



Digging Into Death Certification Data to Uncover Family History and Family Health Treasures *A Physician's Perspective*

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Introduction

- Collecting death data on individuals and groups is a recent human endeavor but has had profound implications on public health
- Mortality records can also be a gold mine of information for the family historian; great place to start your ancestor search
- Of 50 million people that die each year worldwide though, only half will have their death officially recorded
- Knowledge of cause of death and other diseases of your ancestors may be important for the family historian and their descendants!



Outline of Discussion

Review

Fascinating history of recording death

Review

Collections of vital statistics in US that include cause of death and how to find the data

Discuss

Some of the nuances of using death collections in our family history efforts

Discuss

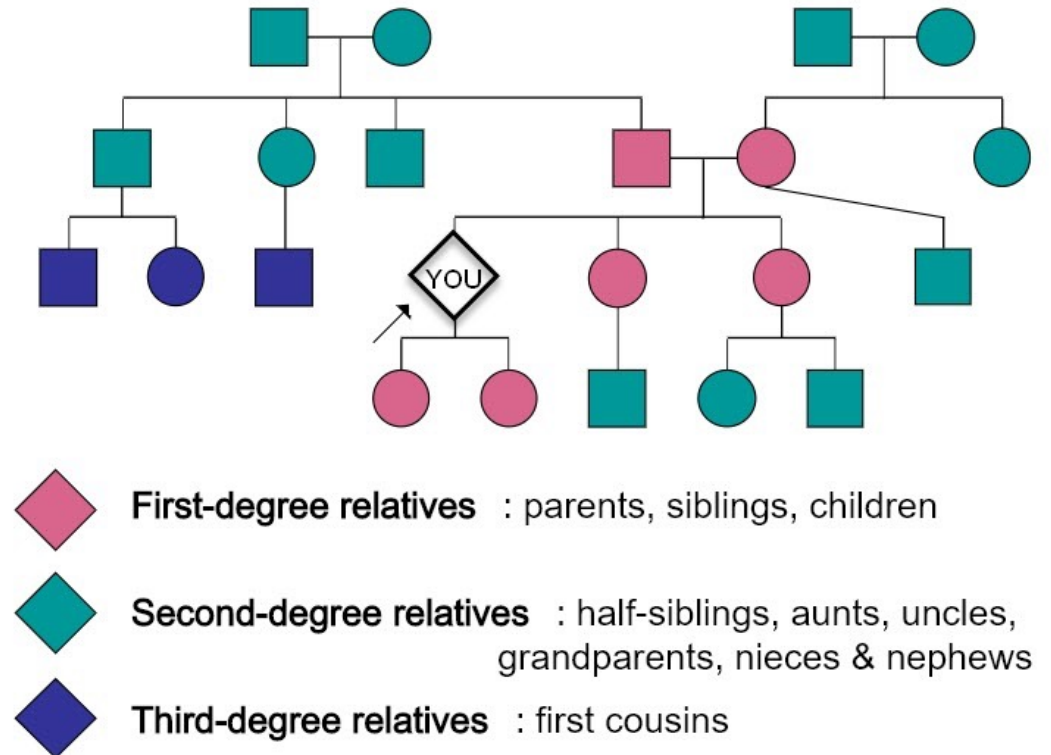
Common familial diseases, how to create a family health portrait, and calculate your risk of these diseases



Question: How Well Do You Know Your Family?

1. How many of you know the important illnesses and causes of death of your first-degree relatives??
 - **Parents, siblings, children**
2. How many of you know the important illnesses and causes of death of your second-degree relatives??
 - **Grandparents, uncles, aunts, grandchildren nephews, nieces, and half-siblings.**
3. How about other demographic information i.e., your grandmother's full name?

Degrees of Relationship



History of Recording Death

Ferry Dock, Kingston, Washington



History of Recording Death and Its Causes

- Advanced ancient civilizations like Egypt, Greece, China, and Rome in general did not record information on causes of death of their citizens
- Significant epidemics were recorded such as the Antonine plague (the Roman emperor of the time) that occurred in 162-180 AD and killed an estimated 10% of the empire. Smallpox or possibly measles
- Rare records of individual deaths such as Gaius Julius Caesar who died on March 15, 44 BC
 - *Modern US death certificate: Immediate cause of death hemorrhage, as a consequence of multiple stab wounds, with manner of death listed as homicide*



Heinrich Friedrich Füger, Public domain, via Wikimedia Commons

- Collick and Winde 134 Lethargy 14 Stopping of the ite

Kathryn Schultz, Final Forms, *The New Yorker*, April 7, 2014 Issue

Family History Jeopardy: Name that Illness

Pre 20th Century Illness Name

- Consumption
- Ague
- Apoplexy
- Brain fever
- Bloody flux
- Dropsy
- Erysipelas (St Anthony's fire)
- Grippe
- Quinsy

21st Century Illness Name

- Tuberculosis
- Malaria
- Stroke
- Meningitis
- Severe colitis/dysentery
- Heart failure/kidney disease
- Streptococcus cellulitis
- Influenza
- Tonsillar abscess



TB in America
PBS.org

<https://www.thornber.net/medicine/html/medgloss.html>  Great URL for old medical terms

Close up of Causes of Death for 1665

- 1665 was a plague year in London
- Note the number of deaths from plague - 68,596
- Note some of the diseases we discussed
 - Ague – 5257
 - Apoplexy – 116
 - Bloody flux - 185
 - Dropsy – 1478
 - Gout and sciatica – 27
 - Surfeit - 1251
- *Only recorded deaths of upstanding member of the Church of England*

1665.

DISEASES and CASUALTIES.

A Bortive and Stillborn 617	Executed — — — 21	Overlaid and Starved — 45
Aged — — — 1545	Flox and Small Pox — 655	Palsy — — — 30
Ague and Fever — — 5257	Found dead in the Streets, } 20	Plague — — — 68596
Apoplexy and Suddenly — 116	Fields, &c. — }	Planet — — — 6
Bedrid — — — 10	French Pox — — — 86	Plurisy — — — 15
Blasted — — — 5	Frighted — — — 23	Poisoned — — — 1
Bleeding — — — 16	Gout and Sciatica — 27	Quinsy — — — 35
Bloody Flux, Scowring, } 185	Grief — — — 46	Rickets — — — 557
and Flux — — — }	Gripping in the Guts — — 1288	Rising of the Lights — 397
Burnt and Scalded — — 8	Hang'd and made away } 7	Rupture — — — 34
Calenture . — — — 3	themselves — — }	Scurvy — — — 105
Cancer, Gangrene, and } 56	Headmouldshot and }	Shingles and Swine Pox — 2
Fistula — — — }	Mouldfallen — — }	Sores, Ulcers, broken } 82
Canker and Thrush — 111	Jaundies — — — 110	and bruised Limbs }
Childbed — — — 615	Impossthume — — — 227	Spleen — — — 14
Chisomes and Infants — 1258	Kill'd by several Accidents 46	Spotted Fever and Purples 1929
Cold and Cough — — 68	King's Evil — — — 86	Stopping of the Stomach 332
Colick and Wind — — 134	Leprosy — — — 2	Stone and Strangury — 98
Consumption and Tiflick 4808	Lethargy — — — 14	Surfeit — — — 1251
Convulsion and Mother — 2036	Livergrown — — — 20	Teeth and Worms — — 2614
Distracted — — — 5	Meagrim and Head-ach — 13	Vomiting — — — 51
Dropsy and Tympany — 1478	Measles — — — 7	Wen — — — 1
Drowned — — — 50	Murdered and Shot — — 9	

CHRISTENED {	Males — 5114	B U R I E D {	Males — 48569	Of the Plague 68596
	Females 4853		Females 48737	
	In all — 9967		In all — 97306	

Increased in the Burials in the 130 Parishes and at the Pest-house this Year 79009

Increased of the Plague in the 130 Parishes and at the Pest-house this Year 68590


William Farr: Moving Death Reporting Forward

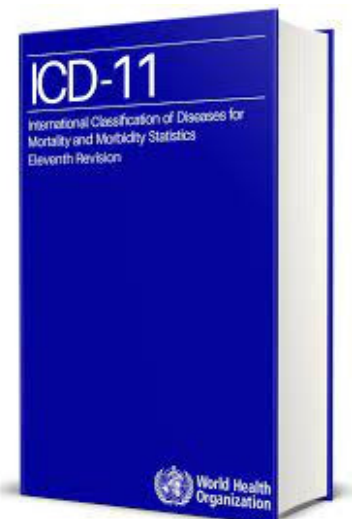
- 1838 Farr appointed Compiler of Abstracts in General Register Office in England; held post for 40 years
- He systematized collection of mortality data in England
- 1853 developed system to categorize 139 causes of death included causes such as “teething”
- Work led to cholera being tied to contaminated water
- His system was used by a committee of the International Statistical Institute headed by **Jacques Bertillon** to develop an international classification of diseases/causes of death first published in 1893



Interlude: What are ICD Codes?



