Towards Health:
The Challenges in Cork and Kerry

"As regards the scope of public health care, it is the community that has the obligation to safeguard the right of each individual to exist i.e. to exist in health"

Virchow, 1848

FOREWORD

In this first Public Health report we have chosen to concentrate on selected key issues concerning our health. We focus on the health of our children, on the quality of the air we breathe and the water we drink; on patterns of infectious disease and their prevention; on the food we eat in terms of its inherent safety and nourishment value; on cancer as a major cause of death and illness; and how our way of life affects our health.

Variations in health and health care do exist. Social and economic disadvantage are well-recognised determinants of health and the inequalities in health which can result are highlighted throughout this report. It is acknowledged that health services are but a factor in determining the health of a population and that many causal factors such as poverty and unemployment are outside the direct control of the health services.

A worthwhile agenda for tackling inequalities in health must therefore include a strong focus on reducing poverty and a commitment to the careful monitoring of the impact of major public policies on our health, particularly among the most vulnerable groups.

This report will not, in itself, improve the health of the public. It is envisaged that this and future reports will influence the allocation of resources and planning of services so that they can become more effective in preventing illness, suffering and premature death.

This report will act as an archive for reference in the future: a yardstick by which to measure our collective efforts. Above all, it should act as a stimulus to debate and action by all concerned with improving the state of our health.

Dr. Elizabeth Keane
Director of Public Health
THE FIRST ANNUAL REPORT OF THE DEPARTMENT OF PUBLIC HEALTH 1996

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The production of this report has been a shared responsibility of the staff of the Department of Public Health but particularly Dr. Fiona Ryan, Ms. Paula O'Connor and Ms. Judith Foley who carried out a disproportionate burden of the work and deserve our thanks.
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Chapter 1

The People of Cork and Kerry
THE PEOPLE OF CORK AND KERRY

That the people of Cork and Kerry are unique might seem obvious! However, a detailed study of the make-up of the population which we serve (its demography) is essential to an understanding of its health needs. Death and disease are not randomly distributed throughout a population; instead certain groups within the community are more prone to disease than others, e.g. accidents as a cause of death in children and the occurrence of certain cancers in smokers.

The age, sex and social class construction of our population, together with the trends in births, deaths and migration, provide us with a profile of those important factors, which are relevant to the levels of disease and need in our community. It is thus possible to identify groups at special risk and to focus health care resources, be they preventive or curative, on those most likely to benefit from help.

The essence of Public Health Medicine is 'Social Medicine'. Inequities in our community and socio-economic deprivation are well-recognised determinants of health problems. Those at a social disadvantage die younger and experience more sickness. It is essential for us as health service providers to be acquainted with those groups who are debarred from optimal health due to their social circumstances. It is a major challenge to Public Health to redress the balance in favour of the underprivileged by targeting services and speaking out as an advocate for those in want.

Population Trends

The Southern Health Board has a population of just over half a million people (532,263): 266,474 males and 265,789 females. This accounts for 15% of the population of the Republic of Ireland. Features of population distribution for the region include a high proportion of the population surviving into old age, as is becoming increasingly a standard pattern in Western Europe (Figures 1.1 and 1.2).

There is a slight excess of males to females in the younger age group while the reverse is the case in the elderly. Again, this is typical of the standard pattern in Western Europe where female life expectancy is higher than males.
The national birth rate has been falling in recent years (figure 1.3). The birth rate in Kerry is consistently lower than the national average and is declining, again reflecting the higher proportion of elderly in the Kerry region.
Examination of the percentage of babies born outside marriage reveals a steady increase from 11% in 1987 to 17% in 1995. It is primarily younger women who are giving birth outside marriage. It is noteworthy that increased availability of family planning advice has not led to a reduction in pregnancy in the very young. A study in the Eastern Health Board in 1990 found that premature babies were significantly more likely to be born to teenage mothers. It is therefore clear that efforts to target these groups in terms of health services and health promotion messages would be rewarded in terms of health gain.

There was no significant change in the national death rate over the nine-year period 1987-1995 (figure 1.4). Within the Southern Health Board, however, the death rate in Kerry is seen to be consistently higher than the national average again reflecting its older population.
It is well recognised that cancer, cardio-vascular disease and accidents are the three main causes of death in Ireland.

In population terms, it is important to look at the "major killers". There has been a decline in mortality in both sexes from diseases of the circulatory system (figure 1.5), specifically ischaemic heart disease, and to a lesser extent cerebrovascular disease or stroke.

Total deaths from cancer have increased slightly, and deaths from injury and poisoning have remained almost unchanged. Disease of the circulatory system remains the cause of close to half of all deaths in men and women, while almost a quarter of deaths in both sexes are caused by cancer.

It is useful to compare the life expectancy at birth of men and women in Ireland (73.6 years for males and 79 for females) with that of men and women in Eastern and Western Europe. Life expectancy in Ireland is higher than many of the less well developed countries of Eastern Europe, but lower than many of the Mediterranean and Nordic countries. This is considered to reflect the influence of deficiencies in our diet and lifestyle on life expectancy.

Changes in population have occurred in County Cork, Cork City and Kerry from 1986 to 1991 (Figure 1.6). There has been a decline in the numbers of children (0-14) in all three regions. This decline was most marked in Cork City (14%). The population of young adults (25-44) has increased in all three regions. The population of elderly (over 65) has increased only slightly in Cork and remained almost unchanged in Kerry.

![Figure 1.5 - Deaths Classified by Cause, 1987-1995](image1)

Source: Vital Statistics

![Figure 1.6 - Change in SHB population 1986 - 1991](image2)

Source: Census '91
The slight decrease in population in Cork and Kerry mirrors the national population that fell by 15,000 between 1986 and 1991 (Table 1.1). This was due to the reduction in the number of births as well as an estimated net migration of 134,000 during this period.

Population predictions for the period 1991 to 2,001 predict a 20% fall in the number of children (0-14). The population between the ages of 60-75 is estimated to remain fairly static, but the population of 80-84 year olds is estimated to increase by almost a fifth, and the population of 85+ year olds is expected to increase by over a third.

As a result of these changes, the ratio of dependent elderly to dependent young people will rise. This has implications in terms of resource allocation and health policy and planning; in particular the needs of an increasing population of very elderly will have to be considered and resources distributed to support this growing ageing segment of our population.

Inequalities

In recent years it has been conclusively shown that the predominant explanation for inequalities in health across the social strata lies in the material circumstances and conditions of peoples lives. Those at social disadvantage die younger and experience more sickness.

There is evidence in individual regions of so called 'black spots' where death and illness rates are above average. It is reckoned that this unacceptable phenomenon is mainly due to factors such as unemployment, high stress living or working conditions and inadequate access to needed services.

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<td>Estimated net migration</td>
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Table 1.1 - Change in Irish population 1981-1991
Source: Census ’91

Some Irish examples of the influence of socio-economic deprivation on health have recently been studied. Research has shown that small areas in Dublin have high mortality rates associated with social deprivation. Other Irish studies have documented the internationally recognised relationship between low birth weight babies and poverty. Up to recently, little research had been carried out on the social class distribution of common chronic illnesses. However, Irish researchers have now reported that the community level of many chronic illnesses such as diabetes, stroke, chronic bronchitis and psychotic mental illness is higher in persons from the poorer social classes. Inequality may make people miserable long before it contributes to their premature death.

Examination of population trends in the Southern Health Board indicates sub groups, which are socially disadvantaged. There has been a 10% increase in lone parent households in the latest available statistics, with 40,000 children involved. In unemployment terms, the numbers of long-term unemployed in Cork and Kerry are rising with an increase from 35% to 40% unemployment rate in the 35-54 year old age group. Within Cork City the Northwest district of the City has the highest level of
deprivation with 15% unemployed and 44% in social class 5 and 6. Research conducted locally has indicated that this community has higher levels of health problems than the general population.

In order to identify pockets of the population with poor health status, information on disease and death must be available for quite small geographic areas, much smaller than counties. At present, a problem exists in Ireland in this regard as health related information is generally not available for areas smaller than county level. However, efforts by Public Health Departments are being made to remedy this.

Another technical issue that needs to be decided upon is the precise socio-economic indicators that should be used to define those who are 'materially deprived'. A number of factors have been used to date including levels of unemployment; home ownership; educational status; percentage of a population holding a medical card and family income support: uptake in an area. The challenge for Public Health Specialists is to choose a minimal set of indicators of social deprivation that are readily available and will correlate well with those most in need from a health viewpoint.

Finally, in recognition of the negative effect of poverty on health, we must tackle the issues of inequality and health in Cork and Kerry using approaches that have been shown to redress the balance elsewhere. Such a strategy would target health resources at those who are most needy. We need to orientate our services in a health promoting fashion to provide benefit to the disadvantaged groups in our community.

An excellent example of an approach to social inequalities is the now well established benefits of pre-school programmes in deprived areas. Social and personal functioning and ultimately health improvements have been documented in recipients of these programmes when they are adults. In planning for our health for the 21st Century, we need to include such long-term projects which will provide enhanced health and well being for those who are presently underprivileged in our community.

The dual challenge is:

- To identify deprived populations/small geographic areas where health status is below average.
- To commit resources, in collaboration with other agencies, to target these social inequalities which are leading to pockets of poor health.
Chapter 2

A Healthy Environment
A HEALTHY ENVIRONMENT

Safe water and clean air are pre-requisites for health. Even in the developed world we cannot afford to lose sight of such basic needs. The quality of air and water in Cork and Kerry is reviewed.

Nationally and internationally people are conscious of the environment, how it impacts on their perceived quality of life and on their health. There is clear evidence that air pollution and contaminated water are injurious to health. Less is known of the effect that other environmental exposures may have on health.

