# Public Health Bulletin

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### THE NATIONAL CENTRE FOR HEALTH PROMOTION

The Minister of Human Services and Health, the Honourable Dr Carmen Lawrence, officially opened the National Centre for Health Promotion on May 10, 1995. The National Centre for Health Promotion aims to contribute to improved population health outcomes by working with practitioners to improve the effectiveness of health promotion practice. The centre's work focuses on workforce development, research and advocacy for health promotion at national, State, local and international levels. It has begun to establish national and international networks of people and organisations with an interest in health promotion.

The centre has already conducted two short training courses – an international meeting on Health Promotion Schools (in collaboration with the World Health Organisation) and a national symposium on the same topic. A second annual symposium – Achieving best practice in health promotion: fostering evidence-based approaches – will be held on December 4-5, 1995.

Professor Don Nutbeam, Director of the centre, invited Dr J. Michael McGinnis, the Assistant Surgeon General, Deputy Assistant Secretary for Health and Director of the Office of Disease Prevention and Health Promotion in the United States Department of Health and Human Services, to speak at the opening. Since 1977, Dr McGinnis has maintained national responsibility for health promotion policy under Presidents Carter, Reagan, Bush and Clinton.

The US has a long experience of working to achieve national health goals and targets. Dr McGinnis has been the architect and leader of that work since 1979. In his speech, he demonstrated the rationale used to direct resources to promoting health in the US and pointed to the significant progress that has been made in reducing the causes of preventable mortality across the population. The ability to measure their progress in the US has also made it possible to identify where greater effort is required. This summary of his presentation is produced with his permission.

# MPROVING HEALTH IN THE USA

here are many ways in which to present the challenges for health policy, but the most direct relates to the causes of death in our society. Approximately 2.1 million people died in the USA in 1990. The 10 leading causes of death are ranked in order in Table 1. One-third of all deaths were from heart disease and one-quarter from cancer.

Another way to examine the burden of illness is to calculate the total number of years lost to society through people dying prematurely, by aggregating the years of potential life lost. Through this analysis those causes of death that strike earlier in life acquire greater significance. Table 2 ranks the leading causes of death in the order of years of potential life lost and demonstrates the impact of injury and suicide/homicide on American society.

Another prominent concern of those involved in determining health policy is cost. Table 3 ranks the leading causes of death by their direct and indirect costs to society. This reveals the enormous cost to society of injury-related deaths (twice that of deaths from heart disease).

For every one of these leading causes of death there are now identified

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## Correspondence

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LEADING CAUSES OF DEATH, USA, 1990		
Heart disease	720,058	
Cancer	505,322	
Cerebrovascular disease	144,088	
Unintentional injuries	91,983	
Chronic lung disease	86,679	
Pneumonia and influenza	79,513	
Diabetes	47,664	
Suicide	30,906	
Chronic liver disease/cirrhosis	25,815	
HIV infection	25,188	

TABLE 3	
COSTS* OF THE LEADING CAUSES OF DEATH, USA, 1990	
Injuries (intentional	
and unintentional)	\$150 billion
Heart disease	\$75 billion
Cancer	\$72 billion
Cerebrovascular disease	\$19 billion
Chronic lung disease	\$15 billion

<sup>\*</sup> Estimates of annual direct and indirect costs

		change
	1990 (millions)	1989 to 1990
Injuries	2.1	-4.1%
Suicide/homicide	1.56	+6.5%
Heart disease	1.38	-2.5%
Congenital defects	0.61	+1.0%
HIV infection	0.78	+12.7%
Prematurity	0.44	-9.2%
SIDS	0.33	-3.9%
Stroke	0.23	+1.3%
Liver disease	0.21	-3.9%
Pneumonia/influenza	0.17	-4.2%

RISK FACTORS FOR THE LEADI CAUSES OF DEATH, USA	NG
Heart disease	Tobacco, obesity, elevated BP, cholesterol, sedentary lifestyle
Cancer	Tobacco, improper diet, alcohol, envir. exposures
Cerebrovascular disease	Tobacco, elevated BP, cholesterol, sedentary lifestyle
Accidental injuries	Safety belt non-use, alcohol, home hazards
Chronic lung disease	Tobacco, envir. exposure