- The 1893 **international classification of diseases** was revised in 1900 and published as **ICD-1** with 191 recognized diseases/causes of death
 - Number 82 “teething”
- ICD codes revised every 10 yrs or so; currently use ICD-11 as of January 2022; ICD sponsored by World Health Organization (WHO)
 - Used by physicians/insurance companies in US to code diseases
 - ICD-11 contains some 17,000 unique illness and 120,000 ways of coding disease and dying
- ***We shall see how the family historian can use ICD information***
 - Current and historical ICD codes available at:
<http://www.wolfbane.com/icd/index.html>  Great URL for old ICD codes



Why Did it Take So Long to Collect Death Data?

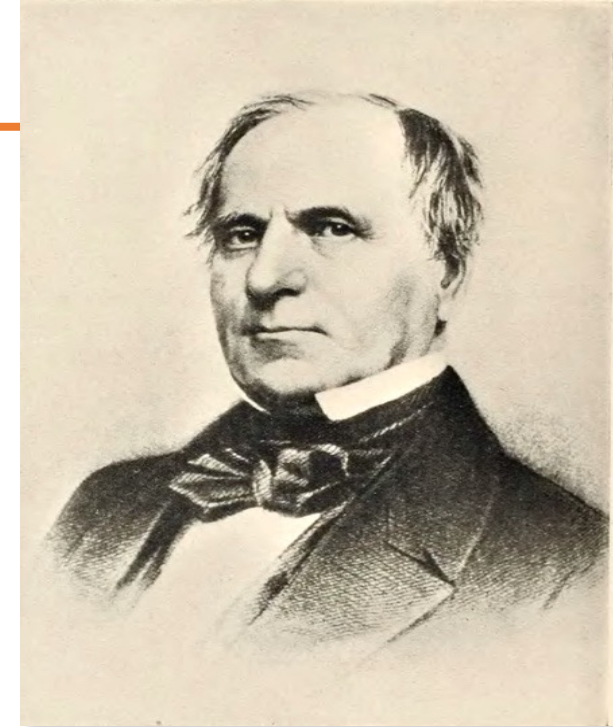
- In my experience, detailed data is only collected when it serves some useful purpose
 - Example: detailed information on disease activity in rheumatoid arthritis was not collected UNTIL we had highly effective medications to treat the disease
- The data on the Bills or Mortality may have helped people stay clear of the plague areas
- More recent efforts came with the beginning of public health activities and understanding of disease



Advanced rheumatoid arthritis

What about in the US?

- 1639 the Massachusetts Bay Colony collected vital data based on the Bills of Mortality experience?
- In 1839 Lemuel Shattuck in Massachusetts became a driving force in promoting vital data collection
 - Historian, genealogist, and statistician (nice combination!)
 - Instrumental in Massachusetts and other states collecting vital statistics including causes of death
 - 1841 Massachusetts first state to issue a form of death certificate
- 1847 the new American Medical Association lobbied for a national effort to collect vital statistics including causes of death
 - Thus, were conceived the **US Mortality Schedules!**



Mortality Schedules

Mortality Registries

Cherry blossom time on
the Quad, University of
Washington



rootstech
by FamilySearch

US Mortality Schedules

- In 1850, causes of death were first collected with each 10-year US census
- ***Deaths were recorded beginning June 1st in year before census until May 31st of census year***
- Collected through 1900 with special census in 6 states in 1885
 - Colorado, Florida, Nebraska, New Mexico, and the Dakotas
- In 1921, the 1890 mortality schedules and 1890 census data destroyed in a fire at Commerce Building in Washington, DC
 - *25% destroyed by fire, 37% by water, remaining undamaged files ordered destroyed in 1934*



US Census Bureau

Mortality Schedules

- 1850/1860 schedules included enslaved status and days ill before death
- 1870 onward included if parents were foreign born
- 1900 Mortality schedules ordered destroyed by congress
 - Only 1900 Minnesota schedules survive; available in Minnesota state archives
- Mortality schedules may have encouraged states to collect death data ongoing in the form of **death or mortality registries**
- Important source of information *if* you have a relative that died during the restricted time period of the mortality schedules



SCHEDULE 3.—Persons who Died during the Year ending 1st June, 1860, in _____ **in the**
County of Jackson **State of** Florida **, enumerated by me,** J. A. Rapitt **Ass't Marshal.**

	NAME OF EVERY PERSON WHO DIED during the year ending 1st June, 1860, whose usual place of abode at the time of death was in this family.	DESCRIPTION.				Married or widowed.	PLACE OF BIRTH, Naming the State, Territory, or Country.	THE MONTH in which the person died.	PROFESSION, OCCUPATION, OR TRADE.	DISEASE OR CAUSE OF DEATH.	NUMBER OF DAYS ILL.	
		Age.	Sex.	White, black, or mulatto.	Free or slave.							
	1	2	3	4	5	6	7	8	9	10	11	
1	Martin H. Grace	6	M				Alabama	June		Inflammation of Bowels	7	1
2	Redin	18	M	B	S		S. Carolina	January		Pneumonia	14	2
3	Daria	7 1/2	M	B	S		Florida	October		"	21	3
4	Senny	12	M	B	S		"	January		"	14	4
5	Alexander	14	M	B	S		"	March		Dyspepsy	2 Months	5
6	Ramie	7 1/2	F	B	S		"	"		Burned	1	6
7	Ann	38	F	B	S		S. Carolina	June		Dyspepsia	4 Months	7
8	Frances	7 1/2	F	B	S		Florida	May		Unknown	Unknown	8
9	Andrew J. Howard	40	M			M	Georgia	April	Farmer	"	3 Weeks	9
10	Clara	15	F	B	S		Florida	May		Moving from Home	8	10
11	Senny Stone	5	M				S. Carolina	November		Congestive Chole	9	11
12	Infant unnamed	12	F				Florida	"		Unknown	2 Weeks	12

Name

Age at death/sex
Race/free or slave

Place of
birth

Mo of
death

Occupation

Cause of
death

Days
ill

SCHEDULE 2.—Persons who Died during the Year ending 1st June, 1870, in Springfield, in the
County of Henry, State of Missouri, enumerated by me, Sam B Allen, Ass't Marshal.

Number of the Family, as given in the 2d col- umn of Schedule 1.	Name of every person who died during the year ending June 1, 1870, whose place of abode at the time of death was in this family.	DESCRIPTION.			Married (M.) or Widowed (W.)	Place of Birth, naming the State or Territory of the U. S., or the country, if of foreign birth.	PARENTAGE.		The Month in which the person died.	Profession, Occupation, or Trade.	Disease or Cause of Death.
		Age last birth-day. If under one year, give months in fractions, as $\frac{1}{2}$.	Sex—Males (M.), Females (F.)	Color—White (W.), Black (B.), Mulatto (M.), Chi- nese (Ch.), Indian (I.)			Father of foreign birth.	Mother of foreign birth.			
1	2	3	4	5	6	7	8	9	10	11	12
1	277	Quincy John L	7	M	W	Missouri			Oct		Scrophula
2	286	Reup E. B.	13	M	W	Missouri			May		Dives
3	313	Prater Mary	5	F	W	Indiana			June		Cholera ^{septica} Mosp.
4	317	Colo Cyntha	2	F	W	Missouri			Sept		Scrophula
5	322	Boyd Samuel	46	M	W	N. Carolina			Jan		Consumption
6	353	Barnett Am	1	M	W	Missouri			Feb		Teething
7	352	James Reuben	5	M	W	Missouri			Feb		Dives

Census
household
number

Name

Age at death/Sex
Race/Marital Status

Place of
birth

Parents
Foreign
born

Mo of
death

Occupation

Cause of Death

State/County Death Registries: Family History Gold Mine!

- It appears some counties/states continued the practice of collecting death information outside of the federally required mortality schedules
- Information collected mirrors mortality schedules and then some!
- How pervasive was practice prior to state mandated death certification?
- Collected on an ongoing basis so more likely to find useful information on relatives than with mortality schedules



Example Death Registry, King County, WA 1893

Register of Deaths in King

RECORD NO.	FULL NAME OF DECEASED.	DATE OF DEATH.			Age last birthday.	Male or female.	White, black, Indian, etc.	Married, single, widow, or widower.	PLACE OF DEATH.	DISEASE, OR CAUSE OF DEATH.
		MONTH.	DAY.	YEAR.						
325	Deymour Francis	July	6	1892	30	male	White	Single	Silman	Fracture of Skull
343	Deulin Ernest	"	22	"	2	"	"	"	Seattle	Drowned
344	Deymour Francis	"	7	"	30	"	"	"	Silman	Accidentally killed
348	Dimmons Susan	May	23	"	49	Female	"	married	Seattle	Valerian of heart
352	Dutton Edna O.	July	28	"	16 Mo.	"	"	"	"	Cholera Inf.
354	Dauborn N.	Aug	8	"	5	male	"	Single	South Seattle	Albuminuria
355	Schacht H. A.	"	4	"	1	Female	"	"	Seattle	Dysentery
364	Starkes Jas.	"	8	"	10	male	"	"	Kirkland	Drowned
377	Shurtz Edward	Aug	14	"	4	"	"	"	Tremont	Anaemia

County King State of Washington.

