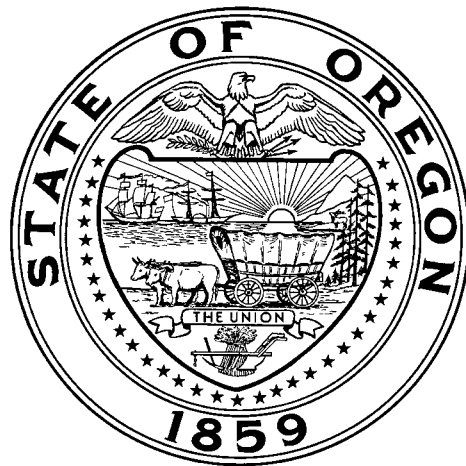


# **Eighth Annual Report on Oregon's Death with Dignity Act**



**Department of Human Services**  
Office of Disease Prevention and Epidemiology  
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## **For more information contact:**

Darcy Niemeyer

Department of Human Services, Oregon State Public Health

Office of Disease Prevention and Epidemiology

800 N.E. Oregon Street, Suite 730

Portland, OR 97232

E-mail: [darcy.niemeyer@state.or.us](mailto:darcy.niemeyer@state.or.us)

Phone: 971-673-0982

Fax: 971-673-0994

<http://www.oregon.gov/DHS/ph/pas/index.shtml>

Contributing Editor: Richard Leman, MD

Data Analysis: David Hopkins, MS

State Epidemiologist, Melvin A. Kohn, MD, MPH

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# Table of Contents

<b>Summary</b> .....	4
<b>Introduction</b> .....	6
History.....	6
Requirements .....	7
<b>Methods</b>	
The Reporting System .....	9
Data Analysis.....	10
<b>Results</b> .....	11
Patient Characteristics.....	12
Physician Characteristics.....	12
Lethal Medication.....	13
Complications .....	13
End-of-Life Concerns .....	14
<b>Comments</b> .....	15
<b>References</b> .....	17
<b>Tables</b>	
Table 1 .....	19
Table 2.....	21
Table 3.....	22
Table 4.....	23

## Summary

Physician-assisted suicide (PAS) has been legal in Oregon since November 1997, when Oregon voters approved the Death with Dignity Act (DWDA) for the second time (see [History](#), page 6). The Department of Human Services (DHS) is legally required to collect information regarding compliance with the Act and make the information available on a yearly basis. In this eighth annual report, we characterize the 38 Oregonians who died in 2005 following ingestion of medications prescribed under provisions of the Act, and look at whether the numbers and characteristics of these patients differ from those who used PAS in prior years. Patients choosing PAS were identified through mandated physician and pharmacy reporting. Our information comes from these reports, physician interviews and death certificates. We also compare the demographic characteristics of patients participating during 1998-2005 with other Oregonians who died of the same underlying causes.

In 2005, 39 physicians wrote a total of 64 prescriptions for lethal doses of medication. In 1998, 24 prescriptions were written, followed by 33 in 1999, 39 in 2000, 44 in 2001, 58 in 2002, 68 in 2003, and 60 in 2004. Thirty-two of the 2005 prescription recipients died after ingesting the medication. Of the 32 recipients who did not ingest the prescribed medication in 2005, 15 died from their illnesses, and 17 were alive on December 31, 2005. In addition, six patients who received prescriptions during 2004 died in 2005 as a result of ingesting the prescribed medication, giving a total of 38 PAS deaths during 2005. One 2004 prescription recipient, who ingested the prescribed medication in 2005, became unconscious 25 minutes after ingestion, then regained consciousness 65 hours later. This person did not obtain a subsequent prescription and died 14 days later of the underlying illness (17 days after ingesting the medication).

After an initial increase in PAS use during the first five years the Act was in effect, the number of Oregonians who use PAS remained relatively stable since 2002. In 1998, 16 Oregonians used PAS, followed by 27 in 1999, 27 in 2000, 21 in 2001, 38 in 2002, 42 in 2003, and 37 in 2004. The ratio of PAS deaths to total deaths trended upward during 1998-2003, peaking at 13.6 in 2003 and has since remained stable. In

1998 there were 5.5 PAS deaths per every 10,000 total deaths, followed by 9.2 in 1999, 9.1 in 2000, 7.1 in 2001, 12.2 in 2002, 13.6 in 2003, 12.3 in 2004, and an estimated 12/10,000 in 2005.<sup>1-7</sup>

Compared to all Oregon decedents in 2005, PAS participants were more likely to have malignant neoplasms (84% vs. 24%), to be younger (median age 70 vs. 78 years), and to have more formal education (37% vs. 15% had at least a baccalaureate degree).