The Environmental Protection Agency (EPA) and local authorities can exert a major influence on the state of the Irish environment now and into the future through their planning, licensing and monitoring functions, while health boards have an important role to play in monitoring the health of the public.

Water quality

“Children of a culture born in a water-rich environment, we have never really learned how important water is to us. We understand it, but we do not respect it”.

William Ashworth (Not any Drop to Drink, 1982)

People expect water that is safe and pleasant to drink to be supplied to their homes on a continuous basis. We expect the water to be free of contamination from human waste and industrial or farming pollution. That it is good for washing and has fluorine added to protect us from tooth decay is an added bonus.

Nationally the highest quality of drinking water is found in public water supplies. Public supplies meet the standards for drinking water 90% of the time.
The quality of the public water supplies serving the people of Cork and Kerry in comparison to other public supplies can be seen in Figure 2.1 & Table 2.1. It is of concern that there are problems with the public water supplies in Kerry. In contrast to public supplies improvement is needed in many group schemes and private wells. Both private wells and group water supplies are especially vulnerable to pollution which is often due to improperly sited septic tanks and slurry pits. Treated group schemes have some protection.

<table>
<thead>
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<td>Cork County Council South</td>
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<tr>
<td>Cork County Council West</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Cork County Council North</td>
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<tr>
<td>Kerry</td>
<td>Not Satisfactory</td>
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</tbody>
</table>

Table 2.1 - Environmental Protection Agency assessment of Local Authority public water supplies, Cork and Kerry, 1993-1995.
Source: Environmental Protection Agency

There is a difficult balance to be achieved between protecting water courses and allowing people free use of their own land. Many people chose to buy sites in the country for their home. From the point of view of protecting water sources it is not desirable to have large numbers of septic tanks serving individual houses widely distributed throughout the countryside. Also, in Ireland, it is common practice to allow animals ready and uncontrolled access to streams leading to contamination of water.

Local authorities are required to monitor the public water supplies. Although the monitoring of private supplies is the responsibility of the owner, some local authorities include private and group water supplies in their monitoring programme. This is not yet the practice of the local authorities in Cork and Kerry. While overall the quality of drinking water in Ireland is excellent one cannot be complacent. Instances of pollution, while rare, continue to occur. In early summer 1995 the source of public water supply serving Cork was heavily contaminated with slurry. The local authority took prompt and appropriate action to ensure a safe water supply. In tandem with the action of the local authority the health board was able to use its infectious disease monitoring programme to monitor infectious disease potentially transmitted by the water. There are certain diarrhoeal illnesses clearly associated with water contamination, cryptosporidium being one of these. Cryptosporidium is an organism commonly found in the intestines of cattle. This organism has caused extensive outbreaks of prolonged diarrhoeal illness where water supplies have been contaminated. It was reassuring that on this occasion no increase in cases of cryptosporidium in Cork was found.
Air safety

*Air: a natural resource to be conserved:*

Everyone loves fresh air. How many of us have travelled distances to breathe in the sea air or climbed to take the view and inhale the bracing breeze. In rural areas air quality is taken for granted. Those living in more populated areas are concerned about maintaining air quality. One and all are aware of the smells in the city streets at times of peak traffic flow or the smoky smell in the suburbs in winter. Overall: in Ireland we enjoy very good air quality.

**Health and air pollution**

It has long been known that air pollution endangers health. The most graphic illustration of the dangers of air pollution happened during the infamous London smog of 1952, which caused 4000 deaths. Chimney emissions of soot and sulphur dioxide accumulated to cause these pea souper fogs. In parts of the third world and Eastern Europe such pollution remains a major threat to health. In the western world clean air legislation has confined such sulphurous pollution to the history books. Now the focus of research is on the ill effects of long-term exposure to relatively low levels of outdoor air pollutants. The pollutants which have been associated with respiratory symptoms are sulphur dioxide (SO₂), nitrogen oxides, ozone, acid aerosols, and particulate matter such as smoke and PM₁₀. The importance of the smaller PM₁₀ particles is more recently recognised. Those particles are so tiny that they are not filtered out by the hair like cilia in the air passages and can penetrate to the innermost parts of the lungs.

The evidence is clear that individuals with chest problems such as asthma or bronchitis have their condition made worse by air pollution. It is not known conclusively that air pollution causes respiratory disease in persons who do not already have chest problems. However when guidelines are breached air pollutants can cause transient symptoms.

When sickness strikes, people are concerned about its cause. Air pollution is often blamed in people’s minds for respiratory illness and lung complaints. It is important to remember other causes of respiratory disease such as cigarette smoking, passive smoking, allergy to the house dust mite, damp mouldy housing conditions and some occupational exposures. Indeed smoking and passive smoking are the main causes of respiratory ill health. In comparison air pollution is nowadays a minor factor in the initiation of respiratory illness.

Apart from concerns regarding human health, air pollution has other effects which are of more general concern. Animals can be adversely affected by air pollution. Vegetation may suffer. The facades of many buildings have been damaged by “acid rain”. Production of the so-called greenhouse gases has to be controlled to preserve normal climate in the world.

**Air quality in Ireland and in Cork and Kerry**

The classic urban air pollution problem was associated with sulphur and smoke emissions, fifty percent of which came from the ordinary domestic fire. The clean air legislation introduced in Dublin in 1990 resulted in a dramatic reduction in smoke in Dublin. Annual mean concentrations of smoke and SO₂ measured at eighteen sites in Cork and Kerry are low.
Concentrations of smoke in excess of the World Health Organisations (WHO) guidelines were recorded in Cork city for the first time in 1988 and on a number of days during the Winter in the following years. Smoke control legislation was introduced in Cork with effect from February 1995 and hopefully these occasional problems are a thing of the past.

Road traffic is now the greatest potential source of air pollution generally, with a thirteen percent increase in registered vehicles in Cork and Kerry since 1990. Cars produce a large number of different air pollutants including nitrogen dioxide, carbon monoxide, ozone, PM10, benzene and these pollutants are generally potentially more harmful than the traditional air pollutants that resulted from the burning of coal.

The only effective long-term solution to modern air pollution is to reduce road traffic, although catalytic converters are of some value.

The information now available confirms that in Ireland breaches of air quality guidelines are rare. Overall smoke, SO2, NO2 and lead levels are generally very much below the limits prescribed. Ozone levels are within guideline values.

In general air quality in Ireland is very good. We all have a part to play in keeping it that way through the appropriate use of smokeless fuel and the economical use of energy sources and means of transport.

The challenge is to get into proportion the relative contribution of different pollutants and the importance of smokeless fuel, catalytic converters and traffic control.
Chapter 3

How healthy are our children?
3.

The Children are
Everyone’s heirs
Everyone’s business
Everyone’s future

How healthy are our children?

In 1996 a report on the ‘Health Status of Children in the Southern Health Board’ was produced by the Department of Public Health. This report presented information on the health status of children in Cork and Kerry in the 1990s. It will provide a baseline against which the success or failure of our collective efforts to improve the health of children in the area can be measured.

The major conclusions of the report include the following:

• The Cork City area has poorer indicators of child health status than other areas in the Southern Health Board.

• Childhood accidents are a major cause of childhood mortality.

• Although the incidence of the Sudden Infant Death Syndrome or Cot Death is declining it continues to be an important cause of death in infants.

• Further development of the Register of children born with birth defects was needed.

Inequalities

“The principle of equity imposes a particular obligation upon the health services to pay special attention to geographical areas or population groups (such as travellers) where the indicators of health status are low.”


It is widely recognised that the predominant explanation for inequalities in health lies in the material circumstances and conditions of people’s lives. In Shaping a healthier future it is acknowledged that most of the causal factors, such as poverty and unemployment, are outside the direct control of health services. However much can still be done to improve the health status of children by taking account of their needs. These inequalities must also be considered when planning new health services and targeting existing ones to ensure that those in most need are receiving adequate services.
Recognised measures of material deprivation indicate that the Cork City area is, in general, the most deprived of the three areas in the SHB (Cork City, County Cork and County Kerry). The north side of the city has higher levels of deprivation than the south side.

In the last thirty years there has been a dramatic decline in deaths in babies in Ireland. Two of the terms commonly used when describing deaths in the first year of life are: **Neonatal Mortality Rate**: the number of deaths in the first month of life per 1,000 live births. **Infant Mortality Rate**: the number of deaths in the first year of life per 1,000 live births.

Because deaths in children have decreased so dramatically in recent years the numbers now involved are thankfully small. These small numbers may be affected by random fluctuations. It is therefore essential to examine the trends over a number of years.

It is encouraging that the trend in infant mortality rate is downwards. Figures 3.1, 3.2 and 3.3 show the infant and neonatal mortality rates in the three areas of the SHB for the years 1987-95.
While the figures for individual years may be affected by random fluctuations as the numbers involved are small it is apparent that the County Cork Borough area tends to have higher infant and neonatal mortality rates than County Cork or Kerry. The maternity hospitals in Cork City provide services for all the Cork area and some of the Kerry area. Therefore these discrepancies in mortality rates cannot be explained by differences in hospital services.

Birth weight is a sensitive measure of infant development and is also related to maternal health. Smaller babies carry increased risk of illness in infancy and childhood.

Cork City had a consistently higher percentage of low birth weight babies compared to County Cork and County Kerry over the four year period (Table 3.1).

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<tr>
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<td>4.3</td>
<td>3.9</td>
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</table>

Source Central Statistics Office

These findings of lower health status in Cork City compared to County Cork or County Kerry may be associated with the fact that Cork City has higher levels of deprivation.

Accidents

Childhood accidents are a major public health problem in the developed world. In children over one year of age, accidents are the commonest cause of death.

In the four year period 1992-1996, 45% (43) of all deaths (97) in young children (1-14 years) were due to accidents. In that period there were 46 deaths in children from this cause - (43 in children aged 1-14 and 3 infants). Of these, 17 were due to motor vehicle traffic accidents, 9 due to poisonings, 5 due to burns, 2 suicide and 13 other miscellaneous causes.

