

Michigan law requires the medical section of a death certificate to be certified by an attending physician within 48 hours after the death of a person (MCL333.2843(1)(a)). As members of a profession dedicated to preserving life, physicians may at times view this requirement as a bureaucratic burden that detracts from time spent caring for the living. In fact, a thoughtful and detailed death certification represents a final act of care for a deceased patient, provides valuable information to surviving family members, informs public health, and supports biomedical research.

For deaths due to natural causes in Michigan, once the funeral director certifies the personal section and the physician certifies the medical section of the death certificate, the record is routed to the local registrar's office for filing. Proper and complete documentation of the causes of death by a physician, including intermediate and underlying causes along with all significant conditions that contributed to the death but are not in the causal sequence, is vital for high quality mortality data. The cause of death provided by a physician represents his or her best medical opinion, not certainty, as to the sequence of conditions and events resulting in death, and the use of qualifiers such as "suspected" or "probable" is allowed.

The cause of death information provided by physicians as text on a death certificate is coded to the International Classification of Disease, 10th Revision (ICD-10). ICD-10 codes combined with other demographic information from death certificates, including age, race, sex, occupation, and residence location are used by public health officials to identify unusual trends or clusters of disease or causes of death. These coded data are used to compile information on national and state leading causes of death (<https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm>) that are used to inform public policy and direct public health intervention efforts to reduce premature mortality due to preventable causes.

Death certificates are an important source of information for researchers conducting epidemiological studies, particularly those focusing on chronic diseases such as cancer or heart disease. More recently, health researchers have focused on death certificates as a source of information to understand why some persons are more susceptible to dying from COVID-19 than others. Each year, staff in the Division for Vital Records and Health Statistics (DVRHS) work with researchers from Michigan and across the nation to provide high quality mortality data to support population-based studies. Death data are often linked to other data sets including cancer and other chronic disease registries, hospital discharge data, notifiable diseases, and other public health data to extend the breadth of research questions that may be asked and answered.

Data provided on death certificates is used by epidemiologists, scientists, and policy makers to develop strategies to improve life, and those efforts have been successful. From 1900 to 2015, life expectancy at birth in the United States increased over 25 years. Public health and social services programs use death certificate data to target health and social services programs aimed at reducing suicide deaths. Demographers and public policy makers use death certificate data to understand how social, geographic, equity, and unequal health care access lead to wide

The Medical Professional's Role in Death Registration

variations in death rates across Michigan. Data from death certificates are provided to researchers in Michigan and nationwide to support biomedical research leading to improved medical treatments. Cancer researchers use death certificate data to calculate survival rates for different forms of cancer after treatment. Geneticists use death certificate data to discover the genetic characteristics of disease and death.

Michigan's Electronic Death Registration System (EDRS) allows medical staff and certifying physicians to log in and complete death certificates in a secure, online system that may be accessed in a web browser from anywhere. EDRS allows for easy referral of cases to medical examiners when required, or when there are questions.

We at DVRHS are working with the Centers for Disease Control and Prevention (CDC), national standards organizations, and electronic health record vendors to integrate EDRS with electronic medical records. We have also engaged the help of our partners at the Michigan Public Health Institute to help train physicians on how to use EDRS and, more importantly, how to effectively document the sequence of diseases and events leading to death, and how to describe events where that information is limited or unavailable. There is no cost to use EDRS, and training is provided for free. Some training resources also offer CME credit.

Electronic filing using EDRS improves the accuracy and timeliness of death reporting and has a significant impact on public health, contributing to longer, healthier lives. By writing accurate and effective death certifications, physicians are directly contributing to society's knowledge of the prevention and epidemiology of disease.

Please feel free to email me (duncanj11@michigan.gov) or if you would like more information on EDRS or on the death certificate process in general visit www.MichiganEDRS.org.

Thanks to your hard work, death certificates contribute to longer, healthier lives.