surgery-Congenital defect repair Plastic or cosmetic surgery, type unknown None Unknown

Surgical History

SNOMED CT code: 161615003 One to many History of surgery to broad regions of the body; scapula is included with arms Medical examiners database and next of kin interview SNOMED CT codes of findings below Normative Answer List:

Normative Answer List:

Arms. 182245002 Legs. 61685007 Head. 69536005 Neck. 45048000 Thorax. 51185008 Genitals. 71934003 No known surgeries Unknown

Implanted device

SNOMED CT code: 14789005 One to many Any device implanted in the decedent Medical examiners database and next of kin interview SNOMED CT, and NCI codes for normative answers are below *Normative Answer List:* Pacemaker. 14106009 Dental implant Prosthesis. 53350007 Nail. 773092001 Pin. 77444004 Plate Wire. 35593004 Stent. 65818007 Shunt. 257351008 Valve Gastric band. 470413006 Lens Clips. 386010000 Rod Chain. 46666003 Cochlear implant. 43252007 Microchip implant. Birth control. NCI: C92891 Glass eyeball. 2478003 Implant, type unknown No implant Unknown

History of radiation

SNOMED CT code: 161633009 One to one Whether or not the decedent underwent radiation therapy in their lifetime Next of kin interview *Normative Answer List:* Yes No Unknown

Diagnosis (non-cancer)

Modified SNOMED CT code: 439401001 One to many Medical Diagnoses that the decedent suffered from during their lifetime Medical examiners database and next of kin interview **Normative Answer List:** Arthritis. 3723001 Asthma. 195967001 Autism spectrum. 408856003 Autoimmune diseases. 85828009 Chronic heart failure. 48447003 Cirrhosis of the liver. 19943007 COPD. 13645005 Coronary artery disease. 443502000

Dementia. 52448006 Diabetes type I. 46635009 Diabetes Type II. 44054006 Epilepsy. 84757009 Hepatitis C. 50711007 HIV/AIDS. 19030005 Hyperlipidemia. 55822004 Hypertension. 38341003 Insect borne disease. 28509004 Mental illness. 74732009 Myocardial Infarction. 22298006 Osteoporosis. 64859006 Staphylococcus aureus. 406602003 Stroke. 230690007 Non-epileptic seizures. Schizophrenia. 191526005 Unknown None Other

Medications

RX Norm CUI for main ingredient. One to many Any medications that the decedent was taking at the time of death or found within their residence Medical examiners database and next of kin interview See: <u>https://www.nlm.nih.gov/research/umls/rxnorm/index.html</u>

Drug/substance use

Modified from ICD-10 F10-F19 One to many Any drugs or substances that the decedent was taking or had taken during their lifetime. Medical examiners database and next of kin interview *Normative Answer List:* Opioids

- Cannabinoids
- Sedative hypnotics/depressants

Cocaine

Other Stimulants

Hallucinogens

Volatile solvents/inhalants

Other psychoactive substances

Drug user, type unknown

Unknown if used drugs

Did not use illegal drugs

Former opioids drug user

Former cannabinoids drug user Former sedative hypnotics/depressants drug user Former cocaine drug user Former other stimulants drug user Former hallucinogens drug user Former volatile solvents/inhalants drug user Former other psychoactive substances drug user Former drug user, type unknown None Unknown

Substance Quit date

No defined standard One to many Date that the decedent quit taking the drug Next of kin interview XX/XX/XXXX

Substance Usage duration

No defined standard One to many Number of years that the decedent took said substance Next of kin interview XX

Tobacco Type

Modified LOINC code: 82769-1 One to many The type of tobacco products used Medical examiners database and next of kin interview SNOMED CT codes given below for Normative Answers *Normative Answer List:* smoke tobacco. 102407002 chew tobacco. 81911001 tobacco user, type unknown. 110483000 Never used tobacco. 702979003

Unknown if ever used tobacco. 160614008

Tobacco usage

LOINC code 72166-2 One to many How often the decedent smoked at the time of death Medical examiners database and next of kin interview SNOMED CT Codes and definitions given below for normative answers *Normative Answer List:* Current every day smoker. 449868002 smoked at lea

smoked at least 100 cigs in life and everyday smoker

Current some day smoker. 428041000124106 Former smoker. 8517006 Never smoker. 266919005 Smoker, current status unknown. 77176002 Unknown if ever smoked. 266927001 Heavy tobacco smoker. 428071000124103 Light tobacco smoker. 428061000124105