Most serious accidents to children under five years happen at home. The 5-14 year age group is at greater risk on the roads than the 0-4 year olds but most accidents still occur at home. Males have a higher risk of accidents than females.

There is a well recognised association between social class and accidents. The socially disadvantaged have consistently higher risk of injury and death. Children who have already had an injury are twice as likely to have another when compared with those who were initially injury-free.

Accidents and their prevention cross all boundaries.

Prevention must consist of a balance between education, environmental change and legislation.

Our homes and our roads must become more child friendly with greater attention to safety for children.

Areas of social disadvantage should be targeted for prevention programmes.

Sudden Infant Death

The Sudden Infant Death Syndrome (SIDS), commonly called Cot Death, is the sudden and unexpected death of an apparently healthy infant or young child. An unexpected death in a young child is a great tragedy and a devastating event for a family. The majority of cot deaths occur in the first year of life and most of these happen between 1 and 5 months.
The SIDS mortality rate in the Republic of Ireland over the past 15 years has fallen considerably and is currently almost one third of the rate which was seen throughout the 1980s.

While the fall in the SIDS rate is greatly welcomed, they still account for over a third of all deaths in the age group one month to one year. Sudden Infant Death Syndrome is the third commonest cause of death in children under one year and caused 6 deaths in the Southern Health Board in 1995. This gives an incidence in the SHB of 0.9 per 1,000 live births which is similar to the national figure of 0.7 per 1,000.

In 1992 the Irish Sudden Infant Death Association established a National Register of all sudden infant deaths. Information relating to each sudden infant death is now collected and published in an annual report.

There are two major issues for prevention programmes identified in their annual report:
- smoking in the family and
- the baby's sleeping position.

All parents should be aware that smoking during pregnancy and after the baby is born increases the risk of sudden infant death.

High levels of smoking among families with sudden infant deaths persist, 70% of mothers and 55% of fathers smoked compared to a national average in that age group of 31%.

The best position for a baby to sleep is on his or her back. The data from the National Register shows that the lateral sleeping position is unstable as babies tend to roll onto their front. It is reassuring that there is no evidence that babies might be sick and choke when lying on their backs.

**Birth defects anomaly (congenital)**

A register of congenital anomalies i.e. birth defects among babies born in the SHB has been compiled for some years. It has been recognised that not all anomalies are identified by the present register which gathers data from the birth notification form only. The current register covering births in Cork and Kerry is being expanded. It will be modelled on EUROCAT, an established European wide network of congenital anomalies registries. This will ensure a comprehensive local register of congenital anomalies.

The surveillance of congenital anomalies is important. They are common, occurring in 2-3% of live births and 14-21% of stillbirths. The birth of a child with a congenital anomaly is a distressing event for families. They are a major cause of death around the time of birth and of childhood disability. The cause of 60% of congenital anomalies is unknown. However, in some types of anomaly the possibility of prevention exists involving interventions such as immunisation against rubella, the taking of folic acid around the time of conception, the avoidance of vitamin A derivatives and genetic counselling. Data available from a comprehensive register is needed to assess survival and disability, and to evaluate the effectiveness of prevention and treatment options. Last but by no means least there is a strong demand from people for clear information on these matters.

This enhanced register will allow us to monitor trends in birth defects. The link with the European network enables comparison with other areas.

**The challenge facing Public Health include:**
- ensuring safe environments for our children both in their homes and on the roads;
- increasing public awareness of the effects of passive smoking on children, and the effects of maternal smoking on the unborn child;
- improving the health status of disadvantaged children to decrease the inequalities that exist at present.
CANCER

A sizeable problem

The effect of cancer on the health status of the Irish population is striking. Cancer is responsible for approximately 7,500 deaths in Ireland each year - one quarter of all deaths annually. Deaths from cancer of the lung, colon and stomach are the most common in men, whereas, in women, deaths from cancer of the breast, lung and colon are the most frequently occurring.

Ireland's death rate from cancer has been worsening since the late 1970s and compares unfavourably with that of the European Union (Figure 4.1).

Figure 4.1 - Mortality from Cancer in Ireland.
Source: Central Statistics Office, EUROSTAT, and World Health Organisation

* SMR: Standardised Mortality Ratio is an overall measure of mortality which allows for the effects of age distribution of a population.
Overall, cancer accounts for one quarter of deaths in Cork and Kerry while diseases of the circulatory system are responsible for a major proportion (46%) of deaths (Figure 4.2).

A key issue for prevention is examining the major causes of death in “people who die before their time”.

The three main causes of premature mortality (i.e. deaths among those aged under 65 years) in Ireland are cancer, cardiovascular disease and accidents. Premature deaths in Cork and Kerry reflect the national trend. Cancer accounts for about one third of all deaths in those aged under 65 and is the major cause of death in this age group (Figure 4.3).

About one third of cancers could be prevented by people adjusting their lifestyle. The Health Strategy has set a target: for health in relation to cancer: “A reduction in premature mortality due to cancer in the under 65 year age group by 15% in the next 10 years”.

While one in three of the population will get cancer, not all will die from it. Many people who get cancer will survive to live a normal life. It is important, therefore, to look at cancer incidence rates (i.e. the numbers of new cases observed in a given period) as well as death rates.
Overall, cancer incidence and death rates in Cork and Kerry for 1994 are shown on Table 4.1. In 1994, there were 1151 deaths from cancer in this region, 623 males and 528 females (Table 4.1). Seventy two per cent of these deaths were in the 65+ year age group, reflecting the fact that cancer is predominantly a disease of older people.

The main cancer deaths among the population of Cork & Kerry are lung cancer, breast cancer and colorectal cancer. This mirrors the national trend of deaths from cancer.

The most common cancers diagnosed for males and females in 1994 are outlined (Table 4.2). Non-melanoma skin cancer was by far the most common cancer site for both sexes with 1139 cases recorded. Lung and prostate cancer occurred frequently in men. Breast cancer, with 262 cases recorded, was the most common site, after skin, in women. It is notable that breast cancer was the second most frequent cancer overall, despite the fact that only half of the population was at risk.

This year we focus on two cancers where effective interventions are available to either prevent or to cure the cancer through early detection and treatment:

- skin cancer
- lung cancer.
Skin cancer

Skin cancer is becoming a major public health problem. In Cork and Kerry, the skin is by far the most common cancer site for both sexes - accounting for one third of all cancer in 1994.

The growing risk of skin cancer is linked with increasing exposure to ultraviolet radiation from the sun - suntans and holidays abroad are popular! People with a fair complexion, a tendency to freckle and with skin that burns rather than tans on sun exposure are especially at risk. Overexposure to sunlight in childhood - resulting in severe sunburns - appears to be particularly harmful as a risk factor for melanoma. With the depletion of the ozone layer, a layer of gas in the upper atmosphere that absorbs most of the sun's ultraviolet radiation, there is likely to be increased exposure to ultraviolet radiation.

In 1994, there were 1,222 cases of skin cancer registered with the National Cancer Registry for the Cork/Kerry area. There were 18 deaths from skin cancer in this area in the same period. Skin cancer includes the frequently occurring non-melanoma skin cancer and the less frequent melanoma skin cancer.

Non Melanoma Skin Cancer

Non melanoma skin cancer is very common, with 1139 cases registered in 1994 (Table 4.3) accounting for 35% of all cases of cancer registered for that year. Most non-melanoma skin cancers are slow growing and the vast majority (more than 90%) of patients are completely cured following treatment. The death rate is therefore very low when compared with the high incidence figures. In 1994 there were eleven deaths.

<table>
<thead>
<tr>
<th>Non Melanoma Skin Cancer Incidence &amp; Death Rates</th>
<th>Cork &amp; Kerry 1994 (per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td>Males</td>
</tr>
<tr>
<td>No. of cases</td>
<td>595</td>
</tr>
<tr>
<td>% of all cancer cases</td>
<td>36.6%</td>
</tr>
<tr>
<td>Crude Incidence Rate</td>
<td>223.3</td>
</tr>
<tr>
<td>Deaths</td>
<td>No. of deaths</td>
</tr>
<tr>
<td></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.3 Source: National Cancer Registry; Central Statistics Office

In its 1991 report on cancer incidence in Cork and Kerry, the National Cancer Registry noted that the incidence of non-melanoma skin cancer rises dramatically with age, and the rise is more marked for men than for women. The site of malignancy was, as expected, on the areas of the skin most exposed to sun.

Melanoma Skin Cancer

Melanoma skin cancer is uncommon but is of importance because of its tendency to spread with a consequent high mortality rate. In the 40 year period between 1951 and 1991, there has been a seven-fold increase in the national death rate from melanoma, rising from 0.2 to 1.4 deaths per 100,000. Although the numbers are relatively small, this upward trend is worrying. In 1994 there were 83 cases of melanoma skin cancer in Cork and Kerry - 29 males and 54 females. Seven deaths occurred (Table 4.4).

<table>
<thead>
<tr>
<th>Melanoma Skin Cancer Incidence &amp; Death Rates</th>
<th>Cork &amp; Kerry 1994 (per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td>Males</td>
</tr>
<tr>
<td>No. of cases</td>
<td>29</td>
</tr>
<tr>
<td>% of all cancer cases</td>
<td>1.8%</td>
</tr>
<tr>
<td>Crude Incidence Rate</td>
<td>10.9</td>
</tr>
<tr>
<td>Deaths</td>
<td>No. of deaths</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.4 Source: National Cancer Registry; Central Statistics Office.
Again, in its 1991 report, the National Cancer Registry has pointed to the different age pattern between the sexes for melanoma skin cancers - the incidence of male cases rose with increasing age; the incidence in females peaked in the 40-60 year age group. The general pattern of disease was typical of North European countries, with more women than men affected. The head and neck areas were the most common sites overall while the hip and leg areas predominated in females.