BIRTHPLACE, NAME OF STATE OR FOREIGN COUNTRY.	RESIDENCE.	OCCUPATION.	NAME OF FATHER.	BIRTHPLACE OF FATHER, NAME OF STATE OR FOREIGN COUNTRY.	MAIDEN NAME OF MOTHER.	BIRTHPLACE OF MOTHER, NAME OF STATE OR FOREIGN COUNTRY.	BY WHOM RETURNED.
Germany	Seab.	Timberman		Germany		Germany	Dorton Geo. M.
Ohio	Seattle	Labourer		Virginia		Virginia	"
Prussia	"	Housewife	Detzler John.	Can Say			Chapman J. B.
							Pharphie C. W.
		Labourer					Dorton Geo. M.
Conn.	Seattle Wash.	Steamboat Capt.					Neills G. S.
Texas	Blk. Diamond		Salvini C.	Italy	Mary Nicolitti	Italy	Stone D. M.
Sweden	Yew Wash.	Housewife	Johnson Jacob	Sweden			Chase P. L.
Iceland	Seattle	Domestic					Dorton Geo. M.

- Name
- Date of Death
- Age/sex/race/marital status
- Place of death
- Cause of death
- Place of birth
- Residence
- Occupation
- Name of parents/place of birth
- Reporter



Name *Geo. S. Roberts*
 Place of Death *Rochester*
 Date of Death *Jan. 9* 18 *89*
 Age: Years, *56* Months, *8* Days, *4*
 Place of Birth *Rochester*
 Sex *M.* Color *W.* Married, Single, Widowed, or Divorced, *W.*
 Occupation *Farmer*
 Cause of Death
 Place of Burial
 Name of Father
 Name of Mother
 Birthplace of Father
 Birthplace of Mother
 Occupation of Father *Farmer*
 Name and Address of Physician (or other person) reporting said Death
Chas. Blazo
 Reported from *Rochester, N.H.*

THE STATE OF NEW HAMPSHIRE.
 OFFICE OF REGISTRAR OF VITAL STATISTICS.
 I hereby certify that the above death record is an exact copy of the return made to the State according to law.
Irving A. Watson
 Registrar of Vital Statistics.

176. FORM 104.

Within *Monroe* County, *Richmond City* District, *S. B. McConferdo*, Commissioner of the Revenue, in the year ending 31st December, 188*7*

NOTE.—It is hereby required that the Commissioners of the Revenue, in making up their Reports of Deaths, shall certify the aggregate number, and also give separately the number of White and Colored.

LINE NUMBERED.	NAME IN FULL.	DATE OF DEATH.	PLACE OF DEATH.	NAME OF DISEASE, OR CAUSE OF DEATH.	AGE.		NAMES OF PARENTS.	WHERE BORN.	OCCUPATION.	MARRIAGE, OR UNMARRIED.	NUMBER OF INFORMATION.	
					Years.	Months.					Name of person giving information of death.	Designation of testimony, whether sworn, or unsworn, and of date of same.
1621	Starks	" "	April 21 1887	Richmond	Unknown	1	James & Carrie Clarke	City		Single	J. E. Shallen	Father
1622	Stall	Marie	" 27 "	"	Embroider	27	Not Given	Chatsfield Co	Domestic	Widow	W. Augustus Lee	Physician
1623	Smith	" "	" 29 "	"	Unknown	1	Annie Smith - Mother	City		Single	W. H. Taylor	Cornet
1624	Smith	Robert	" May 6 "	"	Mal. Intestine & Stomach	63	Not Given	"	Compositor	Married	Edw. Monahan	Physician
1625	Starks	" "	" 1 "	"	Unknown	6	Sam & Mary Clarke	"		Single	J. E. Shallen	Father
1626	Smith	Louisa K.	" " 24 "	"	Rheumatic End	50	Not Given	"		Widow	Annie Shallen	Physician
1627	Stall	Mary C.	" " 24 "	"	Brain Fever	9	Not Given	Not Given		Single	A. L. Lefinich	"
1628	Lemmon	Charles	" " 11 "	"	Unknown	40	Not Given	Not Given	Latimer	Married	J. H. Hinkman	MA 36
1629	Shannon	" "	" 11 "	"	Convulsion	8	Mary Shannon - Mother	City		Single	W. H. Taylor	Cornet

Richmond,
Virginia 1887

Death Registries Around US Ancestry.com

Pittsburg, Penn
1888

Note line on
contributing causes!

1. Full Name of Deceased,	<i>Henry Kirkpatrick</i>		
2. Color, (Race, if not white,)	<i>White</i>		
3. Sex,	<i>Male</i>		
4. Age,	<i>70</i> Years,	Months,	Days.
5. Married, Single, Widow, or Widower,	<i>Married</i>		
6. Occupation,	<i>Book Keeper</i>		
7. Date of Death,	<i>May 9th</i>	188 <i>8</i>	
8. Cause of Death, { Primary, or Chief and Determining, Secondary, or Consecutive and Contributing,	<i>Softening of the Brain Apoplexy</i>		
9. Duration of last illness,			
10. When a Minor, { Name of Father, Name of Mother,			
11. Birthplace,	<i>Pittsburgh</i>		
12. Late Residence,	No. <i>67- Mahon</i>	Avenue, Street, <i>13th</i>	Ward.
13. Time of Residence therein.	<i>7</i> Years,	Months,	Days.
14. Place of Previous Residence,	<i>2nd Ave City</i>		
15. Place of Interment,	<i>Allegheny</i>		
16. Date of Interment,	<i>May 11th</i>		
17. Name of Physician or other Person signing Certificate,	<i>J. M. Lee</i>		
18. His Residence,	No. <i>173 Centre</i>	Avenue, Street, <i>11th</i>	Ward.
19. Undertaker,	<i>L. Binkhaus and Son</i>		
20. His Residence,	No. <i>520 Grant</i>	Avenue, Street, <i>5th</i>	Ward.
21. Date of Certificate,	<i>May 10th</i>		
22. Date of Registration,	<i>June 6th</i>		

New Hampshire 1889

Where to Find Mortality Schedules and Death Registries

- All mortality schedule data offered back to the states in 1918-1919
- Some took the data, and some did not.
- The Library of the Daughters of the American Revolution in Washington D.C. has the data from the nay states
- https://www.census.gov/history/www/genealogy/other_resources/mortality_schedules.html is the URL for the Bureau of Census PDF form that tells you if data exists and where it may be located
 - For example, Colorado was not a territory until 1861 so the mortality schedules are only available starting in 1870.



Where to Find Mortality Schedules and Death Registries



- Most major Family History sites have possible access to this data; good place to start would be Family Search Wiki although **Ancestry.com** seems to have the largest collection of data
- https://www.familysearch.org/en/wiki/How_to_Find_United_States_Death_Records
- Also search for mortality schedules by individual states: example Florida. I put in mortality schedules Florida into Google this appeared: https://www.floridamemory.com/discover/historical_records/mortality-schedules/ and it is awesome! Images of original forms by county!
- <https://www.germanroots.com/deathrecords.html> site that lists free and fee-based sites that contain death indexes as well as other vital data <http://www.deathindexes.com/>





Regatta Anacortes, WA

Death Certificates

Death Certificates: Into the Modern Era

- 1902 Bureau of the Census made a permanent agency of the federal government and moved to collect death vital statistics
- 1900 a US Standard Certificate of Death was developed
- States have been responsible for issuing and collecting and sending the information to the National Center for Health Statistics
- Data collected is used to direct research and public health programs to improve the health of the US
- The National Vital Statistics System also collects data on births, marriages, and fetal deaths



The U.S. Vital Statistics System: A National Perspective. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK219884/>

Reference: Date States Required Universal Death Certificates

State and Date		State and Date		State and Date		State and Date		State and Date	
Alabama	1908	Idaho	1911	Michigan	1867	New York	1880	Tennessee	1908
Alaska	1913	Illinois	1916	Minnesota	1908	North Carolina	1913	Texas	1903
Arkansas	1914	Indiana	1899	Mississippi	1912	North Dakota	1907	Utah	1905
California	1905	Iowa	1880	Missouri	1910	Ohio	1908	Vermont	1857
Colorado	1907	Kansas	1911	Montana	1907	Oklahoma	1908	Virginia	1853
Connecticut	1897	Kentucky	1911	Nebraska	1905	Oregon	1903	Washington	1907
Delaware	1881	Louisiana	1914	Nevada	1911	Pennsylvania	1906	West Virginia	1917
Florida	1899	Maine	1892	New Hampshire	1901	Rhode Island.	1853	Wisconsin	1907
Georgia	1919	Maryland	1898	New Jersey	1848	South Carolina	1915	Wyoming	1909
Hawaii	1859	Massachusetts	1841	New Mexico	1920	South Dakota	1905	Arizona	1909



How to Access Death Certificate Data


- Each state seems to have different rules regarding how to access death certificates
 - Some states consider vital statistics public information
 - Others restrict to those who need to know for wills, probate, etc.
 - Certified vs informational/genealogical versions of death certificates
- Initially try major family history websites as noted previously
- <http://www.cdc.gov/nchs/howto/w2w/w2welcom.htm> helpful if you want a copy that is not online
- <https://www.germanroots.com/deathrecords.html> updated site that lists both free and fee-based sites that contain death indexes
- Finally encourage you, as you feel comfortable, to put parent's and grandparent's death certificates and health information on your favorite family tree





If You Are Lucky...

