Report for meeting of the Board to be held on Monday 5th April, 2004: annual report of the National Parasuicide Registry for 2002

MID-WESTERN
HEALTH BOARD

To: **Cathaoirleach & Each Member**
Mid-Western Health Board

Report No: 17/04
Item No5 on Agenda

For Meeting of the Board to be held on Monday, 5th April 2004

Annual Report of the National Parasuicide Registry for 2002

Dear Member,

The second Annual Report from the National Parasuicide Registry was formally launched by Mr. Micheál Martin, T.D., Minister for Health and Children, on the 2nd February 2004. The National Parasuicide Registry provides information on the general characteristics of people who deliberately self harm. It also provides a better knowledge of suicidal behaviour and specifies trends in parasuicide over time and in the different regions of the country. The 2002 Report represents twelve month data on incidents of parasuicide behaviour collected from 32 Accident and Emergency Departments and 16 Irish Prisons and places of detention.

The data collected by the Registry is standardised across participating health boards and allows for analysis of the general characteristics including the social and demographic profiles of people attempting suicide. The monitoring and data collection provides key information, which informs of possible relationships between precipitating factors and allows for the development of both service policy and clinical interventions appropriate to addressing the needs of people in this vulnerable group.

Parasuicide is defined as "an act with non-fatal outcome in which an individual deliberately initiates a non-habitual behaviour, that without intervention from others will cause self-harm, or deliberately ingests a substance in excess of the prescribed or generally recognised therapeutic dosage, and which is aimed at realising changes that the person desires via the actual or expected physical consequences". (WHO ICD10)

International studies identify that one third of all suicides have a previous history of self harm and that parasuicide is a significant risk factor in relation to suicide. Studies show that those engaging in self harm behaviours are twenty times more likely to eventually die by suicide. The Registry, in establishing the extent of hospital-based parasuicide, highlights that parasuicide is becoming an increasing problem in Ireland, particularly within identified vulnerable groupings. The response requires the priority attention, not only of the Irish health care system, but also of society as a whole.

PARASUICIDE EPISODES FOR PARTICIPANT BOARDS

In 2002, the National Parasuicide Registry reported full data from seven Health Boards, including the MWHB, with partial data reported from the Eastern Regional Health Authority. In the period January 1st to December 31st 2002, the Registry recorded 8,304 parasuicide presentations to Hospital A& E Departments made by 6,705[1] individuals.

Extrapolating, to account for the partial coverage of the Eastern regional Health Authority, the Registry estimates that, from the data collected for Acute Hospitals in 2002, there were 10,537 parasuicide presentations by 8,421 individuals in the country as a whole. Parasuicide episodes were generally confined to the younger age groups; 89.6% of all episodes were by people aged less than 50 years. In most age groups the number of acts by women exceeded the number by men. This was most pronounced in the 10-19 age group where there were 2.4 times as many acts by women (458 and 1094).

Table 1: Distribution of Hospital Treated Parasuicide Episodes by Health Boards

Board	MWHB	MHB	NEHB	NWHB	SEHB	SHB	WHB	ERHA	TOTAL
Episodes Male	431 (43.4%)	265 (45%)	339 (40%)	180 (42%)	489 (43.9%)	508 (41.5%)	407 (45.9%)	894 (40.3%)	3513 (42.3%)
Episodes Female	561 (56.6%)	324 (55%)	509 (60%)	249 (58%)	625 (56.1%)	716 (58.5%)	480 (54.1%)	1,324 (59.7%)	4788 (57.7%)
Episodes Total	**992**	**590***	**848**	**429**	**1,114**	**1,226***	**887**	**2,218****	**8,304***
Individuals Male	328	227	287	152	390	457	314	618	2773
Individuals Female	468	265	411	199	518	604	393	896	3754
Individuals Total	**796**	**493***	**698**	**351**	**908**	**1063***	**707**	**1514****	**6530***
Total Population CSO 2002	339,591	225,363	344,965	221,574	423,616	580,356	380,297	1,401,441	3,917,203
Rate per 100,000 persons	234.4	218.76	202.34	158.41	214.35	183.16	185.91	108.03**	166.7

* One individual in the MHB and 2 in the SHB were recorded as gender unknown

** ERHA :- The Registry recorded 2,218 parasuicide presentation to hospital by 1,514 individuals. Extrapolating from these figures it is estimated that there were 4,451 parasuicide presentations by 3,475 individuals in the ERHA as a whole.