**Scope for Prevention**

Exposure to sunlight - in particular the ultraviolet rays of the sun - is the main cause of skin cancer. Fair skinned people, who tend to go red or freckle in the sun, are most at risk. Children and young adults who have excessive exposure to the sun run an increased risk of developing some form of skin cancer later on in life. The regular use of sunlamps and sunbeds may also increase the risk of developing skin cancer.

Skin cancer, because of its external and visible location, is well suited to early detection. If diagnosed early, there is a high chance of cure. The Europe Against Cancer Code has alerted us to the early warning signs of skin cancer - a lump, a sore which does not heal (including in the mouth), a mole which changes in shape, size or colour or any bleeding.

There is tremendous scope for reducing the incidence of skin cancer by encouraging people, particularly those at high risk, to avoid excessive exposure to the sun for themselves and their children by adopting appropriate avoidance behaviour and sun protection measures.

The following rules would help to minimise skin damage (and apply whether abroad on holiday or at home in Ireland).

**Rules for Sense in the Sun:**

- Use clothing as a sunscreen (T-shirts, brimmed hats, sunglasses)
- Seek shade (trees/other shelter)
- Avoid noonday sun (between 11am and 3pm)
- Use a broad spectrum sun screen with a high protection factor
- Take special care to protect children
- Limit the use of sunbeds and sunlamps.

**Lung Cancer**

In Cork and Kerry, lung cancer is the single most common cause of cancer death in men and the second most common cause in women.

Smoking is the main cause of lung cancer. Up to 90% of the 1,500 lung cancer deaths which occur each year in Ireland are associated with smoking. There are two aspects of lung cancer which are of increasing concern. Lung cancer among women is increasing. In 1994, 512 Irish women died from this type of cancer. Secondly, it is now well recognised that exposure to environmental tobacco smoke (passive smoking) is a health risk. The breathing in of tobacco smoke present in the surroundings, be it in the home, workplace or local hostelry has been shown to increase the risk of lung cancer in non-smokers.

Recent surveys have shown that one quarter (25%) of women in Cork & Kerry are current smokers compared with over one third (36%) of men; the overall figure for current smokers nationally is 30%.
Scale of Problem

In 1994, 227 new cases of lung cancer were registered with the National Cancer Registry for the Cork/Kerry area, while 231 people died from lung cancer in the same year. (Table 4.5). Although it is often thought to be a disease of the elderly, almost one third of lung cancer deaths occurred in people under the age of 65 years.

<table>
<thead>
<tr>
<th>Lung Cancer Incidence and Death Rates</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of new cases</td>
<td>149</td>
<td>78</td>
<td>227</td>
</tr>
<tr>
<td>% of all cancer cases</td>
<td>9.2%</td>
<td>4.8%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Crude Incidence Rate</td>
<td>55.9</td>
<td>29.3</td>
<td>42.6</td>
</tr>
<tr>
<td>Number of deaths</td>
<td>158</td>
<td>73</td>
<td>231</td>
</tr>
<tr>
<td>% of all cancer deaths</td>
<td>25.4%</td>
<td>13.8%</td>
<td>20%</td>
</tr>
<tr>
<td>Crude death rate</td>
<td>59.3</td>
<td>27.5</td>
<td>43.4</td>
</tr>
</tbody>
</table>

Table 4.5

Source: National Cancer Registry, Central Statistics Office

In 1995, 68% of deaths from lung cancer in the Southern Health Board area were in people over 65 years, with 32% occurring in the younger age group (Fig. 4.4). Tragically, despite treatment, 95% of people diagnosed as having lung cancer die within five years. Lung cancer is largely preventable and smoking is the major cause of 90% of lung cancer deaths.

Figure 4.4 - Lung Cancer Deaths (male & female) Southern Health Board, 1995.
Scope for prevention

Tobacco is the leading cause of preventable death in the developed world. The effects of smoking will kill about half of all regular smokers.

An approach to the reduction and ultimate elimination of tobacco smoking must encompass two key elements:
- a supportive environment for the non-smoker
- smoking cessation facilities for the current smoker.

There is now clear evidence that a strategy which includes high taxation levels on tobacco, strict advertising standards and stringent smoking restriction in public areas has an important influence on environmental tobacco smoke levels. These measures act as a deterrent to young people in starting smoking and as a stimulant to smokers to quit. Non-smokers in our society are the majority and these approaches advance their rights to smoke-free air.

Help for smokers to quit has been shown to be effective when the help follows clearly tested approaches, e.g. "brief interventions" by general practitioners, self-help groups and the use of nicotine gum. Research has emphasised the importance of a 'readiness to change' on the individual smoker's part and the use of professional techniques that have been tried and tested. In contrast, interventions that criticise and blame smokers or those which use miracle cures are unhelpful.

Considerable progress has been made in tackling the smoking epidemic in Ireland over the past 18 months. The Southern Health Board has joined together with the other Health Boards in a collaborative group called STAG (Smoking Target Action Group). To date, we have focused on three important public health aspects of smoking:

i. **Illegal sale of cigarettes to children** under 16 years of age: Retailers have fully supported the 'I have to say no' program.

ii. **Smoke filled committee rooms**: Local organisations have been asked to adopt 'going smoke free - the popular choice'

iii. **Exposure of children to adults' second hand smoke in their houses and cars**: Adults have been challenged to protect our children from 'growing up in smoke'.

In February 1996, the Southern Health Board formally agreed a **Smoking Control Policy** which prohibits smoking by staff, service users and visitors in all Health Board facilities, with the exception of clearly designated 'smoking areas'. An important element of this supportive policy was the concurrent launch of a smoking cessation programme in Cork and Kerry. A dedicated co-ordinator has been appointed and smoking cessation groups have been set up in locations throughout the catchment area for all smokers (be they members of the public or health care staff).

The long road ahead to enhance our health by making smoking a thing of the past is a dual carriageway providing:
- a supportive environment for non-smoking adults and all children, and
- encouraging, in a professional manner, smokers to quit.
THE EUROPE AGAINST CANCER CODE

1. Do not smoke. Smokers, stop as quickly as possible and do not smoke in the presence of others. If you do not smoke, do not try it.

2. If you drink alcohol, whether beer, wine or spirits, moderate your consumption.

3. Increase your daily intake of vegetables and fresh fruit. Eat cereals with a high fibre content frequently.

4. Avoid becoming overweight; increase physical activity and limit intake of fatty foods.

5. Avoid excessive exposure to the sun and avoid sunburn, especially in children.

6. Apply strict regulations aimed at preventing any exposure to known cancer causing substances. Follow all health and safety instructions on substances which may cause cancer.

7. See your doctor if you notice a lump, a sore which does not heal (including in the mouth), a mole which changes shape, size or colour, or any bleeding.

8. See your doctor if you have persistent problems, such as persistent cough, persistent hoarseness, a change in bowel or urinary habits or an unexplained weight loss.

Women

9. Have a cervical smear regularly. Participate in organised screening programmes for cervical cancer.

10. Check your breasts regularly. Participate in organised mammographic screening programmes if you are over 50.
Chapter 5

Infectious Diseases
5.

Be Wise, Immunise!

*"one of the most powerful and cost effective weapons of modern medicine"

World Health Organisation

**INFECTIOUS DISEASES**

It is not high technological medical interventions that the WHO is describing but immunisation. The public needs to be aware that immunisation is a safe and effective way of preventing many serious and potentially fatal infectious diseases. Many of today’s young parents have never seen children suffering from infectious diseases, such as whooping cough and measles, which were so common prior to the introduction of effective vaccines.

Consistently high levels of vaccine uptake are needed to ensure that these diseases do not constitute a public health problem. The re-emergence of diphtheria in the newly independent states of the former USSR, where over 50,000 cases were reported in 1995, highlights the speed at which these diseases can reoccur when immunisation levels drop. It is essential that high priority is given to the prevention of infectious diseases by immunisation and that the national target of 95% uptake of primary childhood immunisations is reached and maintained.

In Ireland it is recommended that children be immunised against eight infectious diseases: - Diphtheria, Pertussis (whooping cough), Tetanus, Hib, Polio, Measles, Mumps, Rubella.

*Pertussis (Whooping Cough)*

Lingering concerns about adverse reactions associated in the public’s mind with the pertussis vaccine have led to lack of public confidence and decreased vaccine uptake. Because of this, cases of pertussis continue to occur in many developed countries. This is also true in the Southern Health Board with cases of pertussis continuing, see figure 5.1.

![Figure 5.1 - Whooping Cough Notifications, Southern Health Board 1988-1996. Source: Department of Public Health, Southern Health Board](image-url)
On the 1st of October 1996 the Minister of Health announced the introduction of a new pertussis vaccine, acellular pertussis, into the primary childhood immunisation programme. The acellular pertussis vaccine has fewer side effects and is as effective as the previous vaccine. The very welcome introduction of this new vaccine will restore public confidence and lead to high uptake figures and fewer cases of this serious and damaging disease.

**Mumps**

In late 1988 the Measles, Mumps and Rubella (MMR) vaccine was introduced in Ireland. The notification of mumps illness decreased in 1990 and remained at a low level until 1996, when 120 cases were notified (Figure 5.2). Most of the cases in 1996 occurred in the last three months of the year in the north side of Cork City. The age range of cases was one year to 42 years. The majority of cases were in primary school children, although 24% were in pre-school children.

This increase in mumps cases indicates that there is a significant number of unimmunised children in the community and highlights the need to attain high levels of immunisation uptake in children.