- Example of Washington State digital archive that allows you to search for death certificates by name and date of death
- Able to find death dates, location and age but not all death certificates are currently digitized
- With time, more data will come online, or you can contact state and request a copy

Note on digital archive site: 1907-1960 files indexed by The Church Of Jesus Christ of Latter-Day Saints Family Search Indexing Project. Volunteers who participated in transcribing the death index 1907-1929 : Boojee Bowman, Spanaway; Hazel Rasar, Mount Vernon; Myra Horton, etc...



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Search

Record Series

Death Records

County

Clallam

Title

-- Select a Title --

Enter at least one search field, then click the 'Search' button in the lower right.

Person

LastFirstMiddleSoundex

smithJohn













What is Soundex?

Death Year Range

FromTo

1891

Search

LastName	FirstName	MiddleName	DeathYear	DeathLocation	County	Image Exists
SMITH	JOHN		1973	0	Statewide	N / A
SMITH	JOHN		1969	Walla Walla County	Statewide	N / A
SMITH	JOHN		1974	Pierce County	Statewide	N / A
SMITH	JOHN		1968	0	Statewide	N / A
SMITH	JOHN		1972	King County	Statewide	N / A
SMITH	JOHN		1965	King County	Statewide	N / A
SMITH	JOHN		1979	Kitsap County	Statewide	N / A
SMITH	JOHN		1966	0	Statewide	N / A
SMITH	JOHN		2002	King County	Statewide	N / A
SMITH	JOHN		1977	0	Statewide	N / A
SMITH	JOHN		2002	0	Statewide	N / A
SMITH	JOHN		1982	King County	Statewide	N / A
SMITH	JOHN		2002	King County	Statewide	N / A
SMITH	JOHN		1983	Clark County	Statewide	N / A
SMITH	JOHN		2001	Whatcom County	Statewide	N / A
SMITH	JOHN		1989	Snohomish County	Statewide	N / A
Smith	John		1964	Tacoma	Statewide	
SMITH	JOHN		2014	Lewis County	Statewide	N / A
SMITH	JOHN		1983	Clark	Statewide	
SMITH	JOHN		2016	Pierce County	Statewide	N / A
SMITH	JOHN		1989	Snohomish	Statewide	
SMITH	JOHN		2012	Skagit County	Statewide	N / A
SMITH	JOHN		1982	King	Statewide	
Smith	John		1964	Spokane	Statewide	
SMITH	JOHN		1972	King	Statewide	
SMITH	JOHN		1979	Kitsap	Statewide	
SMITH	JOHN		1968	Pierce	Statewide	
SMITH	JOHN		1974	Pierce	Statewide	
SMITH	JOHN		1969	Walla Walla	Statewide	
SMITH	JOHN		1977	Grant	Statewide	
Smith	John		1961	Spokane, Spokane, Washington	Statewide	
SMITH	JOHN		1973	Spokane	Statewide	

Family History Jeopardy: Name that Illness

Medical Terminology

- Cerebrovascular accident (CVA)
- Myocardial infarction
- Coronary artery disease
- Pulmonary embolism
- Pulmonary edema
- Sepsis
- Peritonitis
- Hepatitis
- Nephritis

Translation

- Stroke
- Heart attack
- Angina/heart attack
- Blood clot in the lungs
- Fluid in the lungs
- Bacterial infection in the blood
- Infection of the abdominal cavity
- Inflammation of the liver
- Inflammation/damage to kidney



What to Look for on Family Death Certificates?

- Demographic data of course!
- Who is the informant?
 - Critical to the accuracy of the demographic data
- Immediate cause of death or mechanism of death
- Antecedent cause(s) of death
 - Want to see sequence of events that lead to immediate cause of death
 - For family health portrait these items may be more important
- Other significant conditions
- What do the numbers mean often found on the death certificates?



The Family Historian and Family Health Information

- To develop a reasonable **family health portrait**, death certificates are important source of info 2nd only to information from living relatives
- Need at least 3 generations although more is better
- Family reunions may be a great opportunity to collect important family health info for those living/dead
 - We rarely discuss family health issues at family reunions; Some issues may be sensitive
 - My family generally discusses best homemade ice cream recipes and who will be making tamales for the next reunion
- *Include important health info in personal and family life histories; post available death certificates*



Example of Early Version of US Death Certificate

- Look at demographics
- Informant is daughter, Olive
- Immediate cause of death
- This older version had contributory causes but no listing of other significant illnesses
- Does give occupation
- Note famous father



Note: young people may need to have their boomer grandparents interpret the cursive writing

PLACE OF DEATH			State Board of Health File No. 164 630	
County	Utah	Moroni	L. Pratt	
Township				
Village or City	Provo	(No. 260 E. 2nd St.; 1st Ward)		
2 FULL NAME Moroni S. Pratt				
PERSONAL AND STATISTICAL PARTICULARS			MEDICAL CERTIFICATE OF DEATH	
3 SEX Male	4 COLOR OR RACE White	5 SINGLE MARRIED WIDOWED OR DIVORCED Widower	10 DATE OF DEATH April 8, 1913	
6 DATE OF BIRTH December 7, 1844			17 I HEREBY CERTIFY, That I attended, deceased from July 1, 1913, to April 8, 1913.	
7 AGE 68 yrs. 4 mos. 1 ds.			that I last saw him alive on April 8, 1913, and that death occurred, on the date stated above, at 4 P.M.	
8 OCCUPATION (a) Trade, profession or particular kind of work. (b) General nature of industry, business, or establishment in which employed (or employer) Fence Manufacturer			The CAUSE OF DEATH* was as follows: Cancer of Stomach	
9 BIRTHPLACE (State or country) Illinois			Contributory One (Duration) One yr. - mos. - ds.	
PARENTS	10 NAME OF FATHER Parley P. Pratt		Contributory No other cause known	
	11 BIRTHPLACE OF FATHER (State or country) New York		(Signed) Fred W. Taylor M.D.	
	12 MAIDEN NAME OF MOTHER Mary Ann Forst		May 2, 1913 (Address) Provo, Ut.	
13 BIRTHPLACE OF MOTHER (State or country) Maine			* State the DISEASE CAUSING DEATH, or, in deaths from VIOLENT CAUSES, state (1) MEANS OF INJURY; and (2) whether ACCIDENTAL, SUICIDAL OR HOMICIDAL.	
14 THE ABOVE IS TRUE TO THE BEST OF MY KNOWLEDGE				
(Informant) Mrs. Andrew Andrew				
(Address) Provo, Utah				
15 Filed April 10, 1913 R. Merrill M.D. REGISTRAR				
21 58 23 NO. OF BURIAL PERMIT				
18 PERCE OF BURIAL OR REMOVAL			DATE OF BURIAL	
Viro Utah			April 11, 1913	
20 UNDERTAKER			ADDRESS	
O. H. Bigdon			Provo	
READ CAREFULLY INSTRUCTIONS ON BACK OF CERTIFICATE				

Indexed Data on My Paternal Grandfather's Death Certificate From Family Search



- Indexed data on major family history sites **does not** include causes of death or health information!!!

- WHAT???**

Charles Frederick Gardner Arizona Deaths, 1870-1951

Name:	Charles Frederick Gardner • Edit
Sex:	Male
Sex:	M
Age:	64
Age:	64y 10m 9d
Birth Year (Estimated):	1887
Death Date:	20 Mar 1951
Death Date:	20 Mar 1951
Death Place:	Douglas, Cochise, Arizona, United States
Father's Name:	Charles Frederick Gardner
Mother's Name:	Amelia Anderson
Record Number:	43

But Luckily the Actual DC is Available!

- Note the usual demographics
- Look for the informant
 - If second degree relative, confirm birthdate and name sequence**
- Cause of death
 - Immediate cause
 - Antecedent causes more important to develop family health portrait**
 - There is no sequence to cause of death**
- Other significant conditions is blank

ARIZONA STATE DEPARTMENT OF HEALTH
DIVISION OF VITAL STATISTICS

CERTIFICATE OF DEATH

STATE FILE NO. 1298
49

REGISTRAR'S NO.

BIRTH NO.