During the past eight years, the 246 patients who took lethal medications differed in several ways from the 74,967 Oregonians dying from the same underlying diseases. Rates of participation in PAS decreased with age, although over 65% of PAS users were age 65 or older. Rates of participation were higher among those who were divorced or never married, those with more years of formal education, and those with amyotrophic lateral sclerosis, HIV/AIDS, or malignant neoplasms (see [Patient Characteristics](#), page 12).

Physicians indicated that patient requests for lethal medications stemmed from multiple concerns, with eight in 10 patients having at least three concerns. The most frequently mentioned end-of-life concerns during 2005 were: a decreasing ability to participate in activities that made life enjoyable, loss of dignity, and loss of autonomy. (see [End-of-Life Concerns](#), page 14).

Complications were reported for three patients during 2005; two involved regurgitation, and, as noted above, one patient regained consciousness after ingesting the prescribed medication. None involved seizures (see [Complications](#), page 13). Fifty percent of patients became unconscious within five minutes of ingestion of the lethal medication and the same percentage died within 26 minutes of ingestion. The range of time from ingestion to death was from five minutes to 9.5 hours. Emergency Medical Services were called for one patient in order to pronounce death.

The number of terminally ill patients using PAS has remained small, with about 1 in 800 deaths among Oregonians in 2005 resulting from physician-assisted suicide.

## Introduction

This eighth annual report presents data on participation in Oregon's Death with Dignity Act (DWDA), which legalizes physician-assisted suicide (PAS) for terminally ill Oregon residents. This report summarizes the information collected from physician reports, interviews, and death certificates.

### History

The Oregon Death with Dignity Act was a citizen's initiative first passed by Oregon voters in November 1994 with 51% in favor. Implementation was delayed by a legal injunction, but after proceedings that included a petition denied by the United States Supreme Court, the Ninth Circuit Court of Appeals lifted the injunction on October 27, 1997. In November 1997, a measure asking Oregon voters to repeal the Death with Dignity Act was placed on the general election ballot (Measure 51, authorized by Oregon House Bill 2954). Voters rejected this measure by a margin of 60% to 40%, retaining the Death with Dignity Act. After voters reaffirmed the DWDA in 1997, Oregon became the only state allowing legal physician-assisted suicide.<sup>8</sup>

Although physician-assisted suicide has been legal in Oregon for eight years, it remains highly controversial. On November 6, 2001, U.S. Attorney General John Ashcroft issued a new interpretation of the Controlled Substances Act, which would prohibit doctors from prescribing controlled substances for use in physician-assisted suicide. To date, all the medications prescribed under the Act have been barbiturates, which are controlled substances and, therefore, would be prohibited by this ruling for use in PAS. In response to a lawsuit filed by the State of Oregon on November 20, 2001, a U.S. district court issued a temporary restraining order against Ashcroft's ruling pending a new hearing. On April 17, 2002, U.S. District Court Judge Robert Jones upheld the Death with Dignity Act. On September 23, 2002, Attorney General Ashcroft filed an appeal, asking the Ninth U.S. Circuit Court of Appeals to overturn the District Court's ruling. The appeal was denied on May 26, 2004 by a three-judge panel. On July 13, 2004, Ashcroft filed an appeal requesting that the Court rehear his previous motion with an 11-judge panel; on August 13, 2004, the Court declined to rehear the case. On

November 9, 2004, Ashcroft asked the U.S. Supreme Court to review the Ninth Circuit's decision. On October 5, 2005, the Supreme Court heard arguments in the case, and on January 17, 2006 it affirmed the lower court's decision. At this time, Oregon's Death with Dignity Act remains in effect.

## Requirements

The Death with Dignity Act allows terminally ill Oregon residents to obtain and use prescriptions from their physicians for self-administered, lethal medications. Under the Act, ending one's life in accordance with the law does not constitute suicide. However, we use "physician-assisted suicide" because that terminology is used in medical literature to describe ending life through the voluntary self-administration of lethal medications prescribed by a physician for that purpose. The Death with Dignity Act legalizes PAS, but specifically prohibits euthanasia, where a physician or other person directly administers a medication to end another's life.<sup>8</sup>

To request a prescription for lethal medications, the Death with Dignity Act requires that a patient must be:

- An adult (18 years of age or older),
- A resident of Oregon,
- Capable (defined as able to make and communicate health care decisions), and
- Diagnosed with a terminal illness that will lead to death within six months.

