Department of Health and Mental Hygiene

Mortality Review Committee

Annual Report

Calendar Year 2005

Robert L. Ehrlich, Jr.
Governor

Michael S. Steele
Lieutenant Governor

S. Anthony McCann
Secretary

Nicole Brandt, Pharm.D., CGP, BCPP, FASCP
Chair

TABLE OF CONTENTS

I. THE MORTALITY REVIEW COMMITTEE ………………………………. 3

II. REPORTING REQUIREMENTS ……………………………….. 4

III. DEATH REVIEW PROCESS ……………………………….. 4

IV. COMMITTEE ACTIVITIES AND STATISTICAL INFORMTION ……………………………….. 5

V. FINDINGS, DISCUSSION AND RECOMMENDATIONS ……………………………….. 15

VI. APPENDIX ……………………………….. 18

I. THE MORTALITY REVIEW COMMITTEE

The Mortality Review Committee (MRC) was established in the Department of Health and Mental Hygiene (DHMH) through legislation effective October 2000, and codified in Maryland Annotated Code, Health General Article § 5-801 through §5-810. As originally enacted, the statute focused on the examination of deaths of individuals in programs or facilities operated or licensed by the Developmental Disabilities Administration (DDA). Subsequently, in 2001, the statute was amended to also require the MRC to review deaths of individuals in facilities or programs operated or licensed by the Mental Hygiene Administration (MHA). This annual report of the Committee encompasses 2005, the fifth calendar year of the Committee's activities. Subsequent annual reports will be published at the conclusion of each calendar year.

The purpose of the Committee is to prevent avoidable deaths and to improve the quality of care provided to persons with developmental disabilities or mental illnesses. To achieve this purpose the Committee performs the following duties:

1. Evaluates causes or factors contributing to deaths reviewable under the statute;
2. Identifies patterns and systemic problems, and ensures consistency in the review process; and
3. Makes recommendations to the Secretary to prevent avoidable deaths and improve quality of care.

Members of the Committee are appointed by the Secretary and include a licensed physician board certified in an appropriate specialty, a psychopharmacologist, a licensed physician on staff with the Department of Health and Mental Hygiene (DHMH), two specialists, one in the field of developmental disabilities and the other in the field of mental illness, a licensed provider of community services for persons with developmental disabilities, a licensed provider of community services for persons with mental illness, two consumers, one with developmental disabilities and the other with mental illness, two family members, one representing a consumer with developmental disabilities and the other representing a consumer with mental illness, the Deputy Secretary of Public Health or the Deputy Secretary's Designee, the Director of the Office of Health Care Quality (OHCQ), a licensed physician representative from the medical examiner's office, a licensed nurse who works with persons with developmental disabilities in a program operated by a State licensed provider in the community, one member of an advocacy group for persons with developmental disabilities, and two members of advocacy groups, one for persons with developmental disabilities and the other for persons with mental illnesses.

The terms of the members are determined at the time of appointment. The terms range from one to three years. A member may not serve for more than two consecutive full terms. The Secretary may remove any member of the Committee for good cause. Members do not receive compensation for service on the Committee.

The Mortality Review Committee meets monthly. A majority of the members of the Committee must be present to vote on decisions related to cases reviewed. The Director of the Office of Health Care Quality does not vote on the disposition of an individual death case previously reviewed by the Office of Health Care Quality. Meetings of the Committee are closed to the public and all deliberations are confidential. All records or files of the Committee, its deliberations, findings, recommendations, and database are confidential. Members may not

disclose what transpired at a meeting and are not allowed to communicate directly with a provider, a State Facility Director, a family member, or guardian of the individual who is the subject of a death review. Mortality Review Committee members have immunity from liability for any action as a member of the Committee or for giving information to, participating in, or contributing to the function of the Committee or its subcommittee.

II. REPORTING REQUIREMENTS

The Mortality Review Committee is required to prepare a report for public distribution at least once a year. The annual report must include aggregate information that sets forth the numbers of deaths reviewed, the age of the deceased, causes and circumstances of death, a summary of the Committee's activities, and summary of findings.

In addition to the annual report for public distribution, the Committee or its subcommittee may, in its discretion, at any time issue preliminary findings or make preliminary recommendations to the Secretary or the Director of the Office of Health Care Quality. The preliminary findings or recommendations are confidential and not discoverable or admissible.[1]

III. THE DEATH REVIEW PROCESS

The Mortality Review Committee is one link in the process of review of deaths in the programs and facilities licensed or operated by the Developmental Disabilities and Mental Hygiene Administrations. The review process begins with a report of a death to the Office of Health Care Quality (OHCQ) and other appropriate agencies. The Developmental Disabilities and Mental Hygiene Administrations both have reporting requirements for deaths in their programs and facilities governed by statute or policy.

The Developmental Disabilities Administration issued a *Policy on Reportable Incidents and Investigations* which became effective July 29, 1999.[2] The purpose of the policy is to protect individuals from harm and to enhance the quality of services provided to them. The policy applies to all State Residential Centers (SRCs) and community-based agencies licensed by the DDA. [3] All deaths in entities covered by the policy must be reported to the following entities:

- The Office of Health Care Quality (OHCQ)
- Developmental Disabilities Administration (DDA) regional office
- Developmental Disabilities Administration (DDA) headquarters
- Family/legal guardian/advocate(s)
- Case manager/resource coordinator
- State protection and advocacy agency (Maryland Disability Law Center)
- Local health department, and
- Police

[1] Md. Health – General Code Ann. §5-809; Md. Health – Occupations Code Ann. §14 –501 (2001).
[2] The *Policy on Reportable Incidents and Investigations* was revised and reissued in December 2001, April 2003, October 2003, and July 2005.
[3] The reporting requirements also apply to those agencies operating by waiver under Md. Health –General Code Ann. § 7-903 (b) (2000).