**Measles**

Measles notifications decreased dramatically after the introduction of MMR vaccine in 1988, from 387 cases in 1990 to 1 case in 1991 (see Figure 5.3). However, notifications increased again in 1993 and 1994, although the levels were lower than those before the introduction of the immunisation programme. This pattern of increasing notifications of measles was seen also in the national figures. Concern at the increase in measles notification was one of the factors that led to the National Measles and Rubella Campaign in 1995.

In 1995 a survey of immunity to measles infection was carried out by the Department of Public Health, Southern Health Board. The objective of the study was to ascertain the level of immunity to measles in school children and adolescents in Cork in order to formulate local and national policies for immunisation.
The outstanding finding of this survey was the high level of immunity to measles at all ages from 5 to 15 years olds. In the 5-10 year age-group 92% were immune with 96% in the 11-15 year age group.

**Rubella (German Measles)**

Notifications of rubella illness began to decrease in 1990, with only 2 cases notified in 1991. However, cases increased again in 1994 when 21 were notified (Figure 5.4).

Infections due to Haemophilus influenza Type b (Hib) are an important cause of illness and death, especially in young children. The most common presentation is meningitis but it can also present as septicaemia (blood poisoning) and infection of other sites in the body. In October 1992, an immunisation programme against Haemophilus influenza Type b (Hib) disease was introduced in Ireland. Prior to the introduction of the vaccine, Hib was the commonest cause of meningitis in children in Ireland.

Figure 5.5 shows the number of cases of childhood Hib disease in the SHB for the years 1992 to 1996.

It is encouraging that the incidence is decreasing, with only two cases in 1996. However, continuing high levels of immunisation are essential to continue to prevent cases of this serious childhood illness.
These serious infectious diseases are still with us. Immunisation is provided free to all children through their general practitioners. We all have a responsibility for ensuring that we achieve high levels of immunisation so that we can protect our children.

Influenza

In the winter months viral illnesses abound and many people suffer from 'flu-like' symptoms. 'True flu' or influenza is less common than many of the other viral illnesses but is of great importance as it can cause serious illness and tends to occur in epidemics. In those with chronic underlying disease, especially if elderly, complications are common and hospitalisation rates high.

There is extensive research evidence that annual immunisation of people at risk reduces influenza related deaths and illness. People at risk include those suffering from certain chronic diseases and the elderly in residential homes and long-stay institutions. Influenza vaccine is recommended for such people in Ireland.

There have been two documented outbreaks of influenza in long-stay institutions in the Southern Health Board in recent years. In October 1993, an outbreak occurred in a geriatric institution and 90 out of 122 patients and 15 staff were affected. In February/March 1995, an outbreak occurred in another long-stay institution and 45 patients and staff were affected.

In 1996 the Department of Public Health, Southern Health Board audited the use of influenza vaccine in the Southern Health Boards long-stay institutions and produced guidelines on the use of influenza vaccine in such institutions.

Those at risk from influenza infection should be offered influenza vaccine.

Meningitis

Meningitis means inflammation of the brain lining. It can be caused by several different organisms. Some are bacteria and some are viruses. Viral meningitis is generally more common but less serious and cannot be helped by antibiotic treatment. Bacterial meningitis is quite a rare disease but it can be very serious and requires urgent treatment with antibiotics.

There are a number of types of bacterial meningitis the commonest of which are meningococcal, Haemophilus influenza b (Hib) and pneumococcal. Hib meningitis is preventable by immunisation and has been discussed above. The Hib vaccine protects against Hib infection. However, it does not protect against any other forms of meningitis. Three cases of pneumococcal meningitis occurred in the Cork and Kerry area in 1996, with one death.

Meningococcal disease

Meningococcus is now the commonest cause of meningitis in Ireland. It can also cause septicaemia (blood poisoning). The Southern Health Board, and particularly the Cork City and surrounding area, has had a high incidence of meningococcal infection in recent years. However, the figures for 1996 show a significant fall in the number of cases compared to recent years. There were 15 confirmed cases in Cork and Kerry in 1996 with no fatalities, compared to 50 confirmed cases with 6 fatalities in 1995.

This pattern of an increase in incidence over a number of years is a feature of meningococcal disease and is, as of yet, unexplained. Possible explanations may be that new strains of meningococcus are brought in to an area and people may be susceptible until they acquire immunity.

Figure 5.6 shows the number of cases of meningococcal disease confirmed by laboratory testing in the Southern Health Board over the years 1992 to 1996. In 1995 there were 9.4 cases per 100,000 population compared to 2.8 per 100,000 in 1996.
Eleven of the cases occurred in the first six months of the year and four in the second six months.

The meningococcus organism has three main strains - A, B and C. Of the 15 confirmed cases in the Southern Health Board in 1996, eleven were Group B and four Group C. No vaccine yet exists which is effective against all meningococcal groups, but research and trials are ongoing. There is however a vaccine against the A and C strains. Group A strains are rare in Europe but cause major epidemics in some countries, especially in sub-Saharan Africa. Immunisation is sometimes recommended for travellers to those areas.

If someone becomes ill with the A or C strain, household and very close contacts of the patients are offered the vaccine. It is not very effective in young children and protection for adults only lasts three to five years. Trials are underway in the UK to find more effective vaccines against A and C strains.

Apart from vaccines, there is no known way to protect against meningitis. However, it is not highly infectious and only the patient's close family contacts are at any significant risk of becoming ill. Antibiotics are offered to these contacts of a patient with meningococcal disease. Other contacts, like school friends or colleagues, are rarely at higher risk so do not normally need treatment.

Figure 5.6: Laboratory confirmed cases of meningococcal disease, SHB, 1992-96.
Source: Department of Public Health, Southern Health Board

Of the 15 confirmed cases in 1996 seven were female and eight male. The age breakdown of cases is shown in figure 5.7.

Figure 5.7: Age of cases of meningococcal disease, SHB, 1996.
Source: Department of Public Health, Southern Health Board

Awareness among the public of the symptoms and signs of meningitis, especially the rash which may accompany meningococcal infection, is very important.
Tuberculosis

The World Health Organisation took what it called the extraordinary step of declaring tuberculosis a 'Global Emergency' in 1993. The disease is out of control in many parts of the world. The situation in Ireland and the Southern Health Board calls for attention rather than alarm.

It can be seen from figure 5.8 that both the national and local statistics show an overall downward trend. The latest WHO information available confirms that Ireland is in line with the rest of Europe and North America with TB notification rates all less than 25 / 100,000. The incidence rates for the Southern Health Board have ranged from a low of 16.1 to a high of 21.4 / 100,000 population over the past five years.

Wide geographic variation in the number of cases is evident within the Southern Health Board as illustrated in table 5.1. It is difficult to assess this phenomenon owing to the small numbers and year to year variability. However, the greater Cork City area accounts for a disproportionate level of tuberculosis.

![Image](image_url)

**Figure 5.8, TB Notifications 1985-1996.**
Source: Department of Public Health, Southern Health Board and Department of Health

<table>
<thead>
<tr>
<th>Community Care Area</th>
<th>1994 cases</th>
<th>Incidence Rate/100,000</th>
<th>1995 cases</th>
<th>Incidence Rate/100,000</th>
<th>1996 cases</th>
<th>Incidence Rate/100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cork City &amp; South Cork</td>
<td>67</td>
<td>23.0</td>
<td>77</td>
<td>26.5</td>
<td>76</td>
<td>26.1</td>
</tr>
<tr>
<td>North Cork</td>
<td>8</td>
<td>11.1</td>
<td>14</td>
<td>19.4</td>
<td>17</td>
<td>26.3</td>
</tr>
<tr>
<td>West Cork</td>
<td>3</td>
<td>6.3</td>
<td>12</td>
<td>25.2</td>
<td>8</td>
<td>16.8</td>
</tr>
<tr>
<td>Kerry</td>
<td>15</td>
<td>12.3</td>
<td>10</td>
<td>8.2</td>
<td>17</td>
<td>13.9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>93</strong></td>
<td></td>
<td><strong>113</strong></td>
<td></td>
<td><strong>118</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Table 5.1. Tuberculosis Notifications within the Southern Health Board.*
Source: Department of Public Health
The salient epidemiologic features of tuberculosis in the Southern Health Board in 1994, 1995 and 1996 were that slightly more males to females were involved (ratio of 1.3:1); two thirds of the cases were respiratory with 29% of cases infectious i.e., direct sputum positive. Almost two thirds of the cases (58%) were young (less than 45 years of age) while 80% of cases were in adults over 15 years of age. There were no cases of tuberculous meningitis.

In Africa and the US outbreaks due to multi-drug resistant strains of M. Tuberculosis and the HIV epidemic have been closely related to the re-emergence of tuberculosis as a priority public health issue.

Multiple drug resistance was reported in 0.6% of isolates sent to centres in the UK from 1982 to 1991. No case of multi-drug resistant TB has occurred in the Southern Health Board to date, however, 1-2% of isolates are resistant to one drug. This low level of resistance is a feature of the Irish situation generally. It is presently reckoned that 5% of patients with AIDS in the UK develop tuberculosis, in Ireland it is estimated to be a lot less. The Southern Health Board experience has mirrored this with approximately 1% of TB cases associated with HIV at present.

Higher rates of tuberculosis have a well recognised association with unemployment and social disadvantage. In 1994, 43% of adult cases in the greater Cork area were unemployed and 48% in 1995

The identification of contacts of these cases (contact tracing) to identify those who are likely to have become infected and require treatment, and to trace the original source of infection is particularly important in geographical areas of increased incidence. Targeted contact tracing to effectively follow-up close contacts of infectious cases has received priority in recent years in Cork and Kerry.

Failure to complete all aspects of prescribed antituberculous treatment is associated with the spread of infection and the emergence of drug resistance. Difficulties with treatment compliance have been identified in disadvantaged people and this is likely to be a contributory factor to the disproportionate number of cases in some areas in the Southern Health Board. Directly observed therapy and the intensive monitoring of compliance by urine testing have been introduced in cases where the taking of anti-tuberculous medication was found to be problematic.