Method of Parasuicide

Three quarters (72.3%) of all parasuicide episodes involved a medication overdose; this method was more commonly used by women (78.4%) then men (63.9%). More than 40% of overdoses involved a minor tranquiliser. Paracetamol featured in (33.4%) of female presentations compared to (24.8%) in male presentations. Alcohol was significantly more common in male presentations (46%) compared with women (38.6%). Cutting, as a method of self harm, featured in 23.5% of male and 15.4% of female presentations.

[1] Individuals who made multiple presentations were counted once in each region where they were treated but only once for the country as a whole.

Table 2: Rate of Parasuicide per 100,000 by Health Board and Gender

Board/Gender	MWHB	MHB	NEHB	NWHB	SEHB	SHB	WHB	**ERHA	National
Male	189	196	169	138	171	138	139	176	**167**
* **Rate difference**	22.5	29	2	-29	4	-29	-28	9	
Female	271	248	238	175	238	195	177	270	**237**
* **Rate difference**	34	11	1	-62	1	-42	-60	33	

* Rate difference = HB Rate – National Rate.
** Rate based on extrapolated ERHA data.

We see that the Mid-Western Health Board rate is 13% and 14% higher than the national rate for men and women, respectively.

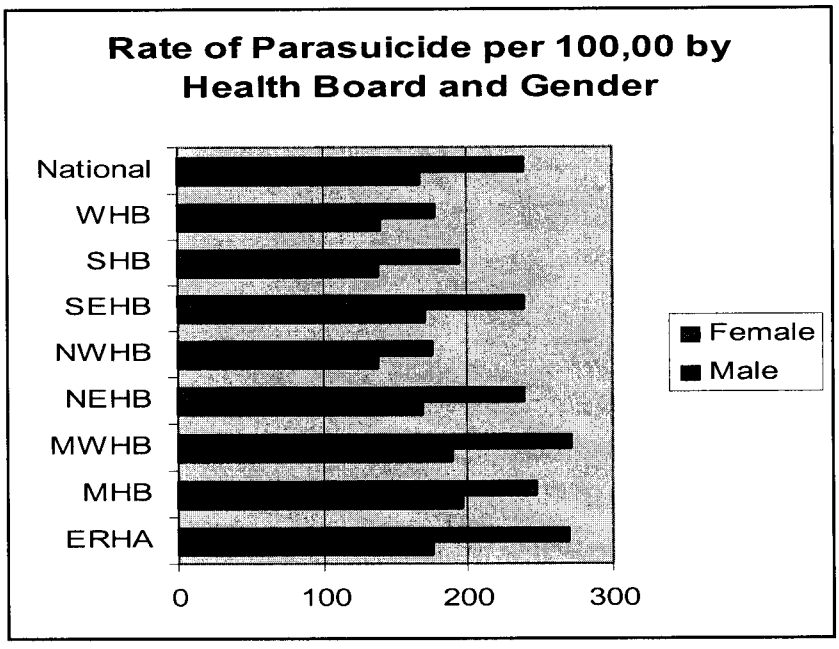

Figure 1: Rate by Health Board/Gender

Incidence of Parasuicide by County/City – Male

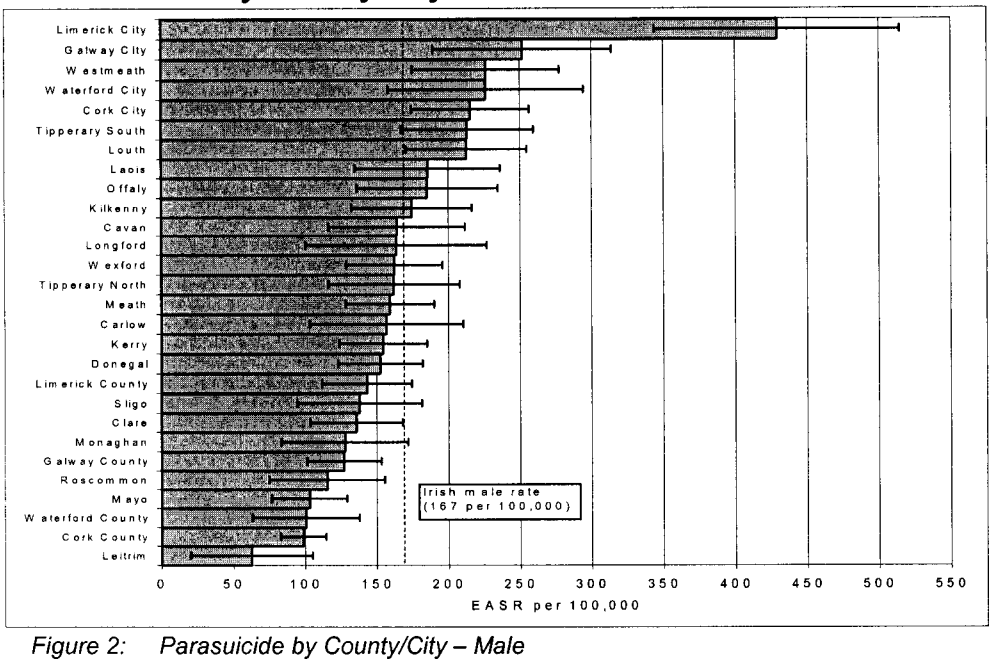

Figure 2: Parasuicide by County/City – Male

Incidence of Parasuicide by County/City – Female

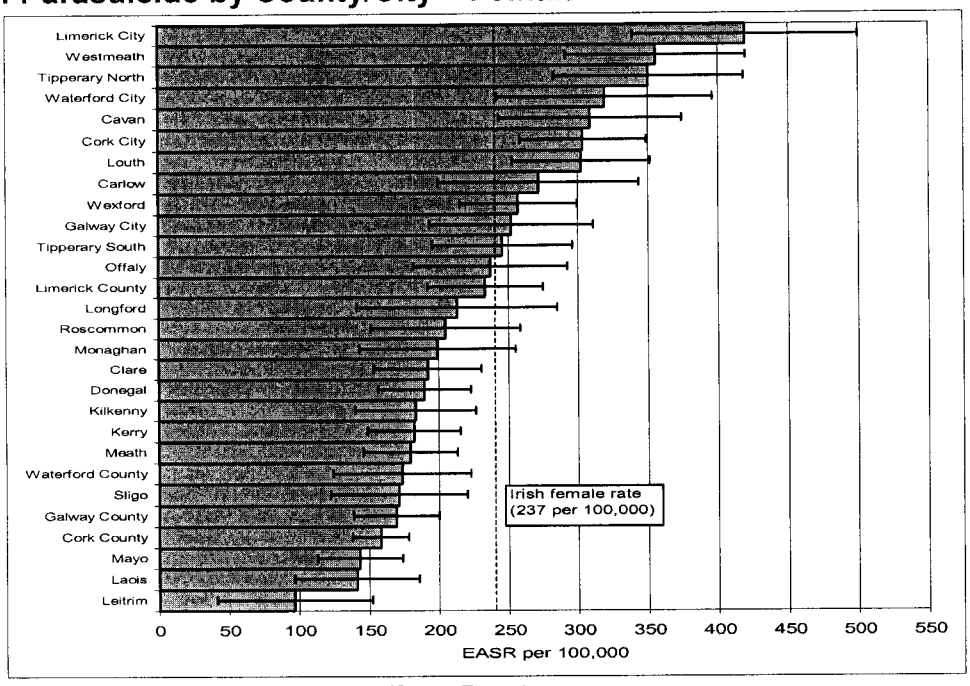

Figure 3: Parasuicide by County/City – Female

Parasuicide in the Mid-Western Health Board

A summary of the findings for the Mid-Western Health Board show that in 2002 parasuicide accounted for 0.9% of total attendances at A&E Departments within the Board. There were 992 treatment episodes of parasuicide involving 796 individuals; of these, 43.4% were male and 56.6% female. The figures reflect an increase of 11.2% and 2.7% on the number of individuals (716) and episodes (966) treated in 2001.