The Mental Hygiene Administration policy on reporting of deaths in a State funded or operated program or facility is governed by Maryland Annotated Code Article Health General §10-714 (2000). This policy applies to all State-funded or operated facilities and community-based agencies receiving State funds. All deaths in entities covered by the policy must be reported to the following:

- Sheriff, police or chief law enforcement official;
- Director of the Mental Hygiene Administration;
- Health Officer in local jurisdiction; and
- State protection and advocacy agency (Maryland Disability Law Center)

Under the provisions of the statute establishing the Mortality Review Committee, the Office of Health Care Quality performs an investigation of each death of an individual with developmental disabilities or mental illnesses who, at the time of death, resided in, or was receiving services from programs or facilities covered under the statute. The purpose of the death investigation is to determine any deficient practice due to regulatory non-compliance. Two exceptions apply to the OHCQ death investigation: 1) OHCQ may not review the care or services provided in an individual's private home, except to the extent needed to investigate a licensed provider that offered services in the individual's home, and 2) unless a member of the Committee requests a review, the Office of Health Care Quality may choose not to review a death if the circumstances, based on reasonable judgment, are readily explained and require no further investigation.

Once OHCQ completes its investigation, the case is referred to the Mortality Review Committee. The MRC then reviews each death case. The Committee may request additional information and documentation including individual records, service of care records, medical records, discharge summary, autopsy reports, medication administration records, and any deficiency statements and plans of corrections if it determines further investigation is warranted. Once a request for information has been made, a provider of medical care, including dental and mental health care, a state or local government agency and a provider of residential or other services must give access to that information. The Committee may prepare questions for the provider agency, State Facility director or other relevant person, or may request the attendance of the provider, director, or other relevant person at a Committee meeting.

IV. COMMITTEE ACTIVITIES AND STATISTICAL INFORMATION

The MRC is scheduled to meet monthly to review death cases referred by OHCQ. However, the scheduled meetings for January and February 2005 were canceled due to inclement weather. Therefore the MRC met 10 times in calendar year 2005. On October 17, 2005, an educational forum with the MRC members was held on End of Life Care. Ms. Patricia Kelly, Director, Health Systems Leadership of the National Hospice and Palliative Care Organization, and Mr. Jack Schwartz, Esq. Office of the Attorney General were invited as the panelists and consultants at the forum. The MRC reviewed a total of 210 death cases (88 DDA and 122 MHA) for calendar year 2005. At the close of calendar year 2005, 207 cases were closed and 3 cases remained open for further review (FFR), The MRC also reviewed and closed the 9 FFR cases carried over from calendar year 2004.

Number and distribution of deaths by age group

TABLE 1: NUMBER OF DEATHS REVIEWED IN 2005[1] AND NUMBER OF DEATHS OF INDIVIDUALS RECEIVING DDA OR MHA SERVICES IN 2005 COMPARED TO THE NUMBER OF DEATHS AMONG ALL MARYLANDERS BY AGE GROUP IN 2004

Age Group (years)	Deaths Reviewed by MRC in 2005 (DDA)	Deaths of Individuals Receiving DDA Services in 2005	Deaths reviewed by MRC in 2005 (MHA)	Deaths of Individuals Receiving MHA Services in 2005	Total Deaths in Maryland (2004)[2]
<5 years	0	0	0	0	724
5 – 14	2	2	0	0	140
15 – 24	4	9	1	3	674
25- 34	5	13	9	12	825
35 – 44	11	18	26	36	1,913
45 – 54	23	36	44	53	3,725
55 – 64	19	38	23	37	4,970
65 – 74	10	16	10	24	7,124
75 – 84	13	15	7	15	12,041
85+	1	9	2	4	11,016
Not stated	n/a	n/a	n/a	n/a	5
Total	**88**	**156**	**122**	**184**	***43,157***

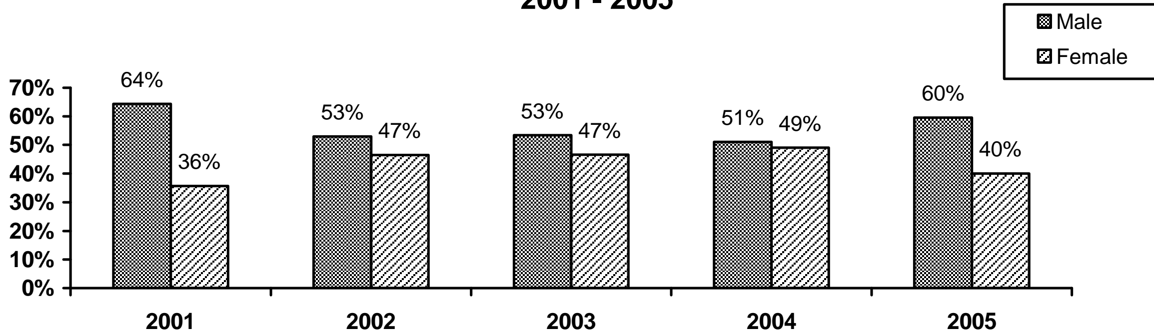
Note:

1. *The DDA and MHA cases reviewed may have included deaths that occurred in 2003, 2004, and 2005. Data provided by DHMH Vital Statistics Administration; 2005 data not yet available*

Table 1 compared the numbers of death cases reviewed in 2005 and the number of deaths of individual receiving DDA or MHA services during this time period to the number of deaths among all Marylanders in 2004. Data indicated that among all Maryland residents, the majority of deaths occurred were in the age ranges of 75- 84 years, and 85 years and over. In comparison among people with disabilities, the majority of deaths were in the age groups of 45-54 and 55-64 years of age for DDA population, and in the age groups of 45-54 and 35-44 for MHA population, respectively.