1. PLACE OF DEATH A. COUNTY Cochise		2. USUAL RESIDENCE (WHERE DECEASED LIVED, IF INSTITUTION; RESIDENCE BEFORE ADMISSION) A. STATE Arizona B. Coconino	
B. CITY (IF OUTSIDE CORPORATE LIMITS, WRITE RURAL) Douglas		C. CITY (IF OUTSIDE CORPORATE LIMITS, WRITE RURAL) Elfrida	
D. FULL NAME OF HOSPITAL OR INSTITUTION Douglas, Hospital		D. STREET ADDRESS (IF RURAL, GIVE LOCATION)	
3. NAME OF DECEASED A. (FIRST) Charles B. (MIDDLE) Frederick C. (LAST) Gardner		4. SEX Male	
5. COLOR OR RACE White			
6. MARRIED NEVER MARRIED WIDOWED <input type="checkbox"/> DIVORCED <input type="checkbox"/>		7. DATE OF BIRTH MONTH DAY YEAR May 11 1886	
8. AGE YEARS MONTHS DAYS 64 10 9		9. USUAL OCCUPATION (GIVE KIND OF WORK DURING MOST OF LIFE, EVEN IF RETIRED) Farmer	
10. BIRTHPLACE (STATE OR FOREIGN COUNTRY) Arizona		11. CITIZEN OF WHAT COUNTRY? U. S.	
12. WAS DECEASED EVER IN U. S. ARMED FORCES? (YES, NO, OR UNKNOWN) (IF YES, WAR OR DATES OF SERVICE) No		13. SOCIAL SECURITY NO.	
14A. FATHER'S NAME Charles Frederick Gardner		14B. BIRTHPLACE (STATE OR COUNTRY) Utah	
15A. MOTHER'S MAIDEN NAME Amelia Anderson		15B. BIRTHPLACE (STATE OR COUNTRY) Utah	
16. INFORMANT'S SIGNATURE Charles E. Gardner		17. DATE OF DEATH MONTH DAY YEAR March 20 1951	
18. CAUSE OF DEATH ENTER ONLY ONE CAUSE PER LINE FOR (a), (b), (c). *THIS DOES NOT MEAN THE MODE OF DYING, SUCH AS HEART FAILURE, ASTHENIA, ETC. IT MEANS THE DISEASE INJURY, OR COMPLICATION WHICH CAUSED DEATH. PLACE DISEASE CONTRIBUTED.		MEDICAL CERTIFICATION DISEASE OR CONDITIONS DIRECTLY LEADING TO DEATH* (a) Acute Coronary Thrombosis ANTECEDENT CAUSES MORBID CONDITIONS, IF ANY, GIVING DUE TO (b) _____ RISING TO THE ABOVE CAUSE (a) STATING THE UNDERLYING CAUSE LAST DUE TO (c) _____ II. OTHER SIGNIFICANT CONDITIONS CONDITIONS CONTRIBUTING TO THE DEATH BUT NOT RELATING TO THE DISEASE OR CONDITION CAUSING DEATH.	
19A. DATE OF OPERATION		20. AUTOPSY? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
21A. ACCIDENT SUICIDE HOMICIDE (SPECIFY)		21B. PLACE OF INJURY (E. G., IN OR ABOUT HOME, FARM, FACTORY, STREET, OFFICE BLDG., ETC.)	
21C. (CITY OR TOWN) (COUNTY) (STATE)			
21D. TIME (MONTH) (DAY) (YEAR) (HOUR) OF INJURY M		21E. INJURY OCCURRED WHILE AT NOT WHILE WORK <input type="checkbox"/> AT WORK <input type="checkbox"/>	
21F. HOW DID INJURY OCCUR?			
22. I HEREBY CERTIFY THAT I ATTENDED THE DECEASED FROM March 3 1951 TO March 20 1951, THAT I LAST SAW THE DECEASED ALIVE ON March 20 1951, AND THAT DEATH OCCURRED AT 12:30 P. M. FROM THE CAUSES AND ON THE DATE STATED ABOVE.			
23A. SIGNATURE E. E. Ramsey		23B. ADDRESS Douglas, Ariz	
23C. DATE SIGNED 3-21-51			
24A. BURIAL <input checked="" type="checkbox"/> CREMATION <input type="checkbox"/> REMOVAL <input type="checkbox"/>		24B. DATE March 23, 1951	
24C. NAME OF CEMETERY OR CREMATORY White water		24D. LOCATION (CITY, TOWN, OR COUNTY) (STATE) Elfrida, Arizona	
25A. DATE REC'D BY LOCAL REG. Mar. 24 - 51		25B. REGISTRAR'S SIGNATURE E. E. Ramsey	
26. FUNERAL DIRECTOR'S SIGNATURE Charles Faye		27. EMBALMER'S SIGNATURE Charles Faye	
28. CERT. NO. 327			

Thoughtfully Completed Death Certificate

- Look at the well described sequence of events that lead to the final cause of death (pulmonary edema)
- The MD also included other medical issues (COPD)
- Medical profession has come under criticism for not filling certificates properly**
- Current certificates have 3 pages of instructions and an example of doing it right

Washington State Digital Archives

STATE OF WASHINGTON DEPARTMENT OF SOCIAL AND HEALTH SERVICES VITAL RECORDS CERTIFICATE OF DEATH											
LOCAL FILE NUMBER 767		3. DEATH DATE (MO DAY YR) Male Aug. 3, 1983		146-8		3 19718 STATE FILE NUMBER					
1. NAME - FIRST, MIDDLE, LAST John (nmi) Smith		2. SEX Male		3. DEATH DATE (MO DAY YR) Aug. 3, 1983		9. COUNTY OF DEATH Clark					
4. RACE (WHITE, BLACK, AM IND, S ETC. SPECIFY) White		5. AGE - LAST BIRTHDAY 79		6. UNDER 1 YEAR MOS		7. UNDER 1 DAY DAYS HOURS MINS		8. BIRTHDATE (MO DAY YR) Aug. 30, 1903		10. CITY, TOWN OR LOCATION OF DEATH Vancouver	
11. PLACE OF DEATH - <input checked="" type="checkbox"/> BOX FOR PLACE THEN GIVE ADDRESS OR INSTITUTION NAME 0 <input type="checkbox"/> HOME 2 <input type="checkbox"/> IN TRANSPORT 3 <input type="checkbox"/> EMERG RM/OUT PTN 4 <input type="checkbox"/> HOSP 5 <input type="checkbox"/> NUR HOME 1 <input type="checkbox"/> OTHER PLACE St. Joseph's Community Hospital		12. RECEIVED EMERGENCY CARE AMBULANCE, FIREFTR, PARAMED? No		13. BIRTH STATE (IF NOT IN USA GIVE COUNTRY) North Carolina		14. CITIZEN OF WHAT COUNTRY U. S. A.		15. MARRIED, NEVER MARRIED, WIDOWED, DIVORCED Widowed		16. SPOUSE (IF WIFE GIVE MAIDEN NAME) -----	
17. WAS DECEDENT EVER IN U.S. ARMED FORCES? (YES/NO) Yes		18. SOCIAL SECURITY NO 538 10 7298		19. USUAL OCCUPATION (GIVE KIND OF WORK DONE DURING MOST OF WORKING LIFE EVEN IF RETIRED.) burner		20. KIND OF BUSINESS OR INDUSTRY naval yards		21. RESIDENCE - NUMBER AND STREET 2806 R Street		22. CITY/TOWN, OR LOCATION Vancouver	
23. INSIDE CITY LIMITS? (YES/NO) Yes		24. COUNTY Clark		25. STATE Washington		26. FATHER - NAME FIRST, MIDDLE, LAST John Smith		27. MOTHER - MAIDEN NAME FIRST, MIDDLE, LAST Bettie Strickland		28. INFORMANT - NAME Marcella Moore	
29. MAILING ADDRESS 2806 R Street, Vancouver, Washington		30. CITY OR TOWN Vancouver		31. STATE Washington		32. ZIP 98663		33. BURIAL, CREMATION, REMOVAL, OTHER (SPECIFY) Burial		34. DATE (MO DAY YR) Aug. 8, 1983	
35. CEMETERY/CREMATORY - NAME Willamette Nat'l Cemetery		36. LOCATION - CITY/TOWN, STATE Portland, OR		37. FUNERAL DIRECTOR SIGNATURE X <i>M. N. Staples</i>		38. NAME OF FACILITY Evergreen Staples Funeral C.		39. ADDRESS OF FACILITY 4700 St. Johns Road Vancouver, Wn. 98661		40. TO BE COMPLETED ONLY BY CERTIFYING PHYSICIAN 37. TO THE BEST OF MY KNOWLEDGE, DEATH OCCURRED AT THE TIME, DATE, AND PLACE AND DUE TO THE CAUSE(S) STATED SIGNATURE AND TITLE X <i>Charles Plamp III M.D.</i>	
41. TO BE COMPLETED ONLY BY MEDICAL EXAMINER OR CORONER 41. ON THE BASIS OF EXAMINATION AND/OR INVESTIGATION, IN MY OPINION DEATH OCCURRED AT THE TIME, DATE AND PLACE AND DUE TO THE CAUSE(S) STATED SIGNATURE AND TITLE X		42. DATE SIGNED (MO DAY YR) 8/8/83		43. HOUR OF DEATH (24 HRS) 1915		44. DATE SIGNED (MO DAY YR) 1915		45. HOUR OF DEATH (24 HRS) 1915		46. NAME AND TITLE OF ATTENDING PHYSICIAN IF OTHER THAN CERTIFIER (TYPE OR PRINT) Charles Plamp, M.D., 700 N. E. 87th Ave. Vancouver, WA 98664	
47. IMMEDIATE CAUSE (A) <i>Pulmonary Edema</i> (B) <i>Congestive Heart Failure</i> (C) <i>Chronic Renal Failure</i>		48. OTHER SIGNIFICANT CONDITIONS-CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO CAUSE GIVEN ABOVE <i>Chronic Obstructive Pulmonary Disease</i>		49. AUTOPSY? (YES/NO) No		50. WAS CASE REFERRED TO MEDICAL EXAMINER OR CORONER? (YES/NO) No		51. ACC. SUICIDE, HOMICIDE, UNDET. OR PENDING INVEST. (SPECIFY)		52. INJURY DATE (MO DAY YR)	
53. HOUR OF INJURY (24 HRS)		54. DESCRIBE HOW INJURY OCCURRED		55. INJURY AT WORK? (YES/NO)		56. PLACE OF INJURY - AT HOME, FARM, STREET, FACTORY, OFFICE BLDG. ETC. (SPECIFY)		57. LOCATION - STREET OR RFD NO., CITY/TOWN, STATE		58. REGISTRAR SIGNATURE X <i>Mark D. Bower</i>	
59. DATE RECEIVED (MO DAY YR) AUG 9 1983		60. FOR STATE REGISTRAR USE ONLY		61. DOCUMENTARY EVIDENCE		62. REVIEWED BY		63. DATE		64. DOCUMENTARY EVIDENCE	
65. REVIEWED BY		66. DATE		67. DOCUMENTARY EVIDENCE		68. REVIEWED BY		69. DATE		70. DOCUMENTARY EVIDENCE	