Parasuicide episodes treated were generally found within the younger age group with 89.4% of all episodes by people aged less than 50 years. The number of acts by women were three times that for males in the 10-19 age group (166 vs 46), however in other age groups, and particularly in the 25-34 age group, episodes for men outnumbered those by women. The gender balance of episodes treated (at 43.4% men to 56.6% women overall) varied significantly by hospital. While the numbers involved were small, there was an equal number of male and female presentations to St John's Hospital Limerick. The excess of female presentations was relatively small at the Mid-Western Regional Hospital (53.5% female, 46.5% male). The gender balance was similar to the health board as a whole at Ennis General Hospital (57.5% female, 42.5% male) whereas presentations by women (72.1%) far exceeded those by men (27.9%) at Nenagh General Hospital.

The Mid-Western Regional Hospital provides an A&E service for the Limerick Catchment area (pop: 175,304) this has an urban and rural population of city (pop: 54,023) and county (pop: 121,281). The Mid-Western Regional Hospital recorded 679 (68%) treatment episodes with 24 (2.4%) treatment episodes recorded for St. John's Hospital giving a total of 703 (71%) episodes for Limerick hospitals. Nenagh General Hospital recorded 136 (13.7%) treatment episodes and Ennis General Hospital 153 (15.4%) treatment episodes.

Parasuicide episodes by A&E Department

Table 3: Parasuicide by A&E Departments

A&E Location	Episodes	
Mid-West Regional Hospital, Limerick	679	703
St. John's Hospital, Limerick	024	
Nenagh General Hospital, N.Tipperary	136	136
Ennis General Hospital, Clare	153	153
Total	**992**	**992**

Parasuicide episodes by Place of Residence

Table 4: Parasuicide by Place of Residence

A&E Location	Episodes	
Mid-West Regional Hospital, Limerick	537	559
St. John's Hospital, Limerick	022	
Nenagh General Hospital, N.Tipperary	120	120
Ennis General Hospital, Clare	127	127
Total	**806**	**806**

While Limerick Hospitals, including St. John's Hospital, show a total of 703 episodes when this figure is examined by place of residence, Limerick City and County account for a total of 559 treatment episodes with 127 and 120 treatment episodes recorded for Ennis and Nenagh General Hospitals respectively.

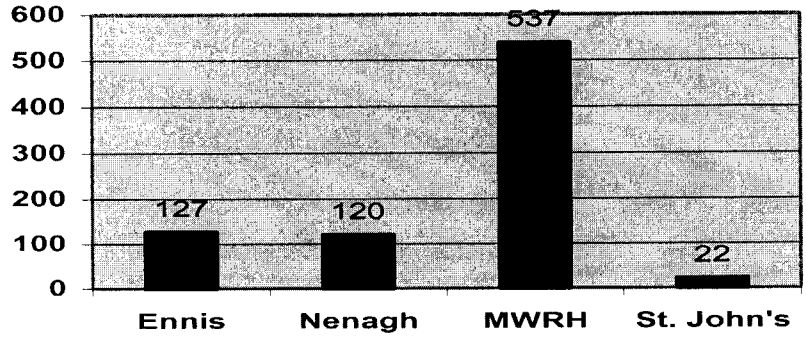

Figure 4: Parasuicide by Place of Residence

The Mid-West Regional Hospital and St. John's Hospital treat 69.35% of episodes with Ennis and Nenagh General Hospital treating 15.75% and 14.88% of regional episodes respectively. The rate by area of residence was highest for Limerick city; this is in keeping with national trends suggesting that parasuicide behaviour is more characteristic of urban areas.