Gender and Percent Distribution of Reviewed Deaths

Figure 1 showed the percent distribution of deaths by gender in the cases reviewed in 2001, 2002, 2003, 2004, and 2005.



2003 data included 180 DDA cases & 11 MHA cases, 2004 data included 179 DDA cases & 44 MHA cases, 2005 data included 88 DDA cases & 122 MHA cases

TABLE 2: PERCENT DISTRIBUTION OF DDA AND MHA DEATHS BY GENDER REVIEWED IN 2005

Administration	Percent Distribution-DDA	Percent Distribution-MHA
Male	60%	59%
Female	40%	41%

Note: As of December 30, 2005, the population served by DDA consists of 57% of male and 43% *of female. The current population served by MHA consists of* 59% *of male and* 41% *of female.*

Location of Death

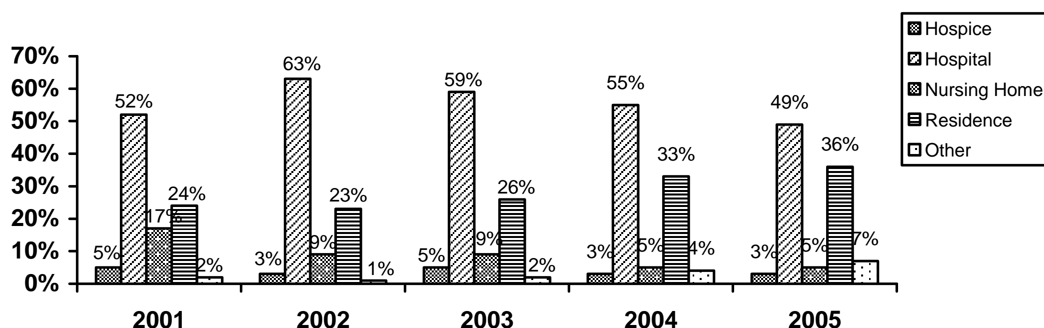
Table 3 illustrated the number and percent distribution of where deaths occurred.

TABLE 3: NUMBER AND PERCENT DISTRIBUTION OF WHERE DEATHS OCCURRED

Location of Death	**# & % Distribution 2001 (DDA only)**	**# & % Distribution 2002 (DDA only)**	**# & % Distribution 2003 (DDA & MHA)**	**# & % Distribution 2004 (DDA & MHA)**	**# & % Distribution 2005 (DDA & MHA)**
Hospice	2 (5%)	4 (3%)	10 (5%)	6 (3%)	7 (3%)
Hospital	22 (52%)	90 (63%)	120 (59%)	122 (55%)	102 (49%)
Nursing Home	7 (17%)	13 (9%)	18 (9%)	11 (5%)	11 (5%)
Residence	10 (24%)	33 (23%)	50 (26%)	74 (33%)	76 (36%)
1. Alternative Living Unit	*2*	*4*	*6*	*22*	*5*
2. Comm. Supported Living Arrangement	*0*	*0*	*3*	*2*	*3*
3. Individual Family Care home	*0*	*3*	*3*	*0*	*1*
4. Group Home	*3*	*6*	*13*	*9*	*5*
5. Family Home	*3*	*17*	*22*	*20*	*9*
6. State Residential Center	*2*	*3*	*1*	*4*	*2*
7. MHA State Facilities	*No data*	*No data*	*2*	*2*	*2*
8. MHA –CMH[3]	*No data*	*No data*	*No data*	*15*	*49*
Other[1]	1 (2%)	2 (1%)	1(1%)	10 (4%)	14 (7%)
Total	**42**	**142**	**191**	**223**	**210**

1. *Including vehicle, hotel, street, etc.*
2. *Total percentage may not add to 100 due to rounding.*
3. *CMH stands for Community Mental Health*

Figure 2. Percent Distribution of Where Deaths Occurred



2003 data include 180 DDA cases & 11 MHA cases, 2004 data include 179 DDA cases & 44 MHA cases, 2005 data include 88 DDA cases & 122 MHA cases

Of the cases reviewed in 2005, the majority (49%) of deaths were pronounced in the hospital, while 37% occurred in residential settings, approximately 7% in other settings including vehicle, hotel room, and street, and 5% in nursing homes.

TABLE 4: NUMBER AND PERCENT DISTRIBUTION OF WHERE DDA AND MHA DEATHS OCCURRED IN CASES REVIEWED IN 2005

Location of Death	Number and Percent Distribution (DDA)	Number and Percent Distribution (MHA)
Hospice	2 (2%)	5 (4%)
Hospital	50 (57%)	52 (43%)
Nursing Home	9 (10%)	2 (2%)
Residence	25 (28%)	51 (42%)
1. Alternative Living Unit	*5*	*N/A*
2. CSLA	*3*	*N/A*
3. Individual Family Care home	*1*	*N/A*
4. Group Home	*5*	*N/A*
5. Family Home	*9*	*N/A*
6. State Residential Center	*2*	*N/A*
7. MHA State Facilities	*N/A*	*2*
8. MHA - CMH Setting	*N/A*	*49*
Other[1]	2 (2%)	12 (10%)
Total	**88**	**122**

Note: Total percentage may not add to 100 due to rounding.