Patients meeting these requirements are eligible to request a prescription for lethal medication from a licensed Oregon physician. To receive a prescription for lethal medication, the following steps must be fulfilled:

- The patient must make two oral requests to his or her physician, separated by at least 15 days.
- The patient must provide a written request to his or her physician, signed in the presence of two witnesses.

- The prescribing physician and a consulting physician must confirm the diagnosis and prognosis.
- The prescribing physician and a consulting physician must determine whether the patient is capable.
- If either physician believes the patient's judgment is impaired by a psychiatric or psychological disorder, the patient must be referred for a psychological examination.
- The prescribing physician must inform the patient of feasible alternatives to assisted suicide, including comfort care, hospice care, and pain control.
- The prescribing physician must request, but may not require, the patient to notify his or her next-of-kin of the prescription request.

To comply with the law, physicians must report to the Department of Human Services (DHS) all prescriptions for lethal medications.<sup>9</sup> Reporting is not required if patients begin the request process but never receive a prescription. In 1999, the Oregon legislature added a requirement that pharmacists must be informed of the prescribed medication's intended use. Physicians and patients who adhere to the requirements of the Act are protected from criminal prosecution, and the choice of legal physician-assisted suicide cannot affect the status of a patient's health or life insurance policies. Physicians, pharmacists, and health care systems are under no obligation to participate in the Death with Dignity Act.<sup>8</sup>

The Oregon Revised Statutes specify that action taken in accordance with the Death with Dignity Act does not constitute suicide, mercy killing or homicide under the law.<sup>8</sup>



## Methods

### The Reporting System

DHS is required by the Act to develop and maintain a reporting system for monitoring and collecting information on PAS.<sup>8</sup> To fulfill this mandate, DHS uses a system involving physician and pharmacist compliance reports, death certificate reviews, and follow-up interviews.<sup>9</sup>

When a prescription for lethal medication is written, the physician must submit to DHS information that documents compliance with the law. We review all physician reports and contact physicians regarding missing or discrepant data. DHS Vital Records files are searched periodically for death certificates that correspond to physician reports. These death certificates allow us to confirm patients' deaths, and provide patient demographic data (e.g., age, place of residence, educational attainment).

In addition, using our authority to conduct special studies of morbidity and mortality, DHS conducts telephone interviews with prescribing physicians after receipt of the patients' death certificates.<sup>10</sup> Each physician is asked to confirm whether the patient took the lethal medications. If the patient took the medications, we ask for information that was not available from previous physician reports or death certificates--including insurance status and enrollment in hospice. We ask why the patient requested a prescription, specifically exploring concerns about the financial impact of the illness, loss of autonomy, decreasing ability to participate in activities that make life enjoyable, being a burden, loss of control of bodily functions, uncontrollable pain, and loss of dignity. We collect information on the time from ingestion to unconsciousness and death, and ask about any adverse reactions. Because physicians are not legally required to be present when a patient ingests the medication, not all have information about what happened when the patient ingested the medication. If the prescribing physician was not present, we accept information they have based on discussions with family members, friends or other health professionals who attended the patients' deaths. We also accept information directly from these individuals. We do not interview or collect any information from patients prior to their death. In lieu of the telephone interview, physicians have the option of printing the questionnaire from our website,

completing it at their convenience, and mailing the document to us. Reporting forms and the physician questionnaire are available at:

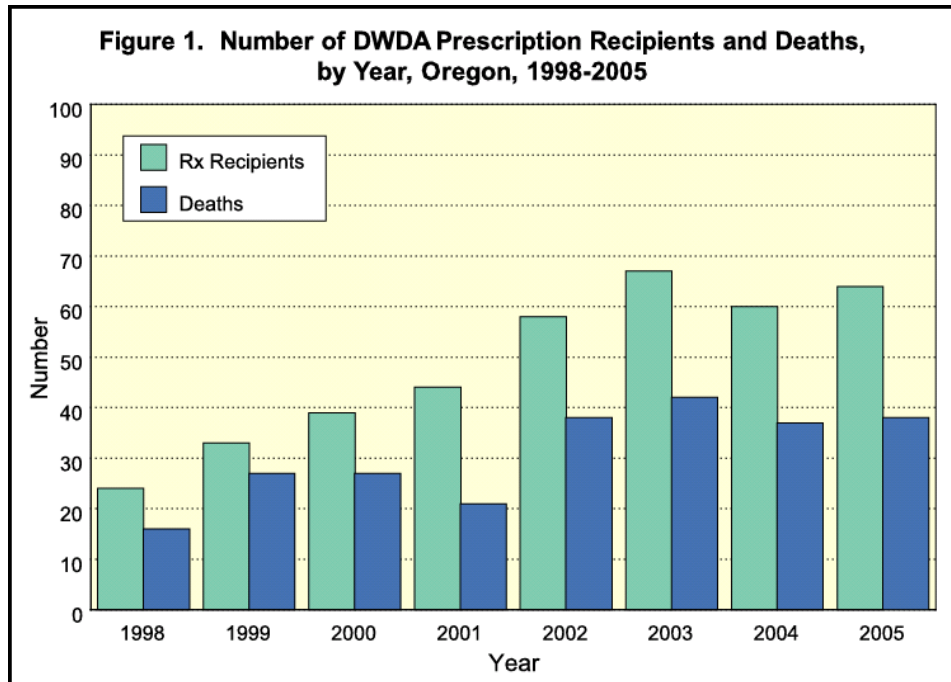
<http://www.oregon.gov/DHS/ph/pas/pasforms.shtml>