Another Thoughtfully Completed Death Certificate

- This person died of a heart attack with a well-defined sequence of events leading to the heart attack
- Other conditions include diabetes
- Died at age 57
- As we will see, useful information for descendants

48. NAME AND ADDRESS OF CERTIFIER—PHYSICIAN, MEDICAL EXAMINER OR CORONER (Type or Print) Marse McNaughton, M.D. 3733 S. Thompson, Tacoma, Washington 98408				49. ME/CORONER FILE NUMBER	
50. ENTER THE DISEASES, INJURIES, OR COMPLICATIONS WHICH CAUSED THE DEATH:					
CAUSE OF DEATH	IMMEDIATE CAUSE (Final disease or condition resulting in death). DO NOT ENTER THE MODE OF DYING, SUCH AS CARDIAC OR RESPIRATORY ARREST, SHOCK, OR HEART FAILURE. LIST ONLY ONE CAUSE ON EACH LINE. Sequentially list conditions, if any, leading to immediate cause. Enter UNDERLYING CAUSE (Disease or injury which initiated events resulting in death) LAST.		A. <i>myocardial Infarction</i>		INTERVAL BETWEEN ONSET AND DEATH <i>hrs.</i>
	B. DUE TO, OR AS A CONSEQUENCE OF: <i>coronary Artery Disease</i>		INTERVAL BETWEEN ONSET AND DEATH		
	C. DUE TO, OR AS A CONSEQUENCE OF: <i>Arteriosclerosis Atherosclerosis</i>		INTERVAL BETWEEN ONSET AND DEATH		
	D. DUE TO, OR AS A CONSEQUENCE OF:		INTERVAL BETWEEN ONSET AND DEATH		
51. OTHER SIGNIFICANT CONDITIONS—CONDITIONS CONTRIBUTING TO DEATH BUT NOT RESULTING IN THE UNDERLYING CAUSE GIVEN ABOVE: <i>Diabetes.</i>				52. AUTOPSY? (Yes / No) No	53. WAS CASE REFERRED TO MEDICAL EXAMINER OR CORONER? (Yes / No) No
54. ACC. SUICIDE, HOM., UNDET., OR PENDING INVEST. (Specify)		55. INJURY DATE (Mo, Day, Yr)	56. HOUR OF INJURY (24 Hrs)	57. DESCRIBE HOW INJURY OCCURRED:	
58. INJURY AT WORK? (Yes / No)		59. PLACE OF INJURY—AT HOME, FARM, STREET, FACTORY, OFFICE BLDG, ETC. (Specify)		60. LOCATION—STREET OR RFD NO., CITY/TOWN, STATE	
61. RECORD AMENDMENT (Registrar use only) ITEM DOCUMENTARY EVIDENCE REVIEWED BY DATE		62. REGISTRAR SIGNATURE X <i>Jeffrey M Allen</i>		63. DATE RECEIVED (Mo, Day, Yr.) JAN 3 0 1992	

FOR INSTRUCTIONS SEE BACK AND HANDBOOK

DOH 110-008 (Rev. 7/91) (formerly DSHS 9-150)

A



Harry Houdini's Death Certificate: What Do the Numbers Mean?

- Harry Houdini (AKA Erik Weisz) famous as an escape artist
- Died October 1926 of diffuse Streptococcal peritonitis due to a ruptured appendix
- **Note the numbers next to the medical diagnoses**
- ICD 3 1920 (205 diagnoses)
 - 90 - heart disease
 - 117 - appendicitis
 - 126 - peritonitis
- Heart disease age 52 useful health information for family



1 PLACE OF DEATH
County.....Wayne.....
Township.....
Village.....
City.....Detroit.....

MICHIGAN DEPARTMENT OF HEALTH
Division of Vital Statistics
CERTIFICATE OF DEATH

out
58274757
Register No. 14890

(No. Grace Hospital St. Ward)
(If death occurred in a hospital or institution, give its NAME instead of street and number)

2 FULL NAME.....Harry Houdini.....
(Usual place of abode)
a) Residence No. New York City St. Ward X
Length of residence in city or town where death occurred yrs. mos. 7 ds. (If non-resident give city or town and state) yrs. mos. ds.

PERSONAL AND STATISTICAL PARTICULARS

3 SEX Male 4 Color or Race White 5 Single, Married, Widowed or Divorced (Write the word) Married

6a If married, widowed or divorced HUSBAND of (or) WIFE of Beatrice Rahner

6 DATE OF BIRTH (Month, day and year) April 6, 1874.

7 AGE Years Months Days If LESS than 1 day...hrs. OR...min.
52 6 25

8 OCCUPATION OF DECEASED
(a) Trade, profession or particular kind of work Actor & Lecturer
(b) General nature of industry, business, or establishment in which employed (or employer)
(c) Name of employer.

9 BIRTHPLACE (city or town) (state or country) Appleton, Wisconsin

PARENTS

10 NAME OF FATHER Samuel Mayer

11 BIRTHPLACE OF FATHER (city or town) (state or country) Unknown

12 MAIDEN NAME OF MOTHER Cecilia Steiner

13 BIRTHPLACE OF MOTHER (city or town) (state or country) Unknown

14 Informant Theodore Hardeen
(Address) 537 N. 21st Street Brooklyn

15 Filed....., 192..... Registrar.

MEDICAL CERTIFICATE OF DEATH

16 DATE OF DEATH (Month, day and year) Oct. 31, 1926 192

17 I HEREBY CERTIFY, That I attended deceased from Oct. 25, 1926 to Oct. 31, 1926 that I last saw him alive on Oct. 31, 1926 and that death occurred on the date stated above at 1:30 p.m.

The CAUSE OF DEATH* was as follows:
Diffuse peritonitis
Streptococci

CONTRIBUTORY (Secondary) Ruptured Appendix
117
90
126

18 Where was disease contracted? Montreal
If not at place of death? Yes Date of... 10/25/26

Did an operation precede death? Yes Date of... 10/25/26

Was there an autopsy? No

What test confirmed diagnosis? Operation

(Signed) Chas. S. Kennedy, M.D.
Nov 1, 1926 Address 10 Peter Ave.

*State the Disease Causing Death, or in deaths from Violent Causes, state (1) Means and Nature of Injury, and (2) whether Accidental, Suicidal, or Homicidal
(See reverse side for further instructions.) 2015

19 PLACE OF BURIAL, CREMATION, OR REMOVAL
New York City
Date of Burial 10/1/26

20 UNDERTAKER
William R. Hamilton Co.
Address Detroit

Familial Illnesses of Consequence

Seattle from the water



Familial Illness of Consequence: The Big 5 +1

- I am convinced that the family historian can have a profound impact on family health by including health information in our family history documentation
- There are many illness that have a genetic basis and recognizing these illness may influence the health of current and future family members
- We will review some of the most important
- Our ancestors can serve as a warning to us!
- **Example:** *as a 25-year-old, if you knew you were at high risk for diabetes would that influence your lifestyle choices going forward?*



Heart and Blood Vessel Disease: The Big One

- Cardiovascular disease accounts for 1 in 5 deaths in the US yearly
- A family history of **heart attack** (MI, myocardial infarction, coronary thrombosis), **heart failure** (congestive heart failure, dropsy), **stroke** (CVA, apoplexy), or **atherosclerosis** through several generations and especially occurring in the 50's or early 60's is significant
- **Risk factors for cardiovascular disease include:**

<i>Family history</i>	<i>High cholesterol</i>
<i>Smoking</i>	<i>Heavy alcohol use</i>
<i>Hypertension</i>	<i>Diabetes</i>
<i>Obesity</i>	
- Modifying these risk factors can impact future disease!



