**Use of historical death certificates as a tool to study the changing dynamics of human populations**

**Pre-project Lab**

**exploring a historical death certificate database**

**Objectives**

* To become familiarized with a historical online death certificate database of a diverse population.
* To recognize the evolution of state death records through time.
* To learn how to collect and organize important identifying data found in death certificates.

**Explore the death certificate database**

You will conduct a series of queries in the Arizona Genealogy Birth and Death Certificates database website <http://genealogy.az.gov/index.htm>. Because this is a large database and it is not designed for specific searches, it is critical to become familiarized with it. In addition, you will notice that death certificates are available from 1870 to 1969. There are also birth records available on the website, but for this lab session we will be focusing on death certificates only. You will be working in groups of two or three and will need to answer all the questions.

***I. Death Records from 1900-1910***

a) In the archives website, place a query for: years “1900-1910” “Maricopa County” and “Death

Certificates”. Make sure to search only for “Search Public Death Certificates” (do not include

Query for birth certificates). Click “Submit”.

b) In the results page, you should be able to figure out how many records are available based

on your query. How many records did you produce? **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

c) At the top of the results list there are several ways to organize your search results for death records. Name the type of search queries (buttons) that you observe in the page. What headings (buttons) do you see?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) Click on the “Born” button until the arrow points up

Born ⏶

Died ⏶

Then, click on the “Died” button until the arrow points up

Clicking in the “Born” and “Died” arranges documents in order of birth dates and death dates in the list of death certificates. You might need to click on these buttons more than once to arrange the documents into chronological order, starting with the youngest diseased individuals. For example, the first record should be a young individual with close dates of birth and death.

e) Go to the bottom of the screen and in the “Page” section, how many pages are available for this query? \_\_\_\_\_\_\_\_\_\_\_\_\_

f) Select “Page \_\_\_\_\_”, then open record #\_\_\_\_\_\_\_. What is the name of the individual in this record?

g) How many identifiers are used in this death certificate? An identifier is a characteristic or feature of the individual in the record, such as name, age, sex, mother’s name and any other information that describes the circumstances of the death. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Then, name and describe 10 specific identifiers for the individual using the information in death certificate #\_\_\_\_\_.

h) Using the identifiers in the record, describe in a short paragraph the profile of the deceased individual depicted in certificate #\_\_\_\_\_ and the circumstances behind his/her death. Use as many identifiers as possible.

i) Then, return to the list of records from 1900-1910. Once you are in the list page, click on top of the page at “Query d1900-1910 (MARICOPA)”, it will take you directly to the query page.

***II. Death Records from 1930-1940***

a) Back in the archives website, click on the button and then place a query for: years “1930-1940”, “Maricopa County” and “Death Certificates”. Make sure to search only for “Search Public Death Certificates”. Click “Submit”.

Clear form

Born ⏶

b) Click on the “Born” button until the arrow points up

Died ⏶

Then, click on the “Died” button until the arrow points up. . Clicking on the “Born” and “Died” buttons will help you organize all the documents listed into chronological order, starting with the youngest diseased individuals. For example, the first record should be a young individual with close dates of birth and death.

c) How many records did your search produce? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) Go to the bottom of the screen and in the “Page” section, how many pages are available for this query? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

e) Go to the bottom of the page and in the “Page” section. Select “Page \_\_\_\_\_”, then open record #. What is the name of the individual in this record?

f) How many identifiers are used in this death certificate? An identifier is a characteristic or feature of the individual in the record, such as name, age, sex, mother’s name and any other information that describes the circumstances of the death.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Then, name and describe 10 specific identifiers for the individual using the information in death certificate #\_\_\_\_\_.

g) Using the identifiers in the record, describe in a short paragraph the profile of the deceased individual depicted in certificate #\_\_\_\_\_ and the circumstances behind his/her death. Use as many identifiers as possible.

h) Then, return to the list of records from 1930-1940. Once you are in the list page, click on top of the page at “Query d1930-1940 (MARICOPA)”, it will take you directly to the query page.

***III. Death Records from 1955-1965***

Clear form

a) Back in the archives website, click on the button place a query for: years “1955-1965”, “Maricopa County” and “Death Certificates”. Make sure to search only for “Search Public Death Certificates”. Click “Submit”.

Born ⏶

b) Click the “Born” button until the arrow points up

Died ⏶

Then, click on the “Died” button until the arrow points up. Clicking on the “Born” and “Died” buttons will help you organize all the documents listed into chronological order, starting with the youngest diseased individuals. For example, the first record should be a young individual with close dates of birth and death.

c) How many records did your search produce? **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

d) Go to the bottom of the screen and in the “Page” section, how many pages are available for this query? \_\_\_\_\_\_\_\_\_\_\_

e) Go to the bottom of the page and in the “Page” section, select “Page \_\_\_\_\_”, then open record #\_\_\_\_\_\_\_\_.

f) How many identifiers are used in this death certificate? An identifier is a characteristic or feature of the individual in the record, such as name, age, sex, mother’s name and any other information that describes the circumstances of the death.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Then, name and describe 10 specific identifiers for the individual using the information in death certificate #\_\_\_\_\_.

g) Using the identifiers in the record, describe in a short paragraph the profile of the deceased individual depicted in certificate #\_\_\_\_\_ and the circumstances behind his/her death. Use as many identifiers as possible.

**IV. Comparing data from death records**

Now that you have seen records from three different time periods (1900-1910, 1930-1940, and 1955-1965), compare the data from these three time periods death records.

a) What are general differences between the death records from the three time periods?

b) Which certificate time period offer more information?

c) What do you think are the advantages of using death records to study demography, ecology, and epidemiology? What are the drawbacks (disadvantages) of using death records, based on your observations?

**LITERATURE CITED**

Bolin, B, S. Grineski, and T. Collins. 2005. The geography of despair: environmental racism and the making of South Phoenix, Arizona, USA. Human Ecology Review 12:156-168.

Campos-Outcalt, D., D. Prybylski, A. J. Watkins, G. Rothfus, and A. Dellapenna. 1997. Motor-vehicle crash fatalities among American Indians and non-Indians in Arizona, 1979 through 1988. American Journal of Public Health 87:283-287.

Campos-Outcalt, D., C. Bay, A. Dellapenna, and M. K. Cota. 2003. Motor vehicle crash fatalities by race/ethnicity in Arizona, 1990–96. Injury Prevention 9:251–256.

Campos-Outcalt, D., C. Bay, A. Dellapenna, and M. K. Cota. 2002. Pedestrian fatalities by race/ethnicity in Arizona, 1990–1996. American Journal of Preventive Medicine 23:129–135.

Cobos, A. J., C. G. Nelson, M. Jehn, C. Viboud, and G. Chowell. 2016. Mortality and transmissibility patterns of the 1957 influenza pandemic in Maricopa County, Arizona. BMC Infectious Disease 16:405.

# Johansson, L. A., R. Westerling, and H. M. Rosenberg. 2006. Methodology of studies evaluating death certificate accuracy were flawed. Journal of Clinical Epidemiology 59:125-131.

Montana Office of Epidemiology and Scientific Support. Multiple and underlying causes of death using Montana death certificates, 1999-2014.

<https://dphhs.mt.gov/Portals/85/publichealth/documents/Epidemiology/VSU/VSU_Multiple_Cause_2017.pdf>

United States National Committee on Vital and Health Statistics. 1968. Uses of vital records for epidemiological research, a report of the united States national comittee on vital and health statistics. National Center for Health Statistics. DHEW Publications No. (HSM) 73-1265.

<https://www.cdc.gov/nchs/data/series/sr_04/sr04_007.pdf>