## Data Analysis

We classified patients by year of participation based on when they ingested the legally-prescribed lethal medication. Using demographic information from 1997-2004 Oregon death certificates (the most recent years for which complete data are available), we compared patients who used legal PAS with other Oregonians who died from the same diseases. Demographic- and disease-specific PAS rates were computed using the number of deaths from the same causes as the denominator. The overall PAS rates by year were computed using the total number of resident deaths. Annual rates were calculated using numerator and denominator data from the same year, except for 2005 where the number of resident deaths from 2004 was used as the denominator. SPSS, release 12 and PEPI, version 4.0 were used in data analysis. Statistical significance was determined using Fisher's exact test, the chi-square test, the chi-square for trend test, and the Mann-Whitney test.

## Results

Both the number of prescriptions written and the number of Oregonians using PAS vary annually but have been relatively stable since 2002. In 2005, 39 physicians wrote 64 prescriptions for lethal doses of medication. In 1998, 24 prescriptions were written, followed by 33 in 1999, 39 in 2000, 44 in 2001, 58 in 2002, 68 in 2003, and 60 in 2004. (Figure 1.)



Thirty-two of the 2005 prescription recipients died after ingesting the medication. Of the 32 recipients who did not ingest the prescribed medication in 2005, 15 died from their illnesses, and 17 were alive on December 31, 2005. In addition, six patients who received prescriptions during 2004 died in 2005 as a result of ingesting their medication, giving a total of 38 PAS deaths during 2005.

In 1998, 16 Oregonians used PAS, followed by 27 in 1999, 27 in 2000, 21 in 2001, 38 in 2002, 42 in 2003, and 37 in 2004. Ratios of PAS deaths to total deaths have shown a similar trend: in 1998 there were 5.5 PAS deaths for every 10,000 total deaths, followed by 9.2 in 1999, 9.1 in 2000, 7.0 in 2001, 12.2 in 2002, 13.6 in 2003, 12.3, in 2004, and an estimated 12/10,000 in 2005.

The percentage of patients referred to a specialist for psychological evaluation beyond that done by a hospice team has declined, falling from 31% in 1998 to 5% in 2005.

### Patient Characteristics

There were no statistically significant differences between Oregonians who used PAS in 2005 and those from prior years. For a comparison, see Table 1.

Although year-to-year variations occur, certain demographic patterns have become evident over the past eight years. Males and females have been equally likely to take advantage of the DWDA. Divorced and never-married persons were more likely to use PAS than married and widowed residents. A higher level of education has been strongly associated with the use of PAS; Oregonians with a baccalaureate degree or higher were 7.9 times more likely to use PAS than those without a high school diploma. Conversely, several groups have emerged as being less likely to use PAS. These include people age 85 or older, people who did not graduate from high school, people who are married or widowed, and Oregon residents living east of the Cascade Range.

Patients with certain terminal illnesses were more likely to use PAS (Table 3). The ratio of DWDA deaths to all deaths resulting from the same underlying illness was highest for three conditions: amyotrophic lateral sclerosis (ALS) (269.5 per 10,000), HIV/AIDS (218.3), and malignant neoplasms (39.9). Among the causes associated with at least five deaths, the lowest rate (8.7) was for patients with chronic lower respiratory diseases (CLRD), such as emphysema.

During 2005, 36 patients died at home, and two died at assisted living facilities. All individuals had some form of health insurance (Table 4). As in previous years, most (92%) of the patients who used PAS in 2005 were enrolled in hospice care. The median length of the patient-physician relationship was 8 weeks.