Parasuicide episodes by age

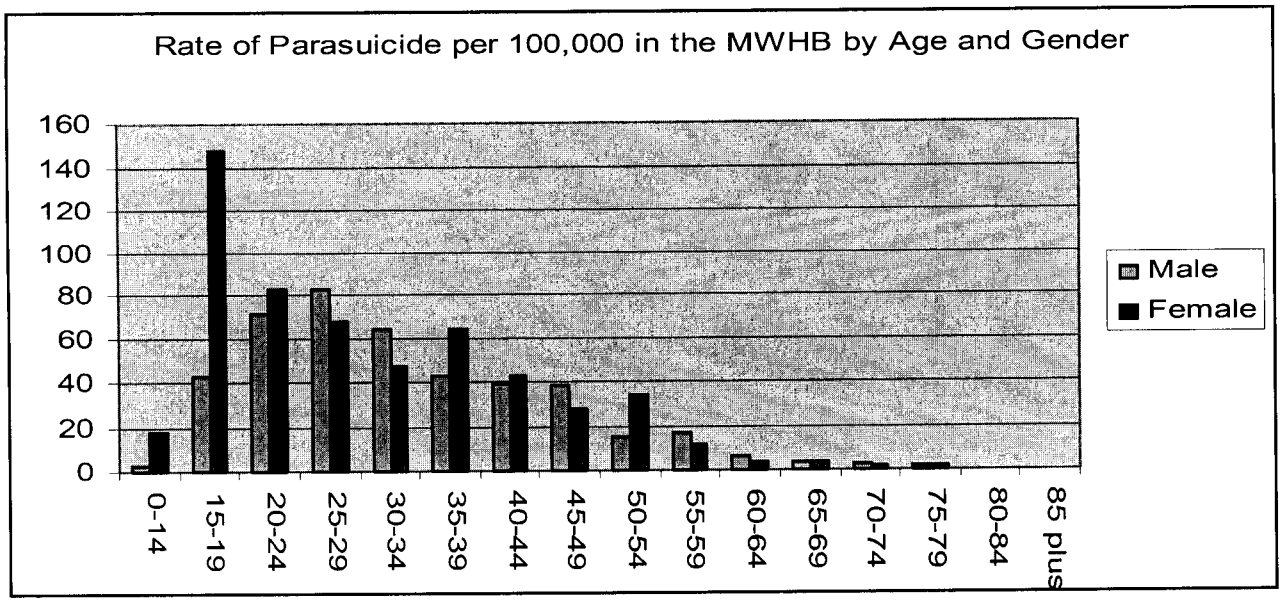

Figure 5: Parasuicide by Age

The figure for the Mid-Western Health Board shows that for women, a significant number of episodes, 235 (42.0%) occurred in the 15 to 24 age group with a peak in the rate for those aged 15 to 19 years 148 (26.38%). For males, 218 (51.0%) of episodes occurred in the 20 to 34 age group with a peak for those in the age range 25 to 29 years with 83 episodes (20%). These figures suggest that, in the Mid-Western Health Board region, parasuicide behaviour is a significant problem among teenage girls aged 15-19 years and for males aged 20-34 years.

In the Mid-Western Health Board, eighteen (1.9%) of the 992 episodes presenting and treated were for individuals who lived outside of the Board's region reflecting a significant number of inward flows from other health board areas.

Repetition of Parasuicide

In 2002 the repetition of parasuicidal behaviour in the region was high at 15.3%. In the 12-month monitoring period, one in five individuals engaged in repeat acts. Of the 796 individuals treated, 122 (15.3%) engaged in one or more repeat attempts. The rate of repetition was higher in men (60/328, 18.3%) than it was in women (62/468, 13.2%).

Table 5 shows the figure for parasuicide episodes and sets this out by number and percentage of individuals who presented with repeat acts.

Table 5: Repetition episodes/Individuals/ by Hospital and Gender

	Ennis General	Limerick Hospitals MWRH & SJH	Nenagh General	Total
Number of Episodes				
Male	65	328	38	431
Female	88	375	98	561
Total	**153**	**703**	**136**	**992**
Number of Individuals				
Male	55	244	35	328
Female	72	315	85	468
Total	**127**	**559**	**120**	**796 ***
Number who Repeated				
Male	06	53	05	60
Female	09	45	08	62
Total	**15**	**98**	**13**	**122 ***
Percentage who Repeated				
Male	10.9%	21.7%	14.3%	18.3%
Female	12.5%	14.28%	9.4%	13.2%
Total	**11.8%**	**17.53%**	**10.8%**	**15.3%**

* Note: The sum for individuals and repeaters exceeds the number recorded in the table because multiple presentations were counted just once at each hospital where a presentation occurred.

Method of Parasuicide

Nationally, overdose of medication featured as the most lethal method of self harm in 66% of all cases presenting (males 55%, females 74.6%). When consideration is given to overdose as a secondary method, its frequency increases to 73.6% of all cases (64.5% males and 80.6% female). The levels of alcohol used were similar to that presented in 2001, 45.1% of all cases, more common in men (50.6% male, 40.8% female). Most lethal methods used in the Mid-Western Health Board area are set out in Table 6.