By breaking down the number and percent distribution of where the DDA and MHA deaths occurred, it was found that, of the 88 DDA cases reviewed in 2005, the majority (57%) of deaths were pronounced in the hospital, while 28% occurred in residential settings, and approximately 10% in nursing homes. Of the 122 MHA cases reviewed this past year, the majority (43%) occurred in residential settings (community-based), while another 42% of deaths were pronounced in a general hospital setting, 4 % in hospice facility and 2% occurred in nursing home. 10% of the MHA deaths occurred in other settings including vehicle, street, etc.

Service Type

Table 5 and Figure 3 depicted the type of services individuals were receiving prior to death. The DDA services included: family and individual support services (FISS)[4], hospice care, nursing home care, residential services, and vocational and day services. The residential service models include alternative living units (ALU)[5], group homes[6], individual family care homes (IFC)[7], community supported living arrangements (CSLA)[8], State Residential Centers (SRC)[9]. Current vocational and day services program models include supported employment, vocational services, day habilitation, and volunteer work. Those who received residential services or FISS may have received vocational and day services at the same time. The MHA cases that were reviewed in 2005 included the deaths of individuals who had received Mental Hygiene Administration (MHA) facilities' residential services and community mental health services.

TABLE 5: TYPE OF SERVICES RECEIVED PRIOR TO DEATH

Type of Services Received Prior to Death	# & % 2001 (DD only)	Percentage 2002 (DD only)	Percentage 2003 (DD & MH)	Percentage 2004 (DD & MH)	Percentage 2005 (DD & MH)
DDA Services	***42 (100%)***	***142 (100%)***	***180 (94%)***	***179 (80%)***	***88 (42%)***
FISS (Family and Individual Support Service)*	1 (2%)	17 (12%)	32 (17 %)	16 (7%)	9 (4%)
Hospice Care	4 (9%)	12 (8%)	21 (11%)	22 (10%)	11 (5%)
Nursing Home Care	7 (17%)	12 (8%)	23 (12%)	13 (6%)	7 (3%)
Residential Services:	28 (67%)	87 (61%)	96 (50%)	102 (46%)	54 (26%)
1. ALU	*7*	*27*	*24*	*50*	*21*
2. CSLA	*1*	*8*	*16*	*11*	*5*
3. IFC	*0*	*4*	*5*	*7*	*1*
4. Group Home	*15*	*28*	*43*	*25*	*17*
5. SRC	*5*	*20*	*8*	*9*	*10*
Vocational and Day Services only	2 (5%)	14 (10%)	8 (4%)	26 (11%)	7 (3%)
MHA Services	***0***	***0***	***11 (6%)***	***44 (20%)***	***122 (58%)***
MHA Facilities	--	--	11	9	15 (7%)
Community Mental Health	--	--	--	35	107 (51%)
Total	***42***	***142***	***191***	***223***	***210***

[4] FISS may include, but are not limited to, supports involving: (1) Budgeting; (2) Medication administration; Counseling; (4) Job coaching (COMAR 10.22.06.03).

[5] ALU means a residence owned, leased, or operated by a licensee that (a) Provides residential services for individuals who because of a developmental disability, require specialized living arrangement; (b) Admits not more than 3 individuals; and (c) Provides 10 or more hours of supervision per unit, per week (COMAR 10.22.01.01).

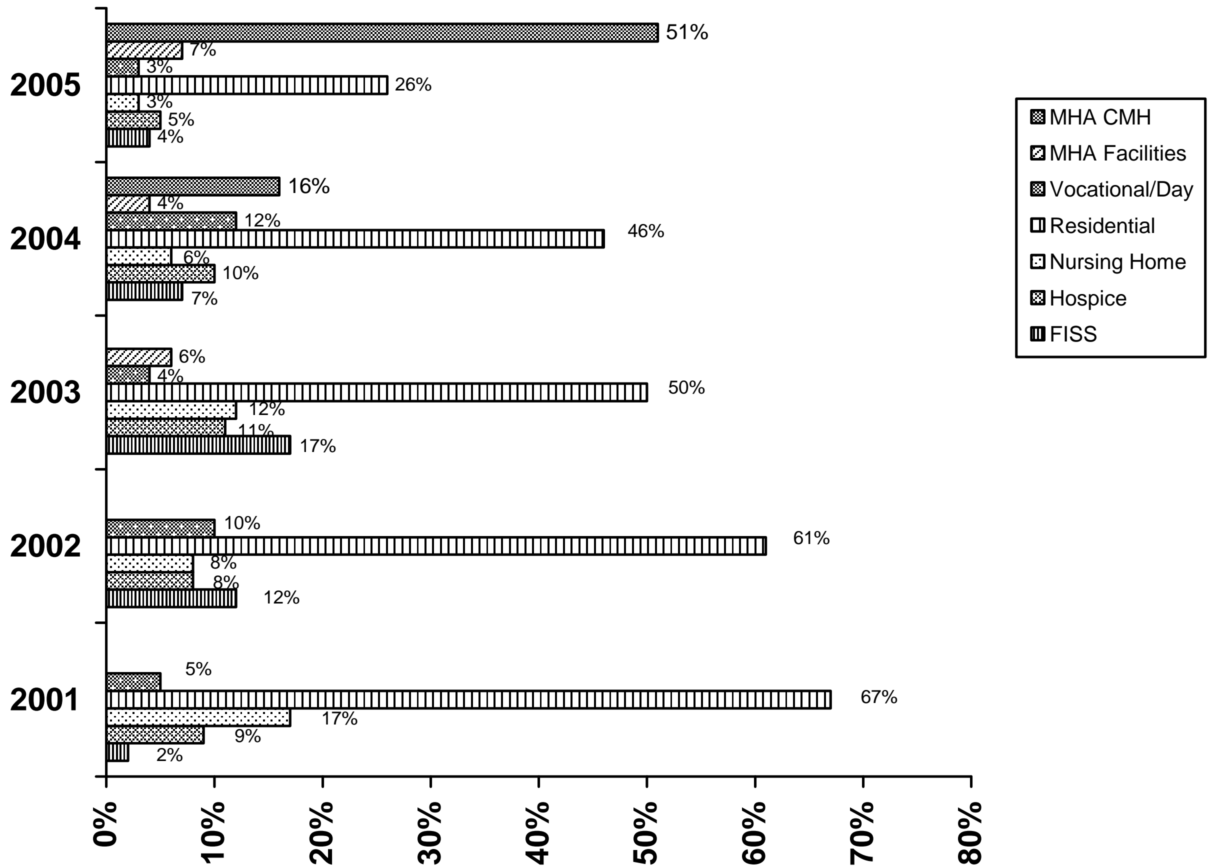
[6] Group Home means a residence owned, leased, or operated by a licensee that: (a) Provides residential services for individuals who, because of a developmental disability, require special living arrangements; (b) Admits at least four, but not more than eight individuals; (c) Provides 10 or more hours of supervision, per week (COMAR 10.22.01.01).