Wikipedia

Breast and Ovarian Cancer

- A family history of either of these cancers in a mother, sibling, or child increase risk of cancer in other close female relatives
- May need a test for a specific gene abnormality BRCA 1 or 2 and early screening tests
- Lower risk of **breast cancer** by maintaining a healthy weight, avoiding alcohol & exercising on a regular basis. Influenced by hormonal therapy
- No known way to modify risk of **ovarian cancer** except removal if at very high risk
- Cancer of the breast first appeared in ICD2 in 1909, ovarian cancer in ICD6 in 1948
- ***Note: BRCA genetic abnormalities can affect men with increased breast, prostate and pancreatic cancer risk***



Colon Cancer

- Several family members with colon cancer before age 50 is important
- If so, screening should start at age 40 rather than 45 years of age with colonoscopy
- **Lynch syndrome** is a disease with very strong genetic component. Genes that repair DNA are abnormal
- Look for cancers of these organs in your family history research:

Colon

Liver

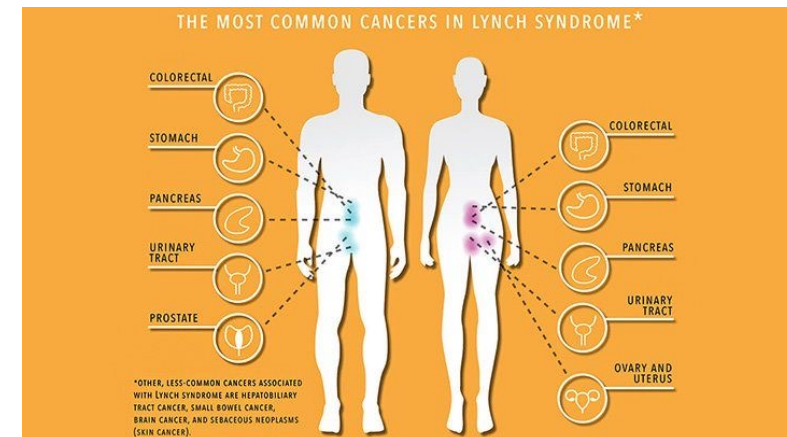
Brain

Stomach

Kidney

Ovarian/uterine

- Cancer of intestines/other abdominal organs in ICD 2 in 1909; cancer of the large intestine ICD 6 1948



Diabetes

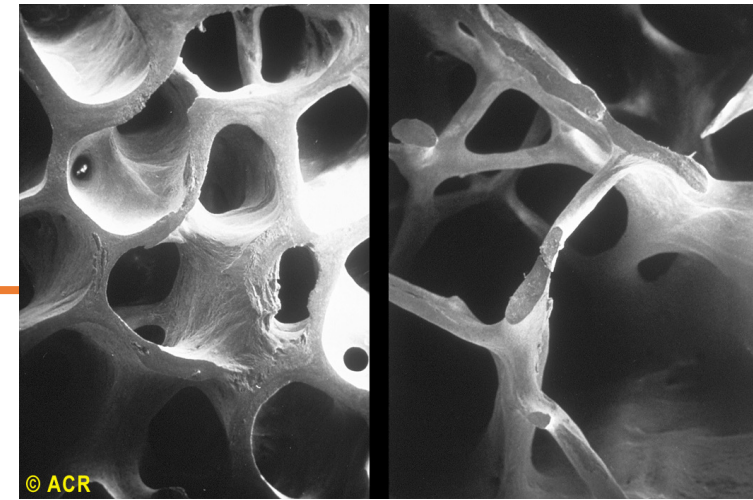


- **Types**
 - **Gestational** – diabetes during pregnancy; increases risk of type 2 diabetes later in life
 - **Type 1** – autoimmune attack against insulin producing cell in pancreas usually early in life. Affects 3 million people in US
 - **Type 2** – later in life and caused by insufficient insulin for needs of body. Major cause of diabetes & affects 35 million people in US
 - **Prediabetes** – those at risk for diabetes due to risk factors; **96 million** in US
- **Risk factors for type 2 diabetes**
 - Family history *Being overweight*
 - Certain medications *Diet*
- Look for diabetes or diabetes mellitus on death certificates



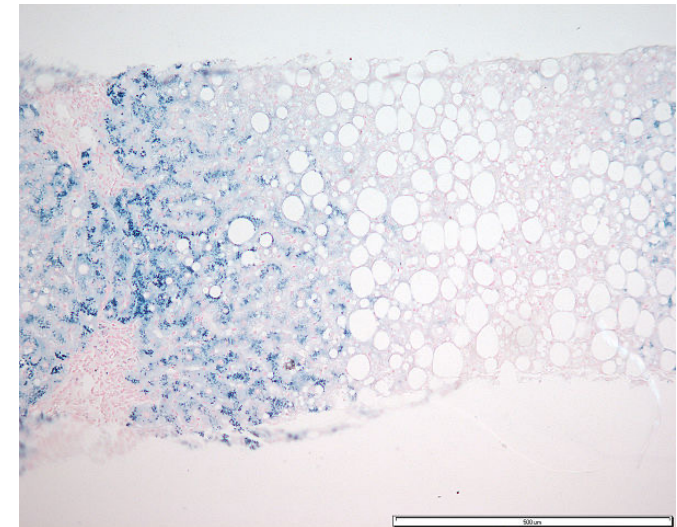
Osteoporosis

- Osteoporosis or weakening of the bones affects 20% of women and 5% of men over age 50 years.
- **Risk factors include:**
 - Family history
 - Heavy alcohol use
 - Certain medications
 - Smoking
 - Having a disease like rheumatoid arthritis
 - Diets low in vitamin D and calcium
- Weight bearing exercise important as is a good diet and avoiding risk activities i.e., smoking and alcohol use
- Osteoporosis first appeared in ICD 8 in 1965. Look for fractures in relatives



Hemochromatosis

- Iron storage disease where affected people hang on to too much iron that then deposits in the tissues including heart, liver, pancreas, joints, and skin and can lead to organ damage
- 1 of every 300 people of northern European decent affected
- Appears in men in 40's-50's; women a bit later
- A simple blood test looking for the amount of iron in the body and/or a gene test can be done
- Look for ancestors with unexplained liver disease, heart failure, and diabetes



Iron accumulated in liver

Family Health Portrait

Makah Bay, Neah Bay, Washington



Family Health Portrait

- CDC website has a site that allows you to create your own family health portrait <http://kahuna.clayton.edu/jqu/FHH/html/index.html>
- You enter data that is saved in XML format to your computer, and you can add information to your family history chart and pedigree as more information becomes available
- Start with siblings, parents, aunts/uncles and grandparents
- Creates a family history chart that you can give to your health provider and a pedigree and **can share with family**
- Finally, can generate a risk profile for diseases found in your family health history




My Family Portrait Main Page

- It will initially ask you to indicate number of family members you want to include
- You can change the information as needed
- You will have to be in the program which will allow you to open your previous XML file
- From here view pedigree and family health chart and check disease risk

My Family Health Portrait

A tool from the Surgeon General



My Family Health History

Check your risk for certain common diseases in your family

[Check Your Familial Risk](#)

[Get Help For This Page](#)

Manage your data

[Save Data](#) - So you can use and update it later (do not use browser menu "save") **You have unsaved data!**

[Share Data](#) - Save for use by a family member


[Start Over](#) - Delete all unsaved data and restart with new data, or load saved data


View and print data

[Pedigree Drawing](#) [Family Health Table](#)


























Edit your family and health histories

[Add a Family Member](#) - Add another family member and enter their health information.

Click  in the table below to make changes to a family member's information and health history.

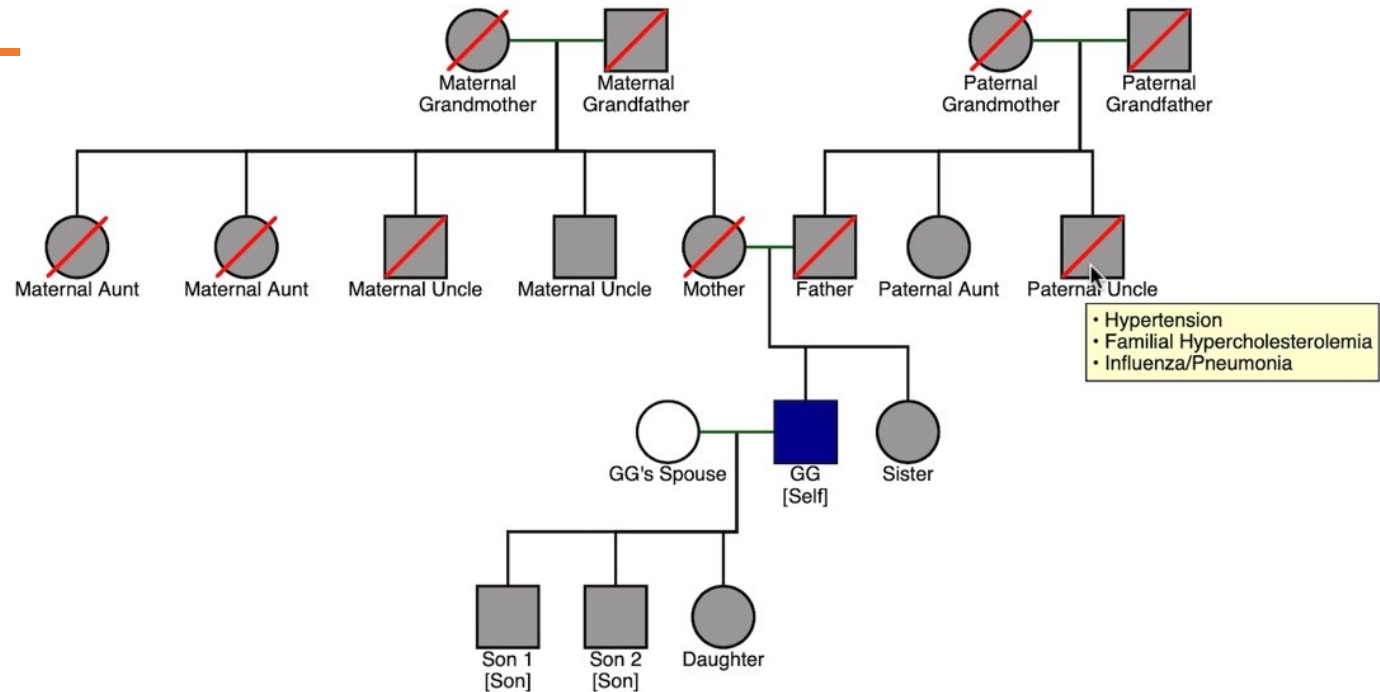
Click  in the table below to remove a family member and their data.

