COLORADO END-OF-LIFE OPTIONS ACT, YEAR ONE 2017 DATA SUMMARY

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For more information, visit www.colorado.gov/pacific/cdphe/medical-aid-dying

Introduction

In 2016, Colorado voters approved Proposition 106, "Access to Medical Aid In Dying," which amends Colorado statutes to include the Colorado End-of-Life Options Act, *Article 48 of Title 25, Colorado Revised Statutes (C.R.S.)*. This Act allows an eligible terminally-ill individual with a prognosis of six months or less to live to request and self-administer medical aid-in-dying medication in order to voluntarily end his or her life; authorizes a physician to prescribe medical aid-in-dying medication to a terminally ill individual under certain conditions; and creates criminal penalties for tampering with a person's request for medical aid-in-dying medication or knowingly coercing a person with a terminal illness to request the medication.

This Act requires the prescribing physicians and the health care professionals dispensing aid-in-dying medication to report to the Colorado Department of Public Health and Environment (CDPHE) specific information outlined by the Act. This information is to be used to ensure documentation requirements of the Act are met, as well as to make available to the public an annual statistical report. Rules for reporting were adopted by the Board of Health in 2017 (6 CCR 1009-4, Reporting and Collecting Medical Aid-in-Dying Medication Information).

This report represents the first annual statistical report published per this Act, and describes Colorado's participation in End-of-Life Options activities in 2017.

Data collection and statistics

Statistics presented in this report reflect patients for whom prescriptions for aid-in-dying medication were written; and among those, patients to whom aid-in-dying medications were dispensed and deaths among patients subsequent to prescription of aid-in-dying medication. Data used for this report are based on required reporting forms and death certificates received by CDPHE. More information on the reporting process, required forms and this annual report are available at: www.colorado.gov/pacific/cdphe/medical-aid-dying

It is important to note that the Colorado End-of-Life Options Act does not authorize or require the Colorado Department of Public Health and Environment to follow up with physicians who prescribe aid-in-dying medication, patients or their families to obtain information about use of aid-in-dying medication. Additionally, the Colorado End-of-Life Options Act requires that the cause of death assigned on a patient's death certificate be the underlying terminal illness. Thus, statistics in this report for deaths are based on all deaths identified among individuals prescribed aid-in-dying medication, whether or not they used this medication, and noting that death may have been caused by ingestion of medication, the underlying terminal illness or condition, or some other cause.



Participation in end-of-life options activities

During 2017, 69 patients received prescriptions for aid-in-dying medications under the provisions of the Colorado End-of-Life Options Act. Among those prescribed aid-in-dying medication, CDPHE has received reports for 50 patients to whom aid-in-dying medication was dispensed. Also among those prescribed aid-in-dying medication, CDPHE has received death certificates for 56 patients through routine vital records registration. Note that not all of these deceased patients were dispensed aid-in-dying medication, and deaths may have been due to ingestion of aidin-dying medication, the underlying terminal illness or condition, or other causes.

Prescriptions for aid-in-dying medication were written by 37 unique Colorado physicians. The median age of patients prescribed aid-in-dying medication was 75 (minimum age was in the early 40's, maximum age was in the mid-90's). Among patients prescribed aid-in-dying medication, the most common illnesses or conditions were malignant neoplasms (cancer), heart diseases (including heart failure), chronic lower respiratory diseases (including chronic obstructive pulmonary disease, or COPD), and amyotrophic lateral sclerosis (ALS, or Lou Gehrig's disease) (Table 1).

Table 1. Underlying terminal illnesses/conditions among patients prescribed aid-in-dying medication, 2017.

	Number	Percent (%)
Total number of patients prescribed aid-in-dying medication	69	100
Malignant neoplasms - Total	44	63.8
Malignant neoplasm - Lung	10	14.5
Malignant neoplasm - Pancreas	8	11.6
Malignant neoplasm - Prostate	7	10.1
Malignant neoplasm - Head and neck	5	7.2
Malignant neoplasm - Colon and rectum	3	4.3
Malignant neoplasm - Other*	11	15.9
Amyotrophic lateral sclerosis (ALS)	7	10.1
Heart disease (including heart failure)	7	10.1
Chronic lower respiratory disease (including COPD)	6	8.7
Other illnesses/conditions	5	7.2

^{*&#}x27;Malignant neoplasms - Other' includes cancers of the bile duct, bladder, breast, central nervous system, esophagus, melanoma, ovary and other sites.