- Good old tuberculosis provides us with an exacting challenge in terms of prevention and control.
- The computerised surveillance system in use in two areas has been extended to the rest of the Southern Health Board in 1997. Information provided will alert us promptly to emerging trends.
- The prevention of infection in HIV patients and the emergence of multi-drug resistance require vigilance.
- In addition our tuberculosis services need to be ever sensitive to accepted difficulties with patient compliance and the documented association between infection and social disadvantage.
Food is an important part of a balanced diet

Fran Lebowitz

While diet alone does not cause diseases such as dental caries, cancers, osteoporosis and cardiovascular disease, it is an important contributory factor. The range and complexity of food and dietary advice available could well baffle the public. In Public Health terms we view food from the approach of its inherent safety and it's nourishment value. Thereby we aim to provide comprehensible information on a prudent diet based on current scientific knowledge and consumption patterns.

A Public Health consideration of food must be set into the context of today's world. There is presently much debate about some sophisticated methods of animal and vegetable production and processing. Practices involved in intensive farming have been held responsible for the rise in certain human infectious diseases such as Salmonella. The processing out of fibre as part of complex food manufacturing also contributes to inadequate dietary intake of fibre and it's association with certain cancers of the bowel. In addition, the evolution of food consumption patterns which include 'instant' foods, take-aways and snacks, as distinct from meals, all contribute to the profile of food today.

In this annual report, three specific aspects of food will be discussed. The areas selected are the profile of foodborne disease in the Southern Health Board in the 1990s; food consumption data from Cork and Kerry set in a national context and, finally, the value of folic acid in the prevention of neural tube defects. These topics illustrate the complexity of topical food issues and have clear Public Health implications.

Foodborne Disease

A study of the profile of foodborne disease in Cork and Kerry provides an important outcome measure of the safety of food in the region. Foodborne disease that is confirmed by a laboratory and reported to the Health Board is but the tip of a much larger iceberg as most illnesses are self-limiting in nature and are never notified. Indeed, it is also noteworthy that food that contains pathogenic organisms, i.e. microbes capable of causing disease, does not always result in clinical illness in humans.
The two most frequently reported indicators of foodborne disease are Salmonella and Campylobacter infections. Figures 6.1 and 6.2 demonstrate trends in the Southern Health Board.

Salmonella is a common bacterial cause of gastro-enteritis. In addition, septicaemia (poisoning of the blood) can occur and severe dehydration with occasional fatalities being a risk in the very young and the very old age groups. The high levels of salmonella reached in 1990 and 1991 were repeated in 1995, while 1996 exceeded previous levels (Figure 6.1).

Campylobacter is another acute bacterial infection of variable severity, characterised by bloody diarrhoea, fever and nausea. The main sources of infection are undercooked chicken and pork or contact with infected pets or farm animals. Person-to-person spread is uncommon. The campylobacter levels (Figure 6.2) in the Southern Health Board are relatively stable over the past few years.

It is useful to compare levels of salmonella infection in Cork and Kerry with other areas nationally and internationally (Table 6.1). We have rates in line with other centres that have a well recognised high incidence rate of salmonellosis, and a rate somewhat above the Irish national average.
Public concern has been directed to two emerging causes of foodborne infection, Listeria Monocytogenes and Verotoxin producing E. Coli (VTE Coli 0157:H7) in recent years. Listeriosis is an uncommon infection although the organism occurs frequently in soil and infected animals. The relative importance of Listeriosis in the Southern Health Board is indicated by the data in Table 6.2.

E. Coli 0157:H7 is now recognised to be an important problem in areas including North America, Japan and, most recently, the Scottish outbreak in November 1996. Serious outbreaks have been associated with under-cooked hamburgers and unpasteurized milk. Table 6.2 shows that it is a cause for vigilance rather than alarm here at present.

**Food Consumption Patterns**

The trends in the quantities and varieties of food we eat provide us with information on the contribution of diet to our health (be it positive or less helpful!). The diet of the Irish population has changed quite substantially since the famine years but the evidence suggests that the changes have not all been nutritionally for the better. In addition, the way in which food is prepared (e.g. raw vegetables versus deep-fried fish etc.) has a considerable bearing on its nutritional value. Information on these aspects of food consumption helps us to accurately target our health promotion efforts.

<table>
<thead>
<tr>
<th>Year</th>
<th>VTE Coli</th>
<th>Listeria Monocytogenes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>1993</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>1994</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>1995</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>1996</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 6.2. E. Coli and Listeriosis Infections - Southern Health Board.
Source: Department of Public Health, Southern Health Board

The findings of the Happy Heart Communities Surveys conducted in Cork and Kerry was published in 1995. The surveys measured relevant behaviour in respect of risk factors for coronary heart disease. Table 6.3 summarises the key findings in relation to food consumption in the Southern Health Board.

<table>
<thead>
<tr>
<th>Food</th>
<th>Kerry (%)</th>
<th>Cork (%)</th>
<th>National (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chips &gt; 2/week</td>
<td>25</td>
<td>33</td>
<td>25</td>
</tr>
<tr>
<td>Takeaway 1/week</td>
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<tr>
<td>Poultry &gt; 2/week</td>
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<td>Eggs 1-3/week</td>
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<tr>
<td>Low Fat Milk</td>
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<tr>
<td>Boiled Potatoes 1/day</td>
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<tr>
<td>Fruit &amp; Veg ≥ 4/day</td>
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<td>Polyunsaturated Spread</td>
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<tr>
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<tr>
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<td>15.1</td>
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<td>28</td>
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Table 6.3 - Food Consumption in the Southern Health Board.
Source: Happy Hearts Survey 1995
While the surveys had a wide brief and did not take the place of a full dietary survey, they tend to support the findings of the Irish National Nutrition Survey (done in the late 1980s) which is the most comprehensive one of its type in Ireland in recent years.

It is of note that Cork faired poorly in terms of the consumption of fatty foods while Kerry people tended to eat more traditional fare in terms of meat and boiled potatoes. In support of the National Nutrition Survey data, both Cork and Kerry had poor intakes of fruit, vegetables and fish. Kerry dwellers had a low intake of low fat milk and polyunsaturated spreads when compared to Cork or the national picture, while Kerry men had the highest average alcohol intake, with Kerry women having the lowest.

Further detailed local information, particularly in relation to the eating habits of important subgroups such as the elderly and pregnant women is needed. The general dietary guidelines espoused by the Food and Nutrition Policy (1995) and promoted by events such as the annual Healthy Eating Week are outlined. Present indications confirm that this advice is applicable to us living in Cork and Kerry.

**SOME RULES FOR HEALTHY EATING**

- Consume a varied diet, using a wide range of foods
- Increase your intake of fibre by using wholemeal bread, whole-wheat pasta, whole-grain cereals and/or whole-grain rice
- Eat plenty of fresh fruit and vegetables
- Cut down on fat intake
- Cut down on sugary foods and alcoholic drinks
- Add as little salt as possible to your diet
- To help keep your weight down, take some form of physical exercise every day and adjust energy intake
Folic Acid

The role of vitamins and minerals in nutrition is becoming more clearly defined. In addition to preventing deficiency states there is much scientific work being done on identifying dietary intakes which optimise well-being and disease prevention. For example, high plasma levels of Vitamin E have been associated in epidemiological studies with low levels of risk for certain chronic diseases such as cancer and heart disease.

In this annual report, the role of Folic Acid and the prevention of neural tube defects (Spina Bifida and Hydrocephalus) are discussed in the light of the local epidemiology of these conditions.

In 1991 it was shown conclusively that an increase in the intake of Folic Acid among women planning a pregnancy prevents most neural tube defects. The extra Folic Acid needed for a reasonable protective effect is 0.4mg a day, twice the current average dietary intake of 0.2mg.

In studies in Ireland and the United Kingdom it has been documented that, sadly, many people are still unaware of the importance of Folic Acid in the prevention of neural tube defects. In a review of the situation in the UK in 1996, only 26% of young women were taking folic acid, while preliminary evidence from a survey in Dublin suggests that a very small percentage have received advice on the value of folic acid and were taking folic acid tablets.

<table>
<thead>
<tr>
<th>Congenital Defects of the Nervous System</th>
<th>Kerry*</th>
<th>Cork*</th>
<th>SHB*</th>
<th>EHB*</th>
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<td>0.4</td>
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<td>12.6</td>
<td>12.3</td>
<td>22</td>
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</tbody>
</table>

Table 6.4. Birth Defects of the Nervous System
* Rate/10,000 total births (1992-1994)

It has been strongly argued that a selective public health strategy which would advise women planning a pregnancy to take extra Folic Acid is less likely to be successful than a population approach. The selective approach also ignores unplanned pregnancies. The alternative solution is a population approach whereby food such as bread, or indeed flour would be fortified with Folic Acid, preferably on a compulsory basis.

The challenge that lies ahead for the discipline of Public Health in relation to food is two-fold. We must provide information to influence production at all stages of the food chain in favour of safe food with a high nutritious quality that is pleasing to the population. We must take advantage of the public's stated intention to change their eating patterns and provide clear rather than confused messages on food for them.
Chapter 7

Our way of Life
**OUR WAY OF LIFE**

We try to aim our lifestyles towards the pursuits of optimal health and well being. However, the spotlight is now turning on the way we live our lives as being a major contributory factor to illness and even unhappiness in our world. The life circumstance diseases of yesteryear and the developing countries have been replaced in our ‘developed’ society by the so-called lifestyle diseases. Today, our high levels of cancer, heart disease, accidents and stress related disorders are strongly linked to the way we live.

In Cork and Kerry, if we are to examine our lifestyle, we must look at how we behave from the time we get up to the time we go to bed. Patterns of eating, smoking, exercise and sexual activity are involved. The way we express ourselves, the way we relax and the ways in which we fulfil ourselves all comprise important elements of our lifestyle, which we now know to impact on our mental and physical health.