Drinking status

SNOMED CT: 365967005 One to many How often the decedent drank on a regular basis Medical examiners database and next of kin interview Normative answers modified from National Institute on Alcohol Abuse and Alcoholism (NIAAA) *Normative Answer List:* Never drank Low risk High risk

Previous High risk Drinker, current status unknown Unknown if ever drank

Dietary Pattern

SNOMED CT code: 41829006. One to many What type of diet the decedent had for the majority of their life Next of kin interview SNOMED CT codes below. *Normative Answer List:* Vegan. 281015005

Vegetarian. 765021002 Weight reduction. 359649009 Overeating. Normal. 36823005 Eating disorder. 72366004 Convenience food Unknown

Current and Previous Occupations

ISCO-88 sub major level. One to many Occupations held by the decedent in their lifetime Medical examiners database and next of kin interview *Normative Answer List:*

Administrative and Commercial Managers

smoked at least 100 cigs in life and some days' smoker

>10 per day <10 per day

- Agricultural, Forestry and Fishery Laborers Armed Forces Occupations, Other Ranks Assemblers Building and Related Trades Workers (excluding Electricians) Business and Administration Associate Professionals Business and Administration Professionals
 - Chief Executives, Senior Officials and Legislators
 - **Cleaners and Helpers**
 - **Commissioned Armed Forces Officers**
 - Customer Services Clerks
 - Drivers and Mobile Plant Operators
 - Electrical and Electronic Trades Workers
 - Food Preparation Assistants
 - Food Processing, Woodworking, Garment and Other Craft and Related Trades
 - Workers
 - General and Keyboard Clerks
 - Handicraft and Printing Workers
 - Health Associate Professionals
 - **Health Professionals**
 - Hospitality, Retail and Other Services Managers
 - Information and Communications Technicians
 - Information and Communications Technology Professionals
 - Laborers in Mining, Construction, Manufacturing and Transport
 - Legal, Social and Cultural Professionals
 - Legal, Social, Cultural and Related Associate Professionals
 - Market-oriented Skilled Agricultural Workers
 - Market-oriented Skilled Forestry, Fishery and Hunting Workers
 - Metal, Machinery and Related Trades Workers
 - Non-commissioned Armed Forces Officers
 - Numerical and Material Recording Clerks
 - Other Clerical Support Workers
 - Personal Care Workers
 - Personal Services Workers
 - Production and Specialized Services Managers
 - **Protective Services Workers**
 - Refuse Workers and Other Elementary Workers
 - Sales Workers
 - Science and Engineering Associate Professionals
 - Science and Engineering Professionals
 - Stationary Plant and Machine Operators
 - Street and Related Sales and Services Workers
 - Subsistence Farmers, Fishers, Hunters and Gatherers
 - **Teaching Professionals**

Duration of occupation

LOINC code: 74163-7 One to many Number of years that the decedent was working in the occupation Next of kin interview XX

Repetitive activities

ICD-10 activity codes: Y93 One to many Activities that the decedent performed on a regular basis during their life Next of kin interview Normative Answer List: aerobic and step exercise american flag or touch football american tackle football **BASE** jumping baseball basketball bike riding bowling boxing building and construction bungee jumping calisthenics caregiving, bathing caregiving, lifting cheerleading circuit training computer keyboarding cooking and baking cross country skiing dancing digging, shoveling and raking drum and other percussion instrument playing exercise machines primarily for cardiorespiratory conditioning exercise machines primarily for muscle strengthening food preparation and clean up free weights frisbee furniture building and finishing gardening and landscaping golf

grass drills grilling and smoking food grooming and shearing an animal gymnastics hand held interactive electronic device hang gliding horseback riding household cleaning ice hockey ice skating jumping rope knitting and crocheting lacrosse and field hockey martial arts milking an animal mountain climbing, rock climbing and wall climbing none non-running track and field events obstacle course other other caregiving other interior property and clothing maintenance other involving animal care other involving arts and handcrafts other involving cardiorespiratory exercise other involving climbing, rappelling and jumping off other involving computer technology and electronic devices other involving cooking and grilling other involving dancing and other rhythmic movements other involving exterior property and land maintenance, building and construction other involving external motion other involving ice and snow other involving muscle strengthening exercises other involving other sports and athletics played as a team or group other involving other sports and athletics played individually other involving water and watercraft other personal hygiene other specified sports and athletics personal bathing and showering physical games generally associated with school recess, summer camp and children piano playing pilates push-ups, pull-ups, sit-ups