### Improving health in the USA

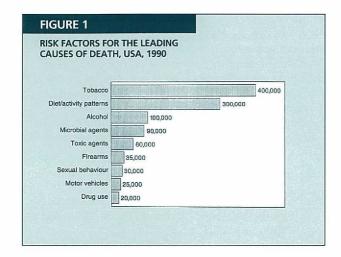
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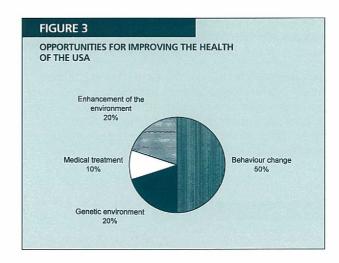
risk factors. In the past 30 years risk factors have been identified for cancer, stroke, injuries and lung disease (Table 4). The last generation of biomedical research has determined that the real leading causes of death for the USA and for Australia are not heart disease, cancer and stroke, but rather tobacco, diet, inactivity and alcohol. Figure 1 ranks these causes of death. In this figure, microbiological agents leading to infection-related deaths refers to infections other than those caused by the human immunodeficiency virus (HIV). Infections related to sexual behaviour or drug use were counted elsewhere in this table. Sexual behaviour accounted for 30,000 deaths and these were largely due to HIV. Toxic agents refers to substances to which people are exposed through

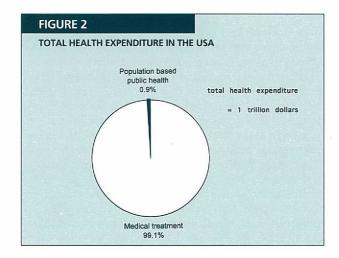
the environment and workplaces. Firearms caused 35,000 deaths in the USA in 1990. There is no other peacetime country for which firearms ranks as the sixth leading cause of death. Motor vehicle deaths presented in this figure are those not related to alcohol.

These are the real leading causes of death for Americans and health policy that is not orientated to address these challenges is ignoring the evidence that biomedical science has compiled.

However, these problems are not best addressed through the medical treatment system. Rather, to change these causes of death and illness whole communities must be mobilised. To develop plans and strategies a population perspective is required to structure the health policy agenda. Unfortunately population-based public health in the USA is not a big investment item. About 1 per cent of the total







national health expenditure is spent on populationbased public health activities.

How does national health expenditure relate to the major causes of death? Medical treatment, to which 99 per cent of the health budget is directed, can affect only about 10 per cent of premature mortality. Further, it can do so only if it is perfectly applied, i.e. if every advantage was taken of every single treatment opportunity that is presented to the medical care system. Every year the USA spends on an average \$4,000 on medical treatment for every person. However, the real opportunities for improving the health profile of the nation lie elsewhere (Figure 3).

Given that there is a limited capacity to alter the genetic contribution to illness and death, that leaves 70 per cent of premature mortality for which the 1 per cent of the health budget spent on population-based public health offers support. This means public health must be extremely efficient to target its scarce resources.

This led to the development of the Healthy People 2000 initiative by the United States Government.

TABLE 5		
YEAR 1990 – TARGETS FOR LIFE STAGES, USA		
Life stage	1990 Target*	
1. Healthy infants (below age 1)	35% fewer deaths	
2. Healthy children (age 1-14) 3. Healthy adolescents/	20% fewer deaths	
Young adults (age 15-24)	20% fewer deaths	
4. Healthy adults (age 25-64)	20% fewer deaths	
5. Healthy older adults (age 65+)	20% fewer sick days	

<sup>\*</sup> relative to 1977

Healthy People 2000 is the national health promotion and disease prevention strategy for the USA. It is based on the following premise:

We know how to improve the health profile of Americans and we know how to do that by preventing rather than treating problems.

Healthy People 2000 originates from the 1979 Surgeon General's Report which set out five broad life-stage goals to be accomplished over the decade of the 80s. These are listed in Table 5.

Figure 4 presents the progress made in each of these areas against the 1990 goal. There were improvements in each area, although the least improvement occurred for adolescents.

The major contributions to change in each area did not come through improved medical treatment but through health promotion, such as changes in tobacco use, changes in dietary patterns away from saturated fats, improvements in high blood pressure control, and expansion of safety measures such as safety belts.

The review of activities in 1990 helped to determine how to proceed with Healthy People 2000 and also

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### Improving health in the USA

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revealed two prominent failings of the work to that time. Notably, it had failed to address the problems of the most vulnerable in society – the minority and low-income populations. It had also failed to establish a broad intersectoral response across the community to address the major causes of death.