Episodes by most lethal Method and Gender 2002 MWHB

Table 6: Episodes by most lethal method and gender

	Overdose	Alcohol	Poisoning	Hanging	Drowning	Cutting	Other	Total
Male	237 55%	1 0.2%	10 2.3%	33 7.7%	25 5.8%	111 25.8%	14 3.2%	431 100%
Female	418 74.5%	1 0.2%	9 1.6%	6 1.1%	24 4.3%	90 16%	13 2.3%	561 100%
Total	655 66%	2 0.2%	19 1.9%	39 3.9%	49 4.9%	201 20.3%	27 2.7%	992 100%

Drugs Used in Overdose

Figure 6 sets out the frequency by gender with which the most common drugs were used in overdose. Minor tranquilisers (50%), Paracetamol (33%), prescribed drugs (20%)and SSRI antidepressants (18.9%)feature most frequently.

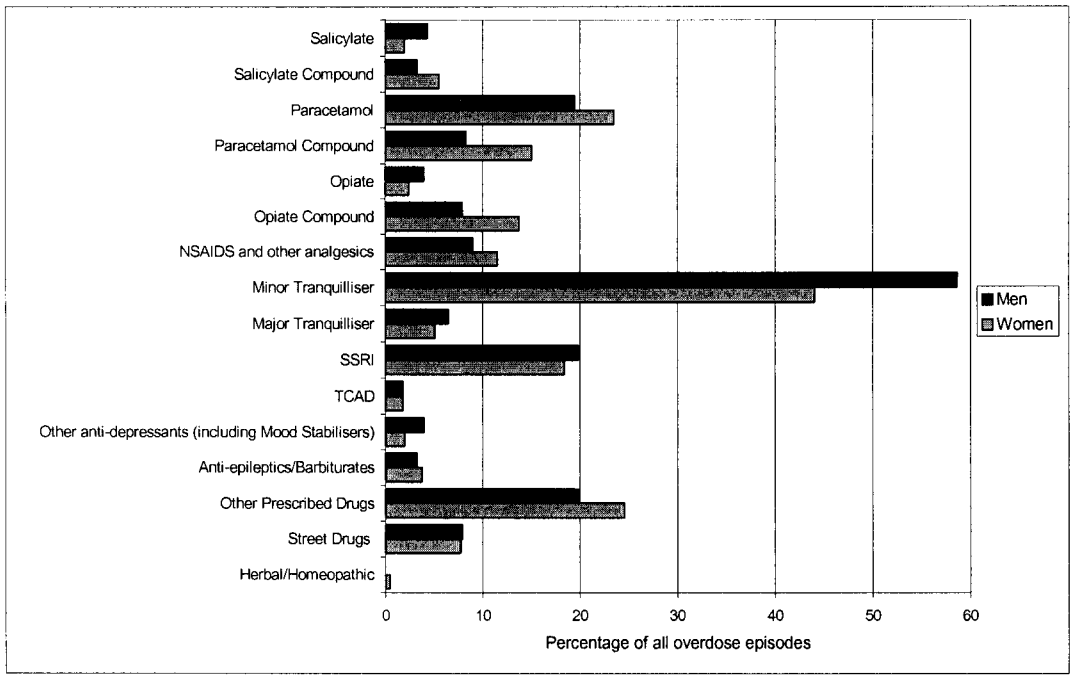

Figure 6: Type of drug used in overdose MWHB

Recommended Next Care

The Report shows that in-patient admission was recommended in 80% of all episodes presenting (86.7% female, 60.9% male). Almost two thirds were admitted to a ward of the treating hospital and 9% were recommended for admission to psychiatric inpatient care. Of those for whom a hospital admission was recommended, 5.7% refused to avail of this option. Of those who presented to hospital A&E departments, 18.2% were discharged following treatment and 1.7% left without being seen.

Parasuicide Episodes by Time of Occurrence

The Report highlights that episodes of parasuicide behaviour by women were highest at the weekend, with higher numbers recorded for Sunday and Monday and lowest numbers recorded for Wednesday to Friday. Male presentations showed an even distribution throughout the week Monday to Sunday. Episodes for both men and women peaked in the late hours of the evening, after 16.00 hrs and the early hours of the morning up to 04.00hrs. Consequently the busiest eight hour period of the day was from 8pm. to 4am.