### Physician Characteristics

The prescribing physicians of patients who used PAS during 2005 had been in practice a median of 26 years (range 3-55). Their medical specialties included: family medicine (62%), oncology (23%), internal medicine (10%), and other (5%). Family

medicine physicians represent 15% of all physicians in Oregon, oncologists 0.9%, and internists 16%.

Seventy-four percent of the physicians who wrote prescriptions for lethal medication during 2005 wrote a single prescription. Of the 39 physicians who wrote prescriptions in 2005, 29 wrote one prescription, three wrote two prescriptions, three wrote three prescriptions, three wrote four prescriptions, and one wrote eight prescriptions.

During the first three years after the legalization of PAS, physicians were present at the patient's ingestion of lethal medication half or more of the time. During 2005, the prescribing physician was present 23% of the time.

It is the policy of DHS to report cases to the Oregon Board of Medical Examiners when required forms have not been completed correctly or have not been received in a timely fashion. During 2005, four cases were referred to the Oregon Board of Medical Examiners, one involving witnessing of signatures and three others for failure to file required documentation in a timely manner.

One case, in which a patient awakened after ingesting the prescribed medication, was referred to the Board of Pharmacy.

### Lethal Medication

During 1998-2004, secobarbital was the lethal medication prescribed for 101 of the 208 patients (49%). During 2005, as during previous years, all lethal medications prescribed under the provisions of the DWDA were barbiturates. In 2005, 34 patients (89%) used pentobarbital and 4 patients (11%) used secobarbital. Since the DWDA was implemented, 56% of the PAS patients used pentobarbital, 43% used secobarbital, and 2% used other medications. (Three used secobarbital/amobarbital, and one used secobarbital and morphine).

### Complications

During 2005, physicians reported that three patients experienced complications: two patients vomited some of the medication, one of whom died 15 minutes after ingestion and the other 90 minutes after ingestion. The former had been vomiting on a

daily basis for the week and a half prior to ingestion. One patient became unconscious 25 minutes after ingestion, then regained consciousness 65 hours later. This person did not obtain a subsequent prescription, and died 14 days later of the underlying illness (17 days after ingesting the medication).

None of the patients experienced seizures. Emergency medical services were called to document one death. In no case was EMS called for medical intervention.

### End-of-Life Concerns

Providers were asked if, based on discussions with patients, any of seven end-of-life concerns might have contributed to the patients' requests for lethal medication (Table 4). In nearly all cases, physicians reported multiple concerns contributing to the request. The most frequently reported concerns included a decreasing ability to participate in activities that make life enjoyable (89%), loss of dignity (89%), and losing autonomy (79%).

## Comments

Since 2002, both the number of prescriptions written for physician-assisted suicide and the number of terminally ill patients taking lethal medication have remained relatively stable with about 1 in 800 deaths among Oregonians in 2005 resulting from physician-assisted suicide. A large population study of dying Oregonians published in 2004 found that 17% considered PAS seriously enough to have discussed the matter with their family and that about 2% of patients formally requested PAS. Of the 1,384 decedents for whom information was gathered, one had received a prescription for lethal medication and did not take it. No unreported cases of PAS were identified.<sup>11</sup>

Overall, smaller numbers of patients appear to use PAS in Oregon compared to the Netherlands.<sup>12</sup> However, as detailed in previous reports, our numbers are based on a reporting system for terminally ill patients who legally receive prescriptions for lethal medications, and do not include patients and physicians who may act outside the provisions of the DWDA.

Over the last eight years, the rate of PAS among patients with ALS in Oregon has been substantially higher than among patients with other illnesses. This finding is consistent with other studies. In the Netherlands, where both PAS and euthanasia are openly practiced, one in five ALS patients died as a result of PAS or euthanasia.<sup>13</sup> A study of Oregon and Washington ALS patients found that one-third of these patients discussed wanting PAS in the last month of life.<sup>14</sup> Though numbers are small, and results must be interpreted with caution, Oregon HIV/AIDS patients are also more likely to use PAS.

Physicians have consistently reported that concerns about loss of autonomy, loss of dignity, and decreased ability to participate in activities that make life enjoyable as important motivating factors in patient requests for lethal medication across all eight years. Interviews with family members during 1999 corroborated physician reports.<sup>2</sup> These findings were supported by a study of hospice nurses and social workers caring for PAS patients in Oregon.<sup>15</sup>

While it may be common for patients with a terminal illness to consider PAS, a request for PAS can be an opportunity for a medical provider to explore with patients their fears and wishes around end-of-life care, and to make patients aware of other

options. Often once the provider has addressed a patient's concerns, he or she may choose not to pursue PAS.<sup>16</sup>



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**Table 1.** Demographic characteristics of 246 DWDA patients who died after ingesting a lethal dose of medication, by year, Oregon, 1998-2005.