racquet and hand sports rappelling refereeing a sports activity residential relocation roller coaster riding roller skating (inline) and skateboarding rough housing and horseplay rowing, canoeing, kayaking, rafting and tubing rugby running sewing sleeping snow (alpine) (downhill) skiing, snowboarding, sledding, tobogganing and snow tubing soccer springboard and platform diving string instrument playing surfing, windsurfing and boogie boarding swimming trampolining underwater diving and snorkeling volleyball (beach) (court) walking an animal walking, marching and hiking water aerobics and water exercise water polo water skiing and wake boarding winds and brass instrument playing wrestling yoga

History of strenuous lifting

No defined standard One to one Whether the decedent had a history of strenuous lifting during their lifetime Next of kin interview *Normative Answer List:* Yes

No Unknown

Highest Education Level

LOINC code 80913-7 One to one Highest educational level attained by the decedent Medical examiners database and next of kin interview

Normative Answer List:

8th grade/less 9th-12th, no diploma High school graduate or GED diploma Some college credit but no degree Associate degree Bachelor's degree Master's degree Doctorate or professional degree Unknown

Childhood Socio-economic Status

No defined standard One to one The socio-economic status of the decedent as a child Next of kin interview *Normative Answer List:*

Lower class Lower middle class Middle class Upper middle class Upper class Unknown

Adult Socio-economic Status

No defined standard One to one The socio-economic status of the decedent as an adult Next of kin interview **Normative Answer List:** Lower class Lower middle class Middle class Upper middle class

Unknown

Carcinogen Exposure

SNOMED CT: 88376000 One to many Decedent exposure to carcinogens throughout their lifetime Next of kin interview List of known carcinogens from the National Toxicology Program's 14th Report on Carcinogens for the Normative Answers; SNOMED CT codes below Normative Answer List: 1-(2-Chloroethyl)-3-(4-methylcyclohexyl)-1-nitrosourea (MeCCNU) 1,3-Butadiene 1,4-Butanediol dimethylsulfonate (also known as busulfan) 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD); "dioxin" 2-Naphthylamine 4-Aminobiphenyl. 15833002 Aflatoxins Alpha radition Analgesic mixtures containing phenacetin Aristolochic acids Arsenic and inorganic arsenic compounds Asbestos Azathioprine. 372574004 Benzene Benzidine Beryllium and beryllium compounds Bis(chloromethyl) ether and technical-grade chloromethyl methyl ether Cadmium and cadmium compounds Chlorambucil Chromium hexavalent compounds Coal tar pitches Coal tars Coke oven emissions Cyclophosphamide Cyclosporin A Diethylstilbestrol (DES) Dyes metabolized to benzidine Epstein-Barr virus (EBV) Erionite Estrogens, steroidal Ethylene oxide Formaldehyde Hepatitis B virus Hepatitis C virus Human immunodeficiency virus type 1 (HIV-1) Human papilloma viruses: some genital-mucosal types Human T-cell lymphotropic virus type 1 (HTLV-1) Kaposi sarcoma-associated herpesvirus (KSHV) (also know as human herpesvirus 8, or HHV-8)

Melphalan Merkel cell polyomavirus (MCV) Methoxsalen with ultraviolet A therapy (PUVA) Mineral oils (untreated and mildly treated) Mustard gas Neutrons Nickel compounds None Oral tobacco products o-Toluidine Radon Silica, crystalline (respirable size) Solar radiation Soots Strong inorganic acid mists containing sulfuric acid Sunlamps or sunbeds, exposure to Tamoxifen Thiotepa Thorium dioxide Tobacco smoke, environmental Trichloroethylene (TCE) Ultraviolet (UV) radiation, broad spectrum Unknown Vinyl chloride Wood dust X-radiation and gamma radiation