These became the major platforms of Healthy People 2000 – to develop change through partnerships and to address as the first priority the issues of those most in need. A consortium of organisations came together, including professional, government, special interest and trade, to develop HP 2000 (this process will be described in detail in a future article). In 1990 Healthy People 2000 was issued with three goals and 3,000 specific objectives. The goals were to:

- increase the span of healthy life for Americans, broadening the notion beyond mortality to quality of life;
- reduce health disparities, closing the gap in health between the rich and poor, black and white, urban and rural; and
- achieve access to preventive primary care services for all Americans.

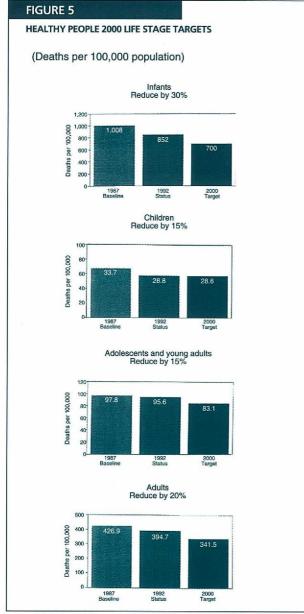
Specific objectives were developed in 22 priority areas.

### How is Healthy People 2000 doing in 1995?

For diseases that are the leading killers of Americans heart disease, cancer, stroke and injuries – there is good progress towards the targets set. A 26 per cent decline in coronary heart disease deaths was targeted by 2000 - by 1995 there had been a 16 per cent decline. A 3 per cent decline in cancer deaths was targeted - there has been a 1 per cent decline. There has been an important achievement with respect to lung cancer death rates in men, which have begun to decline for the first time in decades. A 30 per cent decline in stroke deaths was targeted and by 1995 there had been a 14 per cent decline. A 16 per cent decline in injury death rates was the target and this has already been exceeded in the first five years with a 17 per cent decline. For alcohol-related motor vehicle fatalities (one of the most important components of the injury death rate), there has been a 30 per cent decline in the first six years of monitoring.

The bad news is that several targets are moving in the wrong direction. The proportion of the population which is overweight is increasing, from 26 per cent of the population to 34 per cent. Teenage pregnancies have increased from 71/1,000 to nearly one in ten. Homicide has also increased – instead of the 20 per cent decrease targeted, there has been a 20 per cent increase in homicide deaths this decade.

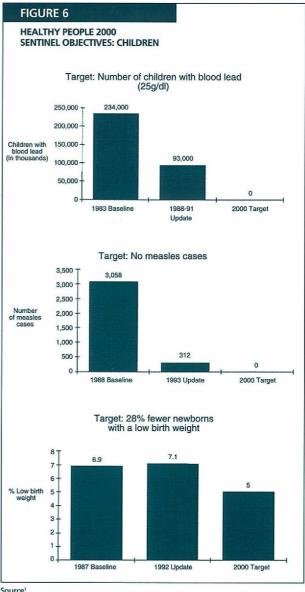
The progress for each of the life stages is summarised in Figure 5. For infants, death rates have fallen from 1,008/100,000 – the 1987 baseline – to 852/100,000 in 1992. Therefore the overall 30 per cent reduction in infant mortality to 700/100,000 is on target. The target of a 15 per cent decline in childhood death rates has almost been achieved. Unfortunately, for adolescents and young adults the death rates are static, largely because the injury reduction gains have been offset by the rise in homicides. The target to reduce mortality in adults by 20 per cent by 2000 is



Source<sup>2</sup>

likely to be achieved. Some of the objectives and the progress to date for the life stages - children, adolescents and adults - are presented in the following figures.

Figure 6 shows good progress has been made reducing the number of children with elevated blood lead levels. Higher immunisation rates are being achieved. The baseline was about 60 per cent of children adequately immunised and the target was 90 per cent by 2000. The level is around 70 per cent and the target is expected to be reached. A related target is notified cases of measles. The baseline was 3,000 cases of measles and the target is zero. Last year there were around 300 measles cases reported. Around 7 per cent of Americans are born with a low birth weight.



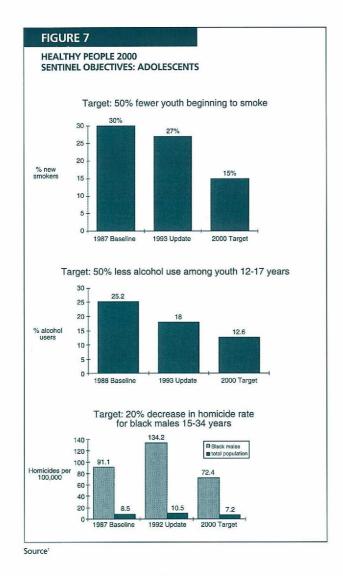
Source<sup>1</sup>

The target is to reduce this to 5 per cent for 2000, but this is not going to be met.