<b>Characteristics</b>	<b>2005 (N = 38)*</b>	<b>1998-2004 (N= 208)*</b>	<b>Total (N = 246)*</b>
<b>Sex</b>			
Male (%)	23 (61)	108 (52)	131 (53)
Female (%)	15 (39)	100 (48)	115 (47)
<b>Age</b>			
18-44 (%)	1 (3)	9 (4)	10 (4)
45-64 (%)	11 (29)	60 (29)	71 (29)
65-84 (%)	21 (55)	123 (59)	144 (59)
85+ (%)	5 (13)	16 (8)	21 (9)
Median years (Range)	70 (42-90)	69 (25-94)	69 (25-94)
<b>Race</b>			
White (%)	36 (95)	203 (98)	239 (97)
Asian (%)	1 (3)	5 (2)	6 (2)
Native American (%)	1 (3)	0	1 (<1)
<b>Marital status</b>			
Married (%)	20 (53)	90 (43)	110 (45)
Widowed (%)	8 (21)	47 (23)	55 (22)
Divorced (%)	8 (21)	56 (27)	64 (26)
Never married (%)	2 (5)	15 (7)	17 (7)
<b>Education</b>			
Less than high school (%)	3 (8)	18 (9)	21 (9)
High school graduate (%)	9 (24)	62 (30)	71 (29)
Some college (%)	12 (32)	40 (19)	52 (21)
Baccalaureate or higher (%)	14 (37)	88 (42)	102 (41)
<b>Residence</b>			
Metro counties (%)**	12 (32)	83 (40)	95 (39)
Coastal counties (%)***	2 (5)	17 (8)	19 (8)
Other W. counties (%)	21 (55)	96 (46)	117 (48)
E. of the Cascades (%)	3 (8)	12 (6)	15 (6)
<b>Underlying illness</b>			
Malignant neoplasms (%)	32 (84)	164 (79)	196 (80)
Lung and bronchus (%)	8 (21)	40 (19)	48 (20)
Breast (%)	4 (11)	19 (9)	23 (9)
Pancreas (%)	2 (5)	18 (9)	20 (8)
Colon (%)	4 (11)	12 (6)	16 (7)
Other (%)	14 (37)	75 (36)	89 (36)

<b>Characteristics</b> (Cont'd)	<b>2005</b> <b>(N=38)*</b>	<b>1998-2004</b> <b>(N=208)*</b>	<b>Total</b> <b>(N=246)*</b>
<b>Underlying Illness (Cont'd)</b>			
Amyotrophic lateral sclerosis (%)	4 (11)	16 (8)	20 (8)
Chronic lower respiratory disease (%)	1 (3)	10 (5)	11 (4)
HIV/AIDS (%)	0	5 (2)	5 (2)
Illnesses listed below (%) <sup>#</sup>	1 (3)	13 (6)	14 (6)

\* Unknowns are excluded when calculating percentages.

\*\* Clackamas, Multnomah, and Washington counties.

\*\*\* Excluding Douglas and Lane counties.

# Includes amyloidosis of the kidney, aortic stenosis, congestive heart failure, diabetes mellitus with renal complications, digestive organ neoplasm of unknown behavior, emphysema, hepatitis C, myelodysplastic syndrome, pulmonary disease with fibrosis, scleroderma, and Shy-Drager syndrome.

**Table 2.** Demographic characteristics of 246 patients who died during 1998-2005 after ingesting a lethal dose of medication, compared with 74,967 Oregonians dying from the same underlying diseases.