Circumstances of Death

Primary and Contributing Cause of Death

OMI data standard

One to many

The primary and contributing cause(s) of death as determined by the medical examiner

Medical examiner database

Normative Answer List:

Acquired Immune Deficiency Syndrome (AIDS, HTLV-III, HIV, positive serology)

Adverse reaction (allergy)

Alzheimer's (senility, dementia, Organic/Chronic Brain Syndrome)

Amyotrophic lateral sclerosis

Aneurysm (cerebral hemorrhage, Berry)

Arthritis (degenerative joint disease, Lupus)

Asphyxia (suffocation, strangulation)

Aspiration (stomach contents, blood, mucus)

Aspiration (stomach, gastric, foreign objects)

Asthma

Blood disorders (anemia, Hyperviscosity Syndrome, leukopenia, Myelodysplastic Syndrome,

myelofibrosis, pancytopenia)

Carbon monoxide intoxication (smoke and soot inhalation)

Carcinoma (CA, cancer, malignancy)

Cardiac arrhythmia

Cerebrovascular (CVA, stroke, anoxia, hypoxia, encephalopathy, brain death, coma, cerebral palsy, multiple sclerosis, Huntington's chorea)

Certification for record purposes only- Natural Cause of Death

Certification for record purposes only- Outside Agency

Child abuse

Chronic drug abuse

Chronic obstructive pulmonary disease (COPD)

Congenital defect (Down, Marfan's, Arnold-Chiari, Turners, Ehlers Danlos, cystic fibrosis, muscular dystrophy)

Consult Request Withdrawn

Cremains

Dehydration (hyperthermia, heat stroke)

Diabetes

Drowning

Electrocution

Emboli (throbus, phlebitus)

Emphysema

Epilepsy (seizure disorder)

Ethanol (alcohol) intoxication

Ethanolism (chronic, alcoholism, alcoholic liver) Exposure Exsanguination Gallbladder (cholecystis, cholelethiasis) Gaserointestinal hemorrhage (gastroenteritis, ulcers, diverticulitis) Gunshot wound of Hanging Head and neck injuries (cervical, cranio-, cerebral) Hepatic failure (liver, cirrhosis) History of illness or injury Hodgkin's disease Hypertension (hypertensive cardiovascular disease) Insanguination Insufficient remains for determination of death (hands, feet, placenta) Intrauterine fetal death (stillborn) Leukemia Malnutrition (cachexia, anorexia) Maternal and fetal complications of birth Medical treatment Meningitis (Waterhouse-Friderichsen Syndrome) Multiple injuries (fractures, lacerations to internal organs) Multiple organ failure (multi-organ) Narcotic abuse Natural-specify Non-human remains, animal or extraterrestrial Obesity **Obstruction** (blockage) other Pancreas Parkinson's disease Pathologic injuries Plague Pneumonia (bronchitis) Prematurity Presumably natural disease Pulmonary edema Renal failure (kidney, nephritis, uremia) Respiratory Distress Syndrome (RDS, ARDS, IRDS, idiopathic pulmonary fibrosis, alveolar damage, insufficiency, Hanta viral) **Reye's Syndrome** Sepsis Skeletal remains (ancient) Skeletal/mummified remains

Spontaneous hemorrhage Stab wound (slash, penetrating cut) Subdural hematoma Substance intoxication (drug, poison, alcohol, etc.) Sudden Infant Death Syndrome (SIDS, crib death) Thermal injuries (burns) Tuberculosis Undetermined after autopsy and/or toxicology Undetermined-specify Unnatural-specify

Manner of Death Categories

OMI data standard One to one The manner of death category as determined by the medical examiner Medical examiner database *Normative Answer List:* Accident Homicides Natural Other Suicides Undetermined

Manner of Death

OMI data standard One to one The manner of death as determined by the medical examiner Medical examiner database Normative Answer List: "Natural" ASCVD/COPD/Seizure disorder Accidental discharge of (handgun, rifle, shotgun, (other firearm type) Accidental ligature strangulation (This applies to autoerotic strangulation or leaning into poseys or other restraints) Accident-specify (To be used when none of the other categories will s-Discuss exact wording with the Medical Investigator) Asphyxia/airway obstruction/suffocation Assaulted with/by Beaten by assailant(s) Bitten/mauled/stung/kicked by (bee, dog, snake, horse, (name agent)) Blunt trauma/multiple injuries/subdural hematoma Burned self with Certification for record purposes only Choked on (bolus of food, toy (identify item)) - (this is used when a foreign object is lodged in the airway)