One of the worrying aspects of the health effects of lifestyle is their long-term nature. Diseases such as cancer and cardiovascular problems take decades to incubate. What our children do and eat has an important influence on how well they will feel and be as adults. In addition, the lifestyle that we have tends to be taken on by the next generation so that our patterns of behaviour are likely to inform those of our children to the benefit or otherwise of their health.

A prime objective of Public Health Medicine is the provision of clear information on lifestyle issues in terms of current patterns of activity locally and those which are desirable. We know that alterations in our present lifestyle will reap benefits for the population of Cork and Kerry. In order to influence the climate for a healthy change, aspects of sexual health, alcohol consumption and exercise are described. Our challenge is to enable ‘the healthy choice to be the easy choice’.
Physical Activity

Mens sanum in corpore sano
(A healthy mind in a healthy body)

It has been recognised for centuries that physical activity has definite beneficial effects on health, but only recently has the full spectrum of its benefits been estimated. The sedentary lifestyle is now known to be damaging to health at all ages.

Physical activity has been shown to extend life by up to 2.5 years, compared with a sedentary lifestyle. Coronary heart disease has been 30-50% less in those who take regular vigorous exercise. Stroke has been shown to be 30% less in those who moderately exercise and 60% less in those who vigorously exercise. Physical activity also helps to control weight, decreasing the many problems associated with obesity.

Exercise has been shown to reduce symptoms of anxiety and depression and increase feelings of well being.

Activity in the elderly is critical to maintenance of independence. There is a steady decline in physical capacity with age estimated at 1% per annum. Exercise maintains healthier bones, muscles and joints. Fractures are less in those with a background of exercise in earlier life.

Thus maintenance of stamina, suppleness, and strength through exercise is especially important in the elderly.

The amount of physical activity is important. Health benefits are directly proportionate to the amount of regular physical activity. Health Benefits will occur at a moderate level of activity (i.e.: walking briskly for 30mins per day).

Exercise can be taken in many ways, and should be maintained throughout life to produce benefits.

Patterns of Physical Activity

Estimating the level of our physical activity is complex. We often find it difficult to remember accurately what exercise we have taken and how intense it has been. It is also hard to standardise different exercise levels. Despite these difficulties several surveys have been done on physical activity.

In adults, less than 20% try regular vigorous physical activity. Men exercise more than women do, as do those in higher social classes. We also tend to exercise less as we get older.

Recent surveys in the Southern Health Board of people's activity during leisure show that almost one third were sedentary, women more than men (Figure 7.1). One fifth of men take intense activity compared to less than 10% of women. We are also in danger of becoming a nation of couch potatoes, in that one seventh watch TV for at least four hours a day, preferring armchair Olympics to real participation in sport and exercise!

![Figure 7.1 - Physical Activity at Leisure in Southern Health Board](image-url)
A recent National Survey of Involvement in Sport and Physical Activity in 1996 found that up to 60% were involved in physical activity once a month and 50% once a week. A decline in involvement with exercise was associated with lower social class, and age over 45 years. Marriage, despite all its compensations, is also associated with a fall in exercise. Styles of involvement in activity were also different between the sexes: men preferred 'competition, while women had a preference for shared and participative exercise.

In school children, boys are more active than girls at all ages, and a serious decline in activity occurs after 14 years, especially in girls. In 15 year olds, up to one third have shown poor aerobic fitness, and a quarter showed little physical activity in the previous week. The vast majority of older teenagers had participated in PE at school at some stage, but one wonders how effective the training is when there is such a drop in activity during adolescence.

The Department of Health published a Health Promotion Strategy in 1995 which recommends that by the year 2000 there should be an increase in those who do a half hour of light exercise most days per week, and in those who do moderate exercise three times a week.

We are thus faced with the clear knowledge that physical exercise is beneficial to health, even at a moderate level, at all ages.

The challenge is, therefore, to increase involvement in exercise in all the “Seven Ages of Man”—from the whining schoolboy to the lean and slipped pantaloons with spectacles on nose. It has now been clearly identified that sub groups within our community have particular difficulties in exercising—adolescent girls, middle-aged persons and the elderly in particular. These slippages must be counteracted by a strategy that increases awareness, facilities and participation at all levels.

Alcohol

Alcohol is used wisely and well by most people who drink... Alcohol is also a drug, which can miserably wreck or destroy life.

Royal College of Psychiatrists – Alcohol Our Favourite Drug 1986.

Alcohol is a basic social lubricant enabling communication, pleasure and happiness. However, excessive alcohol use imposes a serious cost on individuals and society.

The supply and distribution of Alcohol involves a huge industry giving jobs to more than 50,000 people in Ireland. Taxes on alcohol alone raise 4% of revenue, about £490m per annum.

Overall, it is recognised that availability of alcohol directly affects the level of alcohol consumption and alcohol-related problems. This is a complex but real factor influenced by such issues as: price, minimum legal drinking age, advertising standards and trade practices.

Exemptions allowing extension of opening hours have increased nine-fold between 1967 and 1994, and the price of alcohol has fallen in real terms. Wine and spirit consumption is more sensitive to price changes than beer. Non-alcoholic drinks and low-alcohol drinks are relatively expensive at present.

There are now agreed Guidelines for Alcohol Consumption. Alcohol intake is now measured in terms of units, or grams of pure alcohol.

1 unit or 10g alcohol = half pint beer/cider/alcoholic lemonade, 1 glass wine/sherry, 1 small measure spirits.
The Royal College of Psychiatrists has stated that there is increased risk to health in exceeding the weekly limits of 21 units for men or 14 units for women.

**Patterns of consumption of Alcohol**

As a nation we have the highest proportion of non-drinkers in Europe (18%). Despite this, in 1994, we consumed 11 litres pure alcohol per capita, equivalent to 3 units per person per day.

An area of considerable concern is under-age drinking. The evidence is that it is widespread, with two thirds of post-primary pupils reporting that they have taken alcohol, and one third taking alcohol regularly. Almost half have been drunk, and one in twelve have been drunk more than ten times. A body of local research has now been carried out in the Southern Health Board area. Approximately two thirds (66%-70%) of the population of Cork and Kerry are current drinkers. Beer is the most consumed drink, especially among men (Figure 7.2). A significant number of men (about 20%) drink more than the recommended intake of alcohol per week. Surveys suggest that a greater proportion of men in Kerry exceed the recommended limit than men in Cork. About 5% of women drink more than the recommended weekly intake of alcohol. There are no major differences between women in Cork and Kerry. These figures show that a worrying proportion of people, especially men, take alcohol in excess of the safety guidelines.

**Consequences of Alcohol Misuse**

Excess alcohol has adverse effects on many systems of the body. Excess drinking during pregnancy can affect the baby leading to birth defects (Foetal Alcohol Syndrome). Alcoholic disorders are associated with a quarter of all hospital admissions, and present in 21% of admissions to psychiatric hospitals. Many people involved in fatal road traffic accidents have over the legal limit of alcohol. Alcohol is a contributing factor in social disharmony.

Alcohol dependence or addiction is insidious and dangerous. It may be experienced by over 1% of drinkers. It is characterised by the primacy of drinking over all other activities, a compulsion to drink and difficulty in controlling amounts of drink, the development of tolerance requiring increasing amounts of alcohol to achieve the same effect and the development of withdrawal symptoms when alcohol intake ceases.

The National Alcohol Policy, published by the Department of Health in September 1996, seeks to promote moderation in alcohol consumption and reduce risks to physical, mental and family health associated with alcohol abuse. The implementation of the policy must be closely maintained.

**The key challenge is how to maximise the good and minimise the harm in alcohol use. We know the potential dangers of starting to drink early and to excess. The challenge is in encouraging safe use and ensuring that limits are recognised.**
Sexual Health

Good personal and sexual relationships can actively promote health and well being. Sexual health care is now becoming broader in terms of prevention and early treatment of disease.

Just as "beauty is in the eye of the beholder" so sexuality and its expression is a highly personal matter. The promotion of sexual health involves teaching skills and values in making decisions about sexuality. There is more and more evidence that such education is beneficial. Myths about sexuality abound among teenagers. The desire to be "normal" has an important influence on behaviour. There is much to be gained in openly clarifying the real situation.

As indicators of sexual health in the Irish situation, trends are reviewed for teenage pregnancy, sexually transmitted diseases, HIV infection and AIDS, and cervical cancer.

Teen pregnancy

Pregnancy in the teenage years can be problematic for the young parent and child. In 1992 in Ireland 2731 girls aged 15-19 years had pregnancies that went to term, seven mothers were aged less than fifteen years old, while 712 Irish teenagers had abortions recorded in the UK. The number of teenage pregnancies is a cause of concern.

When a child takes on the responsibility of motherhood before the time is right for that child, adverse consequences can result, the effect of which may last for life. Adolescent mothers are more likely to have a difficult birth and to be depressed afterwards. Their chances of completing their education and having a successful career are much reduced. This does not help their children.

At school age the children of teenage mothers as a group have more behavioural problems and score lower on intellectual tests than other children of similar age.

Teenage pregnancy seems to be one manifestation of a cycle of disadvantage. Many teenage mothers were themselves the children of teenage or very young parents. It is clear that both the adolescent mother and her child are in need of much care. The challenge is that society needs to support these young and vulnerable families.

Sexually transmitted diseases

The number of cases of sexually transmitted diseases (STD) and of medical consultations concerning STD is an indicator of the extent of unsafe sexual behaviour practised in the population. Many more engage in unsafe sexual behaviour than ever attend for advice, investigation or treatment. There has been a general increase in the number of cases of sexually transmitted diseases seen in recent years. Figure 7.3 shows the big increase in STD's cases notified from Cork and Kerry in recent years. A total of 5163 cases of STD were notified in Ireland in 1995, up from 1882 cases notified in 1990.