<b>Characteristics</b>	<b>PAS patients 1998-2005 (N = 246)*</b>	<b>Oregon deaths, same diseases (N =74,967)*</b>	<b>DWDA deaths per 10,000 Oregon deaths</b>	<b>Rate ratio (95% CI**)</b>
<b>Sex</b>				
Male (%)	131 (53)	37,847 (50)	34.6	1.1 (0.9-1.4)
Female (%)	115 (47)	37,120 (50)	31.0	1.0
<b>Age</b>				
18-44 (%)	10 (4)	1,815 (2)	55.1	4.1 (1.9-8.7)#
45-64 (%)	71 (29)	14,445 (19)	49.2	3.6 (2.2-5.9)
65-84 (%)	144 (59)	42,956 (57)	33.5	2.5 (1.6-3.9)
85+ (%)	21 (9)	15,751 (21)	13.3	1.0
Median years	69 (25-94)	76		
<b>Race</b>				
White (%)	239 (97)	72,799 (97)	32.8	1.0
Asian (%)	6 (2)	802 (1)	74.8	2.3 (0.8-5.1)##
Native American (%)	1 (<1)	507 (1)	19.7	0.6 (0.0-3.4)##
Other (%)	0	849 (1)		
Unknown	0	15		
<b>Marital status</b>				
Married (%)	110 (45)	36,042 (48)	30.5	1.0
Widowed (%)	55 (22)	24,653 (33)	22.3	0.7 (0.5-1.0)
Divorced (%)	64 (26)	10,894 (15)	58.7	1.9 (1.4-2.6)+
Never married (%)	17 (7)	3,202 (4)	53.1	1.7 (1.1-2.9)+
Unknown	0	176		
<b>Education</b>				
Less than high school (%)	21 (9)	17,403 (24)	12.1	1.0
HS graduate (%)	71 (29)	32,125 (43)	22.1	1.8 (1.1-3.0)
Some college (%)	52 (21)	13,765 (19)	37.8	3.1 (1.9-5.2)
Baccalaureate or higher (%)	102 (41)	10,626 (14)	96.0	7.9 (5.0-12.7)#
Unknown	0	1,048		
<b>Residence</b>				
Metro counties (%)	95 (39)	26,874 (36)	35.4	1.0
Coastal counties (%)	19 (8)	6,076 (8)	31.3	0.9 (0.5-1.5)
Other W. counties (%)	117 (48)	31,470 (42)	37.2	1.1 (0.8-1.4)
E. of the Cascades (%)	15 (6)	10,547 (14)	14.2	0.4 (0.2-0.7)+

\* Unknowns are excluded when calculating percentages.

\*\* Confidence interval.

# The ratio is statistically significant according to the chi-square test for trend.

## Confidence intervals calculated with Fisher's exact test.

+ The ratio is statistically significant according to the chi-square test.

**Table 3.** Underlying illnesses of 246 patients who died during 1998-2005 after ingesting a lethal dose of medication, compared with 74,967 Oregonians dying from the same underlying diseases.

<b>Underlying illnesses</b>	<b>PAS patients 1998-2005 (N = 246)</b>	<b>Oregon deaths, same diseases (N =74,967)</b>	<b>DWDA deaths per 10,000 Oregon deaths</b>	<b>Rate ratio (95% CI)*</b>
<b>Malignant neoplasms (%)</b>	196 (80)	49,117 (66)	39.9	4.6 (2.5-8.4)+
Lung and bronchus (%)	48 (20)	16,160 (22)	29.7	3.4 (1.8-6.6)+
Breast (%)	23 (9)	4,102 (5)	56.1	6.4 (3.1-13.2)+
Pancreas (%)	20 (8)	2,989 (4)	66.9	7.7 (3.7-16.0)+
Colon (%)	16 (7)	4,263 (6)	37.5	4.3 (2.0-9.3)+
Prostate (%)	13 (5)	3,491 (5)	37.2	4.3 (1.9-9.5)++
Ovary (%)	12 (5)	1,608 (2)	74.6	8.6 (3.5-21.5)++
Skin (%)	9 (4)	789 (1)	114.1	13.1 (4.8-35.1)++
Other (%)	55 (22)	15,715 (21)	35.0	4.0 (2.1-7.6)+
<b>Amyotrophic lateral sclerosis (%)</b>	20 (8)	742 (1)	269.5	31.0 (14.4-73.5)++
<b>Chronic lower respiratory dis. (%)</b>	11 (4)	12,596 (17)	8.7	1.0
<b>HIV/AIDS (%)</b>	5 (2)	229 (<1)	218.3	25.1 (6.9-80.4)++
<b>Illnesses listed below (%)#</b>	14 (6)	12,283 (16)	11.4	1.3 (0.6-2.9)

\* Confidence interval.

# Includes amyloidosis of the kidney, aortic stenosis, cardiomyopathy, congestive heart failure, diabetes mellitus with renal complications, digestive organ neoplasm of unknown behavior, emphysema, hepatitis C, myelodysplastic syndrome, pulmonary disease with fibrosis, scleroderma, and Shy-Drager syndrome.

+ The ratio is statistically significant according to the chi-square test.

++ The ratio is statistically significant according to Fisher's exact test.

**Table 4.** Death with Dignity end of life care for 246 Oregonians who died after ingesting a lethal dose of medication, by year, 1998-2005.