Consult Request Withdrawn

Contacted electrical current via (outlet, telephone lines, ungrounded chain saw, (identify source of current))

Cremains

Crushed/suffocated by (car falling from jack, plastic bag over head, (identify mechanism)) Cut self with (knife, chainsaw, razor blade, (name agent))

Cyclist (explain circumstances briefly, e.g., left roadway and struck tree; overturned in roadway, etc.) Cyclist struck by (auto, pickup, truck, minivan, (other motor vehicle)

Driver of (auto, pickup, truck, minivan, (other motor vehicle) struck by train

Driver of auto in collision with (auto, pickup, truck, minivan, ATV, motorcycle, (other motor vehicle type))

Driver of auto in collision with (tree, embankment, rock,_wall, (other fixed object))

Driver of auto that left roadway (and overturned and/or became pinned underneath or in auto) Driver of motor vehicle

Driver of motorcycle (explain circumstances briefly, e.g. left roadway and struck tree, overturned in roadway, etc.)

Driver of motorcycle in collision with (auto, pickup, truck, minivan, ATV, motorcycle, (other motor vehicle type))

Driver of pickup in collision with (tree, embankment, rock, wall, (other fixed object))

Driver of pickup in collision with (auto, pickup, truck, minivan, ATV, motorcycle, (other motor vehicle type))

Driver of pickup that left roadway (and overturned and/or became pinned underneath or in auto) Driver of truck in collision with (auto, pickup, truck, minivan, ATV, motorcycle; (other motor vehicle type))

Driver of truck in collision with (tree, embankment, rock, wall;(other fixed object))

Driver of truck that left roadway (and overturned and/or became pinned underneath or in truck) Driver/passenger motor vehicle

Drowned in (tub, arroyo, pool, (this includes all non-recreational water accidents)

Drowned self in

Drowned while swimming (this includes recreational swimming and rescue attempts)

Drowning

Explosion/Victim of fire

Exposure

Fall from (chair, table, mesa, cliff, (identify origin of fall) and approximate distance of fall in feet)

Fall from height/same height

Fall from standing height

Farm or Industrial machinery accident, e.g., "Crushed in bailer"; "Fell into packaging machine") Fell/thrown from (horse, brahma bull, (specify other riding animal))

Gunshot wound

Hanged self with

Hanged/strangled

Homicide-specify

Ingested alcohol (ethanol) -Accident

Ingested alcohol- Unknown

Ingested and/or injected illicit drug(s) - ((in combination with ethanol))-Accident

Ingested and/or injected prescription medications-Accident

Ingested or injected medication -Suicide

Ingested, injected or inhaled non-prescription medication (illicit, volatiles)-Suicide

Ingested/injected medication-Unknown

Ingested/injected/inhaled drugs/poisons-Homicide

Ingested/injected/inhaled illicit drug or volatile-Unknown

Inhaled (Name' of product/Name of toxic agent), e.g., (Paint/Toluene) - (toxic substances abused to achieve intoxication)

Inhaled (Name of product; Name of toxic agent), e.g., (carbon monoxide in enclosed garage), (toxic substances inhaled accidentally)

Inhaled (via ____) /

Inhaled fumes/auto exhaust

Insufficient remains for determination of death

Jumped from

Medical treatment - (This includes deaths accidentally caused by therapy)

Motor vehicle accident, etiology unknown

Narcotic abuse

Natural

Neglect/Starvation

Non-collision motor vehicle accident, (no collision)

Non-human remains, animal or extraterrestrial

Other

Passenger in (airplane, balloon, hang glider, (other aircraft type) that crashed) - (Also parachutist) Passenger in (auto, pickup, truck, minivan, (other motor vehicle type), struck by train Passenger in auto in collision with (auto, pickup, truck,_minivan, ATV, motorcycle, (other motor vehicle type))

Passenger in auto in collision with (tree, embankment, rock, wall, (other fixed object)) Passenger in auto that left roadway (and overturned and/or became pinned underneath or in auto)