Table 7: Number of Episodes by weekend for males and females

	Mon	Tue	Wed	Thur	Fri	Sat	Sun	Total
Men	57	57	53	64	70	65	65	431
Women	101	82	67	62	78	63	108	561
Total	**158**	**139**	**120**	**126**	**148**	**128**	**173**	**992**

SUICIDE DATA

National Data

The statistical data reported is compiled by the Vital Statistics Section of the CSO in Cork and is based on information provided by the revised confidential Garda Form 104, completed in respect of all deaths from external causes. It reports that in 2002 the rate of death by suicide per 100,000 population was 11.5 (451 people) compared with 11.7 (448 people) in 2001.

The 2002 figures represent one quarter of deaths nationally in the 15-24 age group making suicide the second largest cause of death in this age group. The rate of death by suicide has almost doubled from 6.4 per 100,000 in 1980 to 11.5 per 100,000 in 2002. Suicide accounted for 34.4 % of deaths from external causes, over the last five year period (1998-2002). Death by suicide represented 4.5 % of all deaths in Ireland (1998-2002) (CSO, 2002). More than twice as many men died by suicide in 2002 (371) compared with 20 years earlier (143).

In 2002, males represented 82% (371) of suicide deaths, compared with females who represented 18 % (80) of deaths.

Number of Suicides Registered by the CSO, by Gender, 1998-2002

Table 8: Suicides by Gender (1998-2002)

Year	Males	Females	Total
1998	421	83	504
1999	349	90	439
2000	341	72	413
2001	356	92	448
2002	371	80	451

Number of Suicides Registered by the CSO, by Age, 1998-2002

Table 9: Suicides by Gender (1998-2002)

Age Group	1998	1999	2000	2001	2002
5 -14 years	1	2	4	2	0
15 – 24 years	138	98	105	97	91
25 – 34 years	118	89	93	112	108
35 – 44 years	97	85	76	90	87
45 – 54 years	74	76	58	69	75
55 – 64 years	40	48	47	44	52
65 – 74 years	28	25	21	21	25
75 years +	11	16	9	13	13
TOTAL	504	439	413	448	451

Deaths by suicide registered in 2002 in the MWHB by county of residence, gender and age
(Source CSO)

Table 10: Suicide Deaths – Ireland & MWHB 2001 & 2002 by Gender/Age/ Catchment Area

MWHB	All	Male			Female		
		Total	Under 25	Over 25	Total	Under 25	Over 25
Clare	12	[illegible]	4	7	1	0	1
Limerick City	7	7	1	6	0	0	0
Limerick County	17	12	8	4	5	4	1
Tipperary NR	7	6	2	4	1	1	0
Total 2002	**43**	36	15	21	**7**	**5**	**2**
Total 2001	**38**	28			**10**		
Ireland 2002	**451**	371	77	294	**80**	**14**	**66**
Ireland 2001	448	356			92		

Mid-Western Health Board Data

Over the **five year period 1998-2002**, 217 suicides were registered by the MWHB. Men and women accounted for 178 (82%) and 39 (18%) of these deaths respectively. This yields a male/female suicide ratio of 4.6: 1, which is very similar to the male to female ration of 4.5: 1.

The number of suicide deaths registered in the MWHB in 2002 was 43 (36 Male and 7 Female) compared with 38 deaths (28 Male and 10 Female) in 2001. The average number of suicide deaths registered per annum in the MWHB was 36 for men and 7 for women.

Rate of Suicide Deaths per 100,000 population, by Gender, registered by the CSO's Office, 1998-2002

Table 11: Suicide deaths (rate per 100,000) by Gender/Health Board's

Health Board	Male	Female
ERHA	14.2	4.2
MHB	24	4.2
MWHB	20.2	4.5
NEHB	18	3.6
NWHB	19.9	3.5
SEHB	22.6	3.5
SHB	23.6	5.5
WHB	18.6	4.3

I wish to take this opportunity to acknowledge the work of the National Parasuicide Registry in providing data and analysis in relation to parasuicide and for its contribution in creating an increased awareness around this issue which impacts on personal health.

Yours sincerely,

J. Conway,
Assistant Chief Executive Officer,
Mental Health & Elderly Care.