[7] IFC means a private, single family residence which provides a home for up to three individuals with developmental disabilities, who are unrelated to the care provider (COMAR 10.22.01.01).

[8] CSLA means services to assist an individual in non-vocational activities necessary to enable that individual to live in the individual's own home, apartment, family home or rental unit with (i) no more than two other non-related recipients of these services; or (ii) members of the same family regardless of their number (COMAR 10.22.01.01).

[9] SRC means a State owned and operated facility for individuals with mental retardation (COMAR 10.22.01.01).

Figure 3. Type of Services



2003 data included 180 DDA cases and 11 MHA cases, 2004 data included 179 DDA cases and 44 MHA cases, 2005 data included 88 DDA cases and 122 MHA cases

As indicated in Table 5 and Figure 3, the total 210 cases reviewed in 2005 consisted of 88 (or 42%) deaths of individuals who had received DDA services and 122 (or 58%) of deaths of individuals who had received MHA services. Of the 88 DDA cases, a large percentage of the reviewed deaths occurred to individuals receiving community residential services followed by those receiving hospice and FISS services. Hospice care for individuals with developmental disabilities may be provided at a hospice center, a nursing home, family home or a residential setting. Of the 122 MHA cases, a large percentage of the reviewed deaths occurred in community-based settings, closely followed by general hospital settings.

Cause of Death

TABLE 6 shows the number and percent distribution of the leading causes of death.

TABLE 6: NUMBER AND PERCENT DISTRIBUTION OF LEADING CAUSES OF DEATHS IN CASES REVIEWED IN 2001 THROUGH 2005

Cause of Death	# & % 2001	# & % 2002	# & % 2003	# & % 2004	# & % 2005
Diseases of the heart	9 (21%)	39 (27%)	51 (27%)	50 (22%)	91 (43%)
Influenza and Pneumonia	8 (19%)	31(22%)	33 (17%)	25 (14%)	36 (16%)
Malignant Neoplasms	6 (14%)	14 (10%)	15 (8%)	12 (7%)	37 (17%)
Other Diseases of Respiratory System	7 (17%)	13 (9%)	12 (6%)	13 (6%)	10 (5%)
Septicemia	4 (10%)	11 (8%)	11 (6%)	20 (9%)	15 (7%)
Accidents	4 (10%)	3 (2%)	10 (5%)	18 (8%)	25 (12%)
Motor Vehicle Accident	*1*	*1*	*4*	*1*	*1*
Nontransport Accident (falls, choking drowning, scalding, etc.)	*3*	*2*	*4*	*16*	*8*
Smoke Inhalation	*0*	*0*	*2*	*1*	*0*
Cerebrovascular Disease	0 (0%)	2 (1%)	9 (5%)	14 (6%)	7 (3%)
Epilepsy	0 (0%)	7 (5%)	7 (4%)	9 (5%)	3 (1%)
Nephritis, Nephritic Syndrome & Nephrosis	0 (0%)	2 (1%)	4 (2%)	6 (3%)	0 (0%)
Psychotropic drugs, not otherwise classified	0 (0%)	0 (0%)	4 (2%)	0 (0%)	0 (0%)

The data indicate that out of the death cases reviewed in 2005 the leading cause of death among persons with developmental disabilities and mental illnesses was diseases of the heart. The number of deaths resulting from malignant neoplasms was slightly higher than deaths from influenza pneumonia and ranked as the second leading cause for people with disabilities. Influenza pneumonia was the second leading cause in cases reviewed in 2004 and was the 3rd leading cause in 2005. Accidents remained the 4th leading cause for cases reviewed in 2005.