Remember to click the "Save Data" button above if you want to save your changes for future use.

	Name	Relationship To Me:	Still Living	Update History	Remove Relative
My Family					
GG		Self	Yes		
		Father	No		
		Mother	No		
Son 1		Sister	Yes		
		Son	Yes		
		Son 2	Yes		
Son 2		Daughter	Yes		
My Father's Side of the Family					
		Paternal Grandfather	No		
		Paternal Grandmother	No		
		Paternal Uncle	No		
		Paternal Aunt	Yes		
My Mother's Side of the Family					
		Maternal Grandfather	No		
		Maternal Grandmother	No		
		Maternal Uncle	No		
		Maternal Uncle	Yes		
		Maternal Aunt	No		

Family Health Pedigree

- Family pedigree is as noted (cool!)
- You can roll over a symbol with mouse and the health history is indicated as in paternal uncle
- Helpful key at bottom



Family Health Table

Condensed view showing 6 conditions that your health care provider should know about

Table of Family Diseases and Conditions

My Personal Information			
Age: 67	Height: 74 inches	Weight: 170 pounds	BMI: 21.83
Date of Report: Tuesday, September 20, 2022, 1:58 PM			

Print Save To Image

Show Full Width View (Six common conditions your doctor should know about are always shown)

Name & Relationship	Still Living, cause of death (age)	Heart Disease	Stroke/Brain Attack	Diabetes	Colon Cancer	Breast Cancer	Ovarian Cancer/Fallopian Tube Cancer	Other Diseases
GG (Self)	Yes							<div>Familial Hypercholesterolemia (50-59 years)</div> <div>Hypertension (40-49 years)</div> <div>Asthma (In Childhood)</div> <div>Colon Polyp (50-59 years)</div>
Father	No, Influenza/Pneumonia (60 years or older)	60 years or older						<div>Influenza/Pneumonia (60 years or older)</div>
Mother	No, Heart Attack (60 years or older)				50-59 years			<div>Type 2 Diabetes (50-59 years)</div> <div>Coronary Artery Disease (60 years or older)</div> <div>Heart Attack (60 years or older)</div>
Maternal Grandfather	No, Heart Attack (60 years or older)		60 years or older					<div>High Cholesterol (60 years or older)</div>
Maternal Grandmother	No, Heart Attack (60 years or older)							<div>Hypothyroidism (50-59 years)</div>
Paternal Grandfather	No, Heart Attack (60 years or older)							
Paternal Grandmother	No, Heart Attack (60 years or older)							<div>Dementia/Alzheimer's (60 years or older)</div>

Top Close

Top Close

Family Health Table Extended View

Show Compact View (Six common conditions your doctor should know about are always shown)

[illegible]

Check your familial risks for the following diseases:

Disease	Overall Risk Assessment	Assessment Detail
Colorectal Cancer	⚠️	🔍
Heart Disease	⚠️	🔍
Diabetes	⚠️	🔍

⚠️: possible risk increase based on the current information.

😊: average risk based on the current information.

🔍: not assessed due to lack of required information.

Click on the Assessment Detail icon 🔍 to perform the assessment.

Note: Overall Risk Assessment result may be changed after more information provided during the assessment.

- From your family health history information, it generates a risk chart
- Example of the colon cancer risk is to the right

Your Colorectal Cancer Familiar Risk Information

On this screen you can:

- Get your risk for colorectal cancer based on your personal and family history information
- Learn which risk factors you may have for colorectal cancer

This tool will run a series of tests, one at a time, to determine your risk for colorectal cancer.

Test	Reason
✅	You have never had any of the following cancer types: colon, colorectal, rectal, Lynch Syndrome/Hereditary non-polyposis colorectal cancer (HNPCC), uterine, pancreatic, ovarian, gastric, brain, liver, or kidney cancer.
❌	You have had colon polyps in the past.
✅	You have never had inflammatory bowel disease (either ulcerative colitis or crohn's disease).
✅	None of your family members have had Lynch Syndrome/Hereditary non-polyposis colorectal cancer (HNPCC) or Familial adenomatous polyposis (FAP)
❌	Your mother has had colon cancer in the past.
✅	None of your immediate relatives (father, mother, brothers, sisters, children) have had polyps.
✅	It takes two or more of your secondary relatives to trigger this test: Your maternal aunt has had colon cancer in the past.
❌	Your maternal aunt has had colon cancer before the age of 60 years or at the age of 60 years.
✅	None of your primary or secondary relatives (mother, father, sisters, brothers, sons, daughters, aunts, uncles, grandparents, grandchildren, halfsiblings) have had uterine cancer before the age of 50.
✅	None of your secondary relatives (aunts, uncles, grandparents, grandchildren, halfsiblings) have had uterine cancer. (There should be two or more to trigger this test.)
⚠️	You have at least one of the above risk factors. Based on this your risk of colorectal cancer is increased.

Get Increased
Risk Letter

Get Increased
Risk Provider Letter

Table Key:



No personal or
family history
with this test



There was
personal or
family history
with this test

No risk tool is perfect and your actual risk may be higher or lower than this. If you have questions about your colorectal cancer risk, please speak with a health care provider.

This risk tool is based on information from the United States Preventive Services Task Force and the National Comprehensive Cancer Network®.

More information about colorectal cancer risk can be found at:

- National Cancer Institute Colorectal Cancer Information
- National Cancer Institute Colorectal Cancer PDQ for Healthcare Professionals:



Diabetes Risk Assessment Tool

- Will ask a few questions
- Will then ask you about BMI (only you will see this)
- Will then generate a risk score for you
- Yikes!

Your Type 2 Diabetes Risk Information

On this screen you can:

- Get your risk for type 2 diabetes based on your personal and family history information
- Learn which risk factors you may have for type 2 diabetes
- Read and print sharable letters for you and your health care provider explaining your type 2 diabetes risk

1. How old are you

3

Less than 40 years (0 points) 40-49 years (1 point)
50-59 years (2 points) 60 years or older (3 points)

2. Are you a man or a woman

1

Man (1 point) Woman (0 points)

3. If you are a woman, have you ever been diagnosed with gestational diabetes?

0

Yes (1 point) No (0 points)

4. Do you have a mother, father, sister or brother with diabetes?

1

Yes (1 point) No (0 points)

5. Have you ever been diagnosed with high blood pressure?

1

Yes (1 point) No (0 points)

6. Are you physically active?

0

Yes (0 point) No (1 points)

7. What is your Body Mass Index? (see chart at right)

0

Height:

6 feet 2 inches

Weight:

170 pounds

Total Points

6

0 - 4 points: Risk not increased

5+ points: Risk Increased

No risk tool is perfect and your actual risk may be higher or lower than this. If you have questions about your type 2 diabetes risk, please speak with a health provider.

This risk tool is based on a version of the Diabetes Risk Test as developed by the American Diabetes Association. Additional information about the test can be Heikes KE, et al. Diabetes Risk Calculator: a simple tool for detecting undiagnosed diabetes and pre-diabetes. Diabetes Care. 2008 May;31(5):1040-5.

More information about type 2 diabetes risk can be found at: <http://diabetes.niddk.nih.gov/dm/pubs/riskfortype2/> and <http://ndep.nih.gov/am-i-at-risk/family-history/index.aspx#main>

Height	Weight			
	170 lbs			
	Normal	Overweight	Obese	
BMI	25 or less	25 - 30	30 - 35	3
4'10"	119 -	120-143	144-167	
4'11"	123 -	124-148	149-173	
5'0"	128 -	129-153	154-179	
5'1"	132 -	133-158	159-185	
5'2"	136 -	137-164	165-191	
5'3"	141 -	142-169	170-197	
5'4"	145 -	146-174	175-203	
5'5"	150 -	151-180	181-210	
5'6"	154 -	155-185	186-216	
5'7"	159 -	160-191	192-223	
5'8"	164 -	165-197	198-230	
5'9"	169 -	170-203	204-237	
5'10"	174 -	175-209	210-243	
5'11"	179 -	180-215	216-250	
6'0"	184 -	185-221	222-258	
6'1"	189 -	190-227	228-265	
6'2"	194 -	195-233	234-272	
6'3"	200 -	201-240	241-280	
6'4"	205 -	206-246	247-287	
	0 points	1 points	2 points	

Get Personal
Elevated Risk
Letter

Get Provider
Elevated Risk
Letter



Conclusion

- Using death data can help us identify our ancestors and link them to our family tree
- Using death data may help us identify diseases that might impact our health
- Addressing risk may allow us many more years of doing family history research!
- Develop plan for collecting, sharing, and recording family health information