Aid-in-dying medications were dispensed by 19 unique pharmacists in Colorado, and included the following categories of drugs: Secobarbitol (brand name Seconol); a combination of diazepam, digoxin, morphine sulfate, and propranolol (also called DDMP combination); and morphine sulfate alone or in some other combination (Table 2).

Table 2. Categories of medications dispensed to patients prescribed aid-in-dying medication, 2017.

	Number	Percent (%)
Total number of patients to whom aid-in-dying medication was dispensed	50	100
Secobarbitol	21	42.0
DDMP combination (diazepam, digoxin, morphine sulfate, propranolol)	28	56.0
Other (morphine sulfate alone or some other combination)	1	2.0

Characteristics of patients prescribed aid-in-dying medication who have died

Among patients who died following an aid-in-dying prescription, the median duration of time between the date of prescription and date of death was 13 days (minimum of zero days, maximum of nearly three months). Table 3 presents characteristics of patients who have been prescribed aid-in-dying medication, and for whom a death certificate was subsequently registered with CDPHE. Again, it is important to note that these statistics reflect all deaths identified among individuals prescribed aid-in-dying medication, whether or not they used this medication, and irrespective of whether their death was caused by ingestion of medication, the underlying terminal illness or condition, or some other cause.

Table 3. Summary of patients who died following prescription of aid-in-dying medication, 2017.

	Number	Percent (%)
Total number of decedents prescribed aid-in-dying medication	56	100
Sex		
Female	26	46.4
Male	30	53.6
Age group		
35-54	3	5.4
55-64	9	16.1
65-74	16	28.6
75-84	17	30.4
85+	11	19.6
Race/ethnicity		
White, non-Hispanic	54	96.4
Other	2	3.6
Marital status		
Married	25	44.6
Divorced	16	28.6
Widow/widower	14	25
Other	1	1.8
Educational attainment		
High school graduate or GED completed or less	16	28.6
Some college credit but no degree	10	17.9
Associate's degree	8	14.3
Bachelor's degree	15	26.8
Master's degree, doctorate or professional degree	7	12.5
County of residence		
Denver Metro Area (Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, Jefferson)	35	62.5
Other Front Range (El Paso, Larimer, Pueblo, Weld)	14	25.0
Other counties	7	12.5
Place of death		
Residence	44	78.6
Nursing home/long-term care facility	9	16.1
Other	3	5.4
Hospice enrollment status		
Under hospice care	52	92.9
Not under hospice care	4	7.1



Monitoring compliance with reporting requirements

To comply with the Colorado End-of-Life Options Act, physicians who prescribe aid-in-dying medication, and those health care providers who dispense such medication, must submit documentation to CDPHE per rules promulgated by the Colorado Board of Health.

Physicians who prescribe aid-in-dying medication must submit:

- Attending/prescribing physician form.
- Patient's completed written request for medical aid-in-dying medication.
- Written confirmation of mental capacity from a licensed mental health provider (if applicable).
- Consulting physician's written confirmation of diagnosis and prognosis.

Health care providers who dispense aid-in-dying medication must submit:

Medication dispensing form.

Table 4 contains a summary of documentation received by CDPHE concerning patients prescribed aid-in-dying medication. This information is based on reporting forms and supplemental documentation received by CDPHE as of January 24, 2018.

Table 4. Documentation received for patients participating in the Colorado End-of-Life Options Act, 2017.

Form/Document	Number
Attending/prescribing physician form	60
Patient's completed written request	47
Mental health provider's confirmation	1
Consulting physicians written confirmation	27
Medication dispensing form	50
Death certificate	56

While reporting of the required documentation (including prescribing forms, patients' written requests, consulting physicians' written confirmations, and mental health provider confirmation) may be incomplete, all attending/ prescribing forms received contained physicians' signed attestations that all requirements of the Colorado End-of-Life Options Act have been met, and that required documentation is complete and contained in patients' records. Efforts continue to educate physicians and other health care providers about reporting requirements.

Additional instructions for reporting, including specific regulations and forms, are available on the Colorado Medical Aid in Dying website at www.colorado.gov/pacific/cdphe/medical-aid-dying.

Confidentiality

Colorado's End-of-Life Options Act states that the information reported to CDPHE is not a public record and is not available for public inspection. To comply with that statutory mandate, CDPHE will not disclose any information that identifies patients, physicians, pharmacists, family members, witnesses or other participants in activities covered by the Colorado End-of-Life Options Act. The information presented in this report is limited to items with sufficient numbers in a reporting field to ensure that confidentiality is preserved.