TABLE 7: LEADING CAUSES OF THE DEATHS REVIEWED IN 2005 COMPARED TO THE LEADING CAUSES OF DEATH AMONG ALL MARYLANDERS IN 2004

Rank	Leading Causes of the DDA Deaths reviewed by Committee in 2005[1]	Leading Causes of the MHA Deaths Reviewed by Committee in 2005[2]	Leading Causes of death for all Maryland Residents 2004[3]
1	Diseases of the Heart	Diseases of the Heart	Disease of the Heart
2	Influenza and Pneumonia	Accidents/Malignant Neoplasms (tied)	Malignant Neoplasm
3	Accidents	Influenza & Pneumonia	Cerebrovascular diseases
4	Septicemia	Septicemia	Chronic Lower Respiratory Diseases
5	Cerebrovascular Diseases	Other Diseases of Respiratory System	Diabetes Mellitus
6	Malignant Neoplasm	Epilepsy	Accidents
7	Other Diseases of Respiratory System		Influenza and Pneumonia
8	Chronic Lower Respiratory Diseases		Septicemia
9	Acute Lower Respiratory Infections		Alzheimer's Disease
10	Epilepsy		Nephritis, Nephrotic Syndrome, and Nephrosis

Notes:

1. *The total number of DDA deaths reviewed in 2005 was 88. Deaths may have occurred in 2003, 2004 and 2005;*
2. *The total number of MHA death cases reviewed in 2005 was 125. Deaths may have occurred in* 2003, 2004 and 2005;
3. *Data provided by DHMH Vital Statistics Administration; 2005 data not yet available.*

TABLE 7 compared the causes of death among people with developmental disabilities and mental illness with the cause of death in the general population. Diseases of the heart were the number one cause of death for people with developmental disabilities/mental illnesses and the Maryland population at large. For all Marylanders, malignant neoplasm was the second leading cause of death, compared with influenza and pneumonia as the second cause of death among people with developmental disabilities, and accidents and malignant neoplasm being tied and both being the top 2 cause for people with mental illness. Among individuals with developmental disabilities, accidents ranked the 3rd leading cause for the deaths reviewed in 2005 while accidents were listed the 8th cause in the cases reviewed in 2004. Influenza and pneumonia were the 3rd leading cause for people with mental illness. Respiratory diseases continued to be one of the major causes for individuals with developmental disabilities and mental illness.

Do Not Resuscitate (DNR)

Approximately 74 (35%) individuals had Do Not Resuscitate (DNR) orders at the time of death. Many of the deaths were due to medical complexity and/or terminal conditions such as advanced stage cancer.

TABLE 8: DO NOT RESUSCITATE (DNR)

DNR Authorized by:	**2005 (DDA)**	**2005 (MHA)**
Self	2	7
Family/Guardian	35	14
Court	2	0
Surrogate Decision Maker	0	0
Power of Attorney	0	1
Hospice	0	0
Physician	4	0
Unknown	2	7
Total	**45**	**29**

Medication and Dosage

TABLE 9 illustrated the number and percentage of individuals who had received medications from each identified agent class. Individuals may have received medication(s) from more than one class. Of the 210 cases reviewed in 2005, 162 or 77% of the individuals had received central nervous system (CNS) active medications during the month prior to death.

TABLE 9: NUMBER AND PERCENTAGE OF INDIVIDUALS RECEIVING MEDICATIONS FROM EACH CLASS – 2003, 2004, & 2005 DATA INCLUDE BOTH DDA AND MHA CASES THAT WERE REVIEWED

Agent Class	Number & Percentage (2002)	Number & Percentage (2003)	Number & Percentage (2004)	Number & Percentage (2005)
Anticholinergic Agent	12 (10%)	Data not collected	14(6%)	8 (5%)
Anticonvulsant	78 (65%)	49 (48%)	87 (39%)	78 (47%)
Antidepressant	31 (26%)	43 (42%)	69 (31%)	87 (53%)
Antipsychotic	23 (19%)	40 (39%)	65 (29%)	99 (60%)
Anxiolytics	41 (34%)	39 (38%)	16 (7%)	34 (21%)
Cholinesterase Inhibitor	No data	No data	7 (3%)	6 (4%)
Hypnotics	1 (1%)	5 (5%)	46 (21%)	24 (15%)
Narcotics	16 (13%)	14 (14%)	19 (9%)	18 (11%)
Stimulant	2 (2%)	1 (1%)	0 (0%)	1 (1%)

TABLE 10: COMPARISON OF NUMBER AND PERCENTAGE OF DDA AND MHA INDIVIDUALS RECEIVING MEDICATIONS FROM EACH CLASS

Agent Class	Number & Percentage (DDA) 2005	Number & Percentage (MHA) 2005
Anticholinergic Agent	1 (2%)	7 (6%)
Anticonvulsant	37 (69%)	41 (37%)
Antidepressant	14 (26%)	73 (66%)
Antipsychotic	18 (33%)	81 (73%)
Anxiolytics	4 (7%)	30 (27%)
Cholinesterase Inhibitor	6 (11%)	0 (0%)
Hypnotics	9 (17%)	15 (14%)
Narcotics	5 (9%)	13 (12%)
Stimulant	0 (0%)	1 (1%)

TABLE 11: NUMBER AND PERCENT DISTRIBUTION OF INDIVIDUALS RECEIVING MEDICATION(S) FROM THE SAME CLASS; 2003, 2004, & 2005 DATA INCLUDE BOTH DDA AND MHA CASES THAT WERE REVIEWED

Individuals	# & % Distribution (2002)	# & % Distribution (2003)	# & % Distribution (2004)	# & % Distribution (2005)
Individuals Using 1 Agent From The Same Class	71 (59%)	62 (61%)	109 (66%)	115 (70%)
Individuals Using 2 Agents From The Same Class	42 (35%)	35 (34%)	44 (27%)	73 (44%)
Individuals Using 3+ Agents From The Same Class	7 (6%)	5 (5%)	12(7%)	17 (10%)

Figure 4 Percent Distrbution of Individuals Receiving Medications from the Same Agent Class