<b>Characteristics</b>	<b>2005 (N=38)*</b>	<b>1998-2004 (N=208)*</b>	<b>Total (N=246)*</b>
<b>End of Life Care</b>			
Hospice			
Enrolled (%)	35 (92)	178 (86)	213 (87)
Not enrolled (%)	3 (8)	28 (14)	31 (13)
<i>Unknown</i>	0	2	2
Insurance			
Private (%)	22 (58)	129 (63)	151 (62)
Medicare or Medicaid (%)	16 (42)	74 (36)	90 (37)
None (%)	0	2 (1)	2 (1)
<i>Unknown</i>	0	3	3
<b>End of Life Concerns<sup>+</sup></b>			
Losing autonomy (%)	30 (79)	177 (87)	207 (86)
Less able to engage in activities making life enjoyable (%)	34 (89)	172 (84)	206 (85)
Loss of dignity (%) <sup>++</sup>	34 (89)	60 (80)	94 (83)
Losing control of bodily functions (%)	17 (45)	121 (59)	138 (57)
Burden on family, friends/caregivers (%)	16 (42)	74 (36)	90 (37)
Inadequate pain control or concern about it (%)	9 (24)	45 (22)	54 (22)
Financial implications of treatment (%)	1 (3)	6 (3)	7 (3)
<b>PAS Process</b>			
Referred for psychiatric evaluation (%)	2 (5)	32 (16)	34 (14)
Patient died at			
Home (patient, family or friend) (%)	36 (95)	196 (94)	232 (94)
Long term care, assisted living or foster care facility (%)	2 (5)	9 (4)	11 (4)
Hospital (%)	0	1 (<1)	1 (<1)
Other (%)	0	2 (1)	2 (1)
Lethal Medication			
Secobarbital (%)	4 (11)	101 (49)	105 (43)
Pentobarbital (%)	34 (89)	103 (50)	137 (56)
Other (%)	0	4 (2)	4 (2)
<b>Health-care provider present when medication ingested<sup>†</sup></b>			
Prescribing physician (%)	8 (23)	40 (29)	48 (28)
Other provider, when prescribing physician not present (%)	18 (51)	74 (54)	92 (54)
No provider (%)	9 (26)	22 (16)	31 (18)
<i>Unknown</i>	3	2	5
<b>Complications</b>			
Regurgitated (%)	2 (5)	10 (5)	12 (5)
Seizures (%)	0	0	0
Awakened after taking prescribed medication <sup>††</sup>	1	0	1
No complications (%)	35 (95)	194 (95)	229 (95)
<i>Unknown</i>	1	4	5

<b>Characteristics (cont'd)</b>	<b>2005 (N=38)*</b>	<b>1998-2004 (N=208)*</b>	<b>Total (N=246)*</b>
<b>Emergency Medical Services</b>			
Called for intervention after lethal medication ingested (%)	0	0	0
Calls for other reasons (%)**	1 (3)	2 (1)	3 (1)
Not called after lethal medication ingested (%)	36 (97)	203 (99)	239 (99)
<i>Unknown</i>	1	3	4
<b>Timing of PAS Event</b>			
Duration (weeks) of patient-physician relationship			
Median	8	12	12
Range	0-678	0-1065	0-1065
Duration (days) between 1 <sup>st</sup> request and death			
Median	40	38	39
Range	15-1009	15-737	15-1009
Minutes between ingestion and unconsciousness			
Median	5	5	5
Range	2-15	1-38	1-38
<i>Unknown</i>	3	21	24
Time between ingestion and death			
Median (minutes)	26	25	25
Range (minutes-hours)	5m-9.5h	4m-48h	4m-48h
<i>Unknown</i>	2	15	17

\* Unknowns are excluded when calculating percentages unless otherwise noted.

\*\* Calls included two to pronounce death and one to help a patient who had fallen.

† The data shown are for 2001-2005. Information about the presence of a health care provider/volunteer, in absence of the prescribing physician, was first collected in 2001. Attendance by the prescribing physician has been recorded since 1998. During 1998-2005 the prescribing physician was present when 35% of the patients ingested the lethal medication.

†† Historically, the Annual Report tables list information on patients who died as a result of ingesting medication prescribed under the provisions of the Death with Dignity Act. Because one patient regained consciousness after ingesting the lethal medication and then died 14 days later from his/her illness rather than from the medication, the complication is recorded here but the patient is not included in the total number of PAS deaths.

+ Affirmative answers only ("Don't know" included in negative answers). Available for 17 patients in 2001.

++ First asked in 2003.