Passenger in pickup in collision with (tree, embankment, rock, wall, (other fixed object)) Passenger in pickup in. collision with (auto, pickup, truck, minivan, ATV, motorcycle, (other motor vehicle type))

Passenger in pickup that left roadway (and overturned and/or became pinned underneath or in auto) Passenger in truck in collision with (auto, pickup, truck, minivan, ATV, motorcycle; (other motor vehicle type))

Passenger in truck in collision with (tree, embankment, rock, wall; (other fixed object))

Passenger in truck that left roadway (and overturned and/or became pinned underneath or in truck) Passenger on motorcycle (explain circumstances briefly, e.g. left roadway and struck tree, overturned in roadway, etc.)

Passenger on motorcycle in collision with (auto, pickup, truck, minivan, ATV, motorcycle, (other motor vehicle type))

Passenger who fell from moving (auto, pickup, truck, minivan (other motor vehicle type)) Pedestrian homicide (ie, struck with auto by assailant(s))

Pedestrian struck by (auto, pickup, truck, train, (other motor vehicle type))

Pedestrian struck by (bicycle, (other non-motor vehicle))

Pedestrian

Pilot of (airplane, balloon, hang glider, (other aircraft type) that crashed)

Poisoned

Poisoned by (name agent) - (This includes excessive consumption or improper use of product leading

to poisoning not otherwise considered)

Received blow/collided with

Remained outdoors exposed to (cold, heat) - ((while intoxicated))

Scalded by (hot water, hot oil, (name agent))

Shot by assailant(s) with firearm (specify type, if known)

Shot self with firearm

Skeletal remains (ancient)

Skeletal, mummified or decomposed remains

Slashed ____ with ____

Stab/incised wounds

Stabbed by assailant(s)

Stabbed self with _____

Stillbirth, No Manner Determined

Stillborn/live birth/fetus

Strangled by assailant(s)/Suff

Struck by flying/falling (rock, tree, post, (identify moving object))

Struck by lightning

Suffocated self with

Suicide as pedestrian

Suicide-specify

Undetermined after autopsy and/or toxicology

Undetermined-specify

Victim of (car bomb, letter bomb, (type of device)) explosion

Victim of (house, car, trailer, open range, (other site)) fire

Victim of drowning

Victim of intentionally set fire

Method for Identification

OMI data standard One to one The method that was used to identify the decedent Medical examiner database *Normative Answer List:* Fingerprint Visual ID card/driver's license Photo Dental Circumstantial evidence X-ray comparison Medical device DNA Not Identified Unknown

Current bone density

SNOMED CT code: 385342005 One to one The bone density value of the decedent Not currently obtained XX

City of Death

No defined standard One to one City decedent was in at the time of death Medical examiner database

County of Death

Otero

No defined standard One to one County decedent was in at the time of death Medical examiner database Normative Answer List: Bernalillo Catron Chaves Cibola Colfax Curry De Baca Dona Ana Eddy Grant Guadalupe Harding Hidalgo Lea Lincoln Los Alamos Luna McKinley Mora

Quay **Rio Arriba** Roosevelt Sandoval San Juan San Miguel Santa Fe Sierra Socorro Taos Torrance Union Valencia Apache (AZ) Coconino (AZ) Navajo (AZ) Yavapai (AZ)

Cadaver Conditions

No defined standard One to one Condition of the decedent when found and reported to authorities Medical examiner database *Normative Answer List:*

Buried Burn Open air Indoors Vehicle Water Other

Cadaver Length

Unknown

Modified LOINC Code: 3137-7 One to one Length of the prone decedent at death in cm Medical examiner database XX

Cadaver weight

Modified LOINC code: 3141-9 One to one Weight of the decedent at death in kg Medical examiner database

CT scanner Protocol

OMI data standard One to one The scanning protocol undertaken at the OMI Determined by CT technologist *Normative Answer List:* OMI adult protocol OMI decomposed protocol OMI partial protocol OMI pediatric protocol

Unknown

Decomposition Score

OMI data standard One to one The level of decomposition in the decedent at the time of scan Determined by CT technologist *Normative Answer List:* No decomposition Mild Decomposition

Moderate decomposition Advanced decomposition

Time delay for CT scan

No defined standard One to one Time in hours between death and CT scan Medical examiner database XX

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