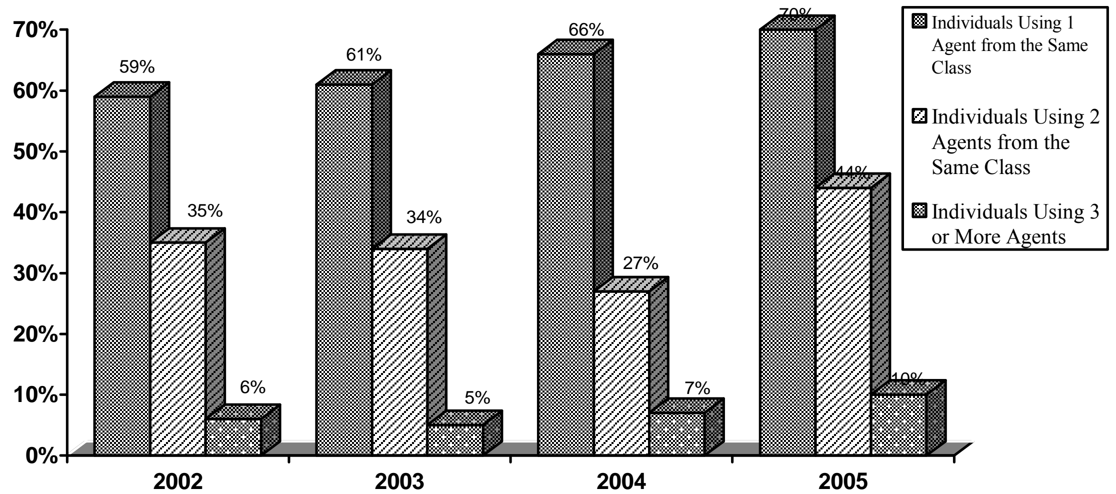


TABLE 12: COMPARISON OF NUMBER AND PERCENT DISTRIBUTION OF DDA AND MHA INDIVIDUALS RECEIVING MEDICATION(S) FROM THE SAME CLASS

Individuals	Number and Percent Distribution DDA 2005	Number and Percent Distribution MHA 2005
Individuals Using 1 Agent From The Same Class	30 (56%)	85 (77%)
Individuals Using 2 Agents From The Same Class	18 (33%)	55 (50%)
Individuals Using 3+ Agents From The Same Class	6 (11%)	11 (10%)

Table 13, Table 14 and Figure 5 describe the number and percent distribution of individuals who had been on one or more different central nervous system (CNS) active medications.

TABLE 13: NUMBER AND PERCENT DISTRIBUTION OF INDIVIDUALS ON CENTRAL NERVOUS SYSTEM (CNS) ACTIVE MEDICATIONS; 2003, 2004, and 2005 DATA INCLUDE BOTH DDA AND MHA CASES THAT WERE REVIEWED

Individuals	# & % distribution (2002)	# & % distribution (2003)	# & % distribution (2004)	# & % distribution (2005)
Individuals on 1 CNS active medication	47 (39%)	34 (33%)	42 (26%)	31 (19%)
Individuals on 2 CNS active medications	43 (36%)	34 (33%)	60 (37%)	47 (28%)
Individuals on 3 CNS active medications	14 (12%)	14 (14%)	33 (20%)	42 (25%)
Individuals on 4 or more CNS active medications	16 (13%)	20 (20%)	28 (17%)	45 (27%)

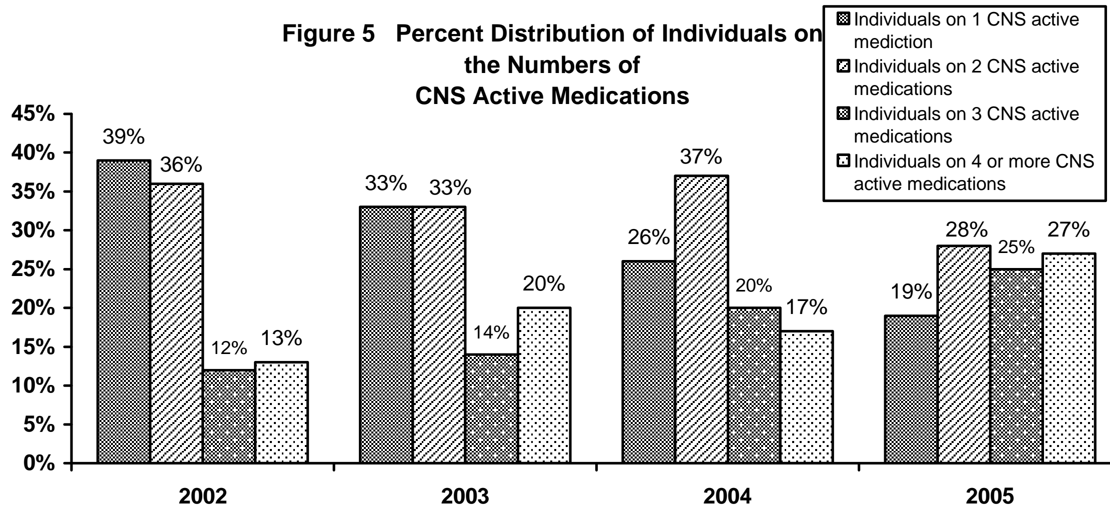


TABLE 14: COMPARISON OF NUMBER AND PERCENT DISTRIBUTION OF DDA AND MHA INDIVIDUALS ON CENTRAL NERVOUS SYSTEM (CNS) ACTIVE MEDICATIONS IN CASES REVIEWED IN 2005