![Figure 7.3](image-url) - Number of notifications of new cases of Sexually Transmitted Disease occurring in Cork and Kerry from 1989 – 1995. Source: Department of Health
Health education with a view to behaviour change remains the mainstay of prevention of STD. The sexually active are at risk and need to understand the facts. The general increase in sexually transmitted disease needs to be reversed. The individual with the infection not only suffers but runs the risk of infecting their partner. In the case of expectant women there is the added worry of exposing their child to infection especially at the time of birth. Sexually transmitted disease may lead to subsequent infertility in both sexes, ectopic pregnancy, that is pregnancy in the tubes, or chronic pelvic pain. There is a growing body of evidence that a person's risk of infection with the HIV virus that causes AIDS is increased in the presence of other sexually transmitted diseases.

The number of new consultations for STD seen in the Southern Health Board clinic has risen from 264 in 1990 to 675 in 1996 which may reflect more serious levels of disease.

**AIDS - Acquired immunodeficiency syndrome:**

The World Health Organisation estimates there has been 8.4 million cases of full blown AIDS worldwide, one fifth of whom are children. It is estimated that there are currently 22.6 million people living with HIV/AIDS.

In Ireland 577 cases of AIDS had been notified to the Department of Health up to 31st December 1996 of whom 304 had died. One thousand, seven hundred and thirty one people had tested positive up to the end of December 1996. The HIV statistics show that intravenous drug users represent 46% of the total, homosexuals 22%, heterosexuals 15% and the balance (17%) is made up of haemophiliacs, children at risk and others. HIV testing has been carried out in the SHB since 1989. In contrast to the national picture cases of infection associated with intravenous drug use are relatively rare in the SHB, where transmission of infection is predominantly due to homosexual and heterosexual sex.

Achieving a reduction in the incidence of HIV infection requires a number of approaches. Prevention and control measures need to be guided by accurate ongoing information on the spread of the virus in the population.

Spread of the AIDS virus in Ireland is monitored through a national anonymous unlinked antenatal HIV testing programme. Pregnant women can be said to represent the heterosexually active adult population. Between the 1st October 1992 and the end of 1995 160,679 samples were tested. The number of positive tests found was 25 giving a rate of 15.6 per 100,000 tested. The rate in the Eastern Health Board Area was one woman in 2,675. In the Southern Health Board the rate was one woman in 9,900. The results confirm that the level of infection with the AIDS virus is lower in Ireland than in other European countries.

**Cervical cancer**

Cancer of the cervix is relatively rare accounting for 2.3% of all cancers in Ireland. Its importance lies in the fact that early detection by cervical smear is possible. A virus - the human papilloma virus that can be spread from person to person through sexual activity has been identified as a causative factor in cervical cancer. Those who had their first sexual relationship at an early age, when the cervix may be more vulnerable to the effect of a carcinogen / cancer promoting agent, are at increased risk of developing cancer of the cervix. The risk is also increased with increasing numbers of sexual partners. Screening, by the taking of a smear of the cervix, has increased by 30% the number of non-invasive cancers of the cervix detected since 1982. These non-invasive cervical cancers are most commonly found in 30-35 year old women. Cases of invasive cervical cancer occur mostly in older women, the greatest number of cases being found at the age of 75-79. In the SHB in 1994 nine women died from cervical cancer.
Chapter 8

Towards Health -
The Challenges
Towards Health-The Challenges

This report has highlighted a number of issues concerning the health of the population of Cork and Kerry. In setting an agenda for change, there are several common themes.

There is a need to take prevention seriously. For too long prevention has been regarded as peripheral to the main activities in the health sector. Efforts have concentrated on the treatment of established disease with newer and more expensive technologies. Investment in prevention may not be as glamorous in the short term but will, in time, lead to improved quality of life for more of us.

The most graphic example of this is the prevention of coronary heart disease – the cause of 30% of our premature deaths – and lung cancer which accounts for 231 deaths each year in Cork and Kerry. Smoking control is the single most effective way of reducing the toll of early death and we as a community need to substantially increase our efforts in this area. The challenges are to provide a supportive environment for non-smoking adults and all children and to encourage smokers to quit.

The evidence for inequalities in health is compelling. People who live in disadvantaged circumstances have more illnesses, more disability and shorter lives than those who are more affluent.

Many of the underlying socio-economic causes of such health inequalities are amenable to change. It is a major challenge to Public Health to redress the balance by identifying deprived groups of people where health status is below average and by ensuring that, in collaboration with other agencies, resources are committed to improve the situation.

Safe water and clean air are pre-requisites for health. While in general, the quality of drinking water in Cork and Kerry is satisfactory, there is no room for complacency. There must be constant vigilance to ensure a water supply that is safe and free from industrial and farming contamination.
Likewise, we all have a part to play in protecting the quality of the air we breathe through the use of smokeless fuels, the economical and responsible use of energy and to realise that the only effective long-term solution to modern air pollution is the reduction of motorised road traffic.

If we are to improve the health status of our children, the main challenge is to reduce accidents. This can be done by ensuring safe environments, both in our homes and on our roads. Another major threat to the health of children arises from passive smoking. We need to increase awareness of the risks of passive smoking and, in particular, the effects of maternal smoking on the unborn child.

Immunisation may be "one of the most powerful and cost effective weapons of modern medicine" yet it is of concern that serious infectious illness such as Pertussis, Measles, Mumps and Rubella, all preventable by immunisation, are still with us. We all have a responsibility for ensuring that we achieve high levels of immunisation so that we can protect our children.

Health is valued but rarely fully appreciated. The return on the large investment of financial resources and human effort in the field of health cannot be measured in monetary terms but can and should be measured in terms of public health. This first Public Health Annual Report commences the task of monitoring the health status of the population of Cork and Kerry. It highlights key issues affecting our health and presents challenges, which must be met if we are to improve the health and quality of life of the people of Cork and Kerry.

Excessive alcohol use imposes a serious cost to individuals and society. The key challenge is how to maximise the good and minimise the harm in alcohol use. The potential dangers of starting to drink early and to excess must be highlighted.
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Source: Central Statistics Office, 1995 (Provisional Data)
Standardised Death Rates
(average 1991 - 1995*)

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<td>16.4</td>
<td>24.7</td>
<td>14.3</td>
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<td>Rectum</td>
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<td>4.7</td>
<td>7.1</td>
<td>10.3</td>
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<td>Female breast</td>
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<td>-</td>
<td>39.3</td>
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</tr>
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<td>-</td>
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<td>-</td>
</tr>
<tr>
<td>Prostate</td>
<td>185</td>
<td>32.5</td>
<td>-</td>
<td>32.9</td>
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<td>-</td>
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<tr>
<td>Respiratory disease</td>
<td>460-519</td>
<td>165.0</td>
<td>99.6</td>
<td>125.1</td>
<td>161.8</td>
<td>94.7</td>
</tr>
<tr>
<td>Bronchitis/emphysema/asthma</td>
<td>490-496</td>
<td>80.6</td>
<td>35.5</td>
<td>53.5</td>
<td>84.3</td>
<td>34.3</td>
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<tr>
<td>Asthma</td>
<td>493</td>
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<td>3.2</td>
<td>4.9</td>
<td>2.5</td>
<td>3.6</td>
</tr>
<tr>
<td>Injury &amp; Poisoning</td>
<td>800-999</td>
<td>58.6</td>
<td>22.0</td>
<td>40.1</td>
<td>64.1</td>
<td>23.7</td>
</tr>
<tr>
<td>Motor vehicle accidents</td>
<td>E810-819</td>
<td>16.3</td>
<td>5.9</td>
<td>11.0</td>
<td>14.1</td>
<td>5.0</td>
</tr>
<tr>
<td>Suicide</td>
<td>E950-959</td>
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<td>4.6</td>
<td>11.0</td>
<td>21.4</td>
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<tr>
<td>Accidental falls</td>
<td>E880-888</td>
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<td>7.5</td>
<td>10.0</td>
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<td>11.7</td>
<td>15.9</td>
<td>11.2</td>
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<td>Chronic liver disease, cirrhosis</td>
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<td>3.0</td>
<td>3.4</td>
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<td>2.5</td>
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<td>1.0</td>
<td>1.4</td>
<td>1.6</td>
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</tr>
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</table>

Source: Common Data Set, Department of Health
*Direct Standardisation, using the WHO European standard population as standard population, per 100,000 population.
## Standardised Death Rates (1991-1995)*

### Selected Causes of Death, age 15-64 years

<table>
<thead>
<tr>
<th>Cause</th>
<th>Cork</th>
<th>Kerry</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>All Causes</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Diseases of Circulatory System</td>
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<tr>
<td>Ischaemic heart disease</td>
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<td>25</td>
<td>60.9</td>
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<tr>
<td>Cerebrovascular disease</td>
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<td>10.1</td>
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<tr>
<td>Malignant neoplasms</td>
<td>98.6</td>
<td>87.1</td>
<td>93.3</td>
</tr>
<tr>
<td>Respiratory disease</td>
<td>15.1</td>
<td>9.7</td>
<td>12.5</td>
</tr>
<tr>
<td>Injury &amp; poisoning</td>
<td>52.7</td>
<td>14.2</td>
<td>33.7</td>
</tr>
<tr>
<td>Motor vehicle accidents</td>
<td>12.9</td>
<td>3.3</td>
<td>8.2</td>
</tr>
<tr>
<td>Suicide</td>
<td>20.0</td>
<td>5.2</td>
<td>12.7</td>
</tr>
</tbody>
</table>

*Source: Central Statistics Office

*Direct standardisation, using the population of Ireland, 1991 Census, as the standard population, per 100,000 population.