Individuals	Number and Percent Distribution (DDA)	Number and Percent Distribution (MHA)
Individuals on only 1 CNS active medication	16 (29%)	15 (14%)
Individuals on 2 CNS active medications	18 (33%)	29 (26%)
Individuals on 3 CNS active medications	10 (19%)	32 (29%)
Individuals on 4 or more CNS active medications	10 (19%)	35 (32%)

TABLE 15 NUMBER OF CASES REFERRED BY MORTALITY REVIEW COMMITTTEE TO OTHER AGENCIES FOR FURTHER EVALUATION

Agencies	Number and Percent of Cases (DDA)	Number and Percent of Cases (MHA)
Board of Nursing	4	--
Board of Pharmacists	--	--
Board of Physicians	--	--
Hospital Unit	3	6
Licensing Unit	--	--
MHA	--	2
Nursing Home Unit	1	1
State Attorney's Office	1	--
Total	9 (10%)	9 (7%)

Table 15 listed the number of cases that were referred to the different licensing board and agencies/unit or State Attorney's office for further investigation, due to concerns of quality of care provided to the individuals.

V. FINDINGS, DISCUSSION AND RECOMMENDATIONS

This 2006 Annual Report for calendar year 2005 represents a summation of the hard work and dedication put forth by all of the committee members and staff. The MRC and Maryland at large is constantly challenged to provide the best care to individuals with disabilities.

We strongly feel that this report provides insight into areas that we can improve further as well as areas that there has been some notable improvement.

Generally speaking, the population that we review is dying at a younger age than the general population. We feel that this may be in part to their disabilities and co-morbidities yet the committee has concerns regarding care issues that may affect this finding. The committee commends all providers who help to keep individuals aging and dying in place yet this continues to be a minority of the cases.(3%)

Due to the medical complexity of many of the deaths we review it not surprising to see that diseases of the heart are a leading cause of death among all Marylanders. What is disturbing is that respiratory illnesses (influenza and pneumonia) as well as accidents and malignant neoplasms are in the top three. There is a concern among the Committee regarding planning for end of life care. Because of this the Committee heard from a panel of experts on end of life care issues which prompted a memo to be sent to all providers including various resources to improve planning.

With the psychiatric and behavioral issues of the population, we note that 77% of the individuals were taking central nervous system (CNS) active medications during the month prior to death. MHA individuals were using more duplicative agents as well as more CNS active medications compared to the DDA population.

Based on the information provided as well as minutes of the meetings, the MRC makes the following recommendations:

1) Choking deaths continues to be problematic.

The committee continues to view this issue as a multifactorial problem. To better implement change, the committee is working on better defining the issues and then looking at sustainable interventions to ultimately decrease this concern.

2) End of Life Care and legal documentation regarding health decision making continues to be poorly documented or provided.

Ongoing training and educational initiatives need to be done to increase understanding and awareness regarding health care decision making and end of life care. A special forum was provided to MRC members in the fall to increase their awareness to local and national concerns. The proceedings from this forum were sent out to all providers via a memo.

3) Medication management and medication related problems continue to be a concern of the committee.

Due to the complexity of the medication regimens and potential issues that have been seen by this, we encourage both MHA and DDA to provide services (e.g. training, pharmacy review) not only in institutional settings but also in community settings (e.g. Groups homes, assisted living facilities) to address and prevent medication related problems.

4) The health care received by individuals with disabilities appears to be less than adequate.

The Developmental Disabilities Administration, Mental Health Administration and the Office of Health Care Quality should continue to do outreach and educational initiatives to improve training for care providers especially in the community.

5) There have been concerns on the qualifications as well as history of direct care providers and professionals.

The committee still feels strongly that there should be a central registry for individuals who should not be permitted to provide services to individuals with disabilities due to allegations or charges brought against them.

As you can see the work of this committee cannot be done with out the collaboration among numerous individuals and organizations. Through this collaboration we are hoping we can achieve some of our previous stated recommendations.

VI. APPENDIX

MORTALITY REVIEW COMMITTEE MEMBERS

Committee Chair:

• Nicole Brandt, Pharm D., CGP, BCPP - University of Maryland – School of Pharmacy

Committee Members:

• Sarah Basehart, Assistant Director of The Arc of Maryland

• Allison Del Bene Davis, RN., MS., Director of Nursing – Arc of Anne Arundel County

• Tracey DeShields, Director of Public Health Policy - DHMH

• Jean Furman, RPH – Parent

▪ Deana Krizan, Director of Public Policy - Mental Health Association of Maryland

▪ Wendy Kronmiller, Esq., Director of Office of Health Care Quality – DHMH

▪ Miriam Levy, Ph.D. – Mental Health Specialist

• Evan Mortimer, MD, Medical Director of Family Planning and
Reproductive Health – DHMH

• Monica McCall, Executive Director – Creative Options, Inc.

▪ Linda Morrell, Self Advocate

• Cindy Ostrowski, APRN, BC, Program Director - St. Luke's House, Inc

• Roger Peele, MD, Psychiatrist – Montgomery County

•Joanna Pierson, Ph.D., Executive Director – The Arc of Frederick County, Inc.

• Mary Ripple, M.D. Deputy Chief Medical Examiner – Office of the Chief
Medical Examiner

• Joan Rumenap, MBA, Director of Special Projects – Abilities Network

• Tracy Wright, Self Advocate

Committee Counsels:

• Kathleen Ellis, Deputy Counsel, Assistant Attorney General, Office of the Attorney
General-DHMH

▪ Paul Ballard, Assistant Attorney General, Office of the Attorney General-DHMH