For adolescents (Figure 7), progress has been made towards achieving the targets for reducing smoking and the use of alcohol. However of great concern is the rise in homicide. In the figure describing homicide death rates, there are two bars for each time period. One is for the total population aged 15-34 years and one is for black youth alone. Almost the whole burden of homicide is centred in the black youth population. This is an example of a health issue that affects the most vulnerable in society.

For adults (Figure 8), progress has been made towards achieving the targets for lowering cholesterol

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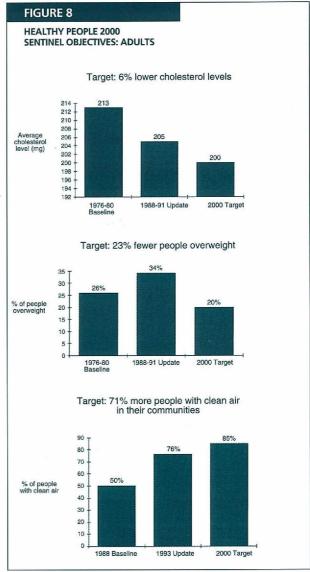
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levels and ensuring more people exercise regularly. However a larger proportion of the population is overweight.

A significant and unheralded victory for public health is clean air – the proportion of people who live in communities with clean air. Air and water are becoming substantially cleaner as the result of major efforts over the past decades. This has largely been achieved through regulations and there is a threat to these achievements in the deregulatory environment in the USA. There has also been a loss of commitment to some of the procedures necessary to ensure clean air and water.

The first goal of Healthy People 2000 – achieving a decline in mortality – is being achieved. To some extent, gains in quality of life have also been made. However Healthy People 2000 is failing with respect to its second goal of closing the gaps in health

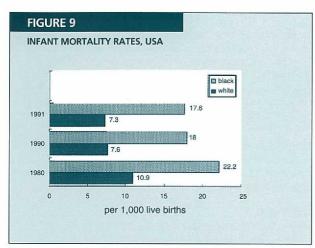


Source<sup>1</sup>

between various groups in US society. For example, Figure 9 demonstrates that for the black community the infant mortality rates continue to be approximately double those for the white community. This is despite improvements in infant mortality for all populations. Healthy People 2000 is also failing to meet its third goal of ensuring that all Americans have access to adequate primary and preventive services. Seventeen per cent of Americans have no health insurance. Once again it is the most vulnerable in society that are most at risk – in particular, 21 per cent of the black population is without health insurance, as is 32 per cent of the Hispanic population.

### CONCLUSION

Equity is a major challenge for Healthy People 2000. In recent years there has been a dramatic increase in the rich getting richer and the lowest income groups



Source: CDC, NCHS, National Vital Statistics System

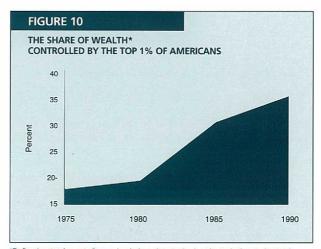
becoming progressively more alienated. Firearm death rates for black males are climbing and the burden of teenage pregnancy is centred with young black women. At the same time the share of wealth controlled by the top 1 per cent of Americans has more than doubled since 1975. In the USA 38 per cent of the wealth is now controlled by 1 per cent of the population (Figure 10).

The roots of many of the health problems in the USA lie in the alienation, dependency and inequities that course through society. These must be addressed if improvements in health across the board are to be achieved.

This means health must focus on:

- Equity. Broader social equity is vital.

  Sustained progress in all dimensions can not be achieved without a solid commitment to equity and without the involvement of the public health community to work for all population groups.
  - Outcomes. In today's world of constrained resources we simply cannot undertake activities that are not focused on the outcome.



\*Defined as total assets (home, bank deposits, stocks, bonds, and other real estate) minus mortgage and consumer debt.

Source: Edward N. Wolfe, Twentieth Century Fund

Partnerships. The health community alone cannot achieve these changes in health status of the population. Partnerships with other groups are vital.

### **ACKNOWLEDGMENTS**

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The Bulletin aims to provide its readers with population health data and information to motivate effective public health action. Articles, news and comments should be 1,000 words or less in length and include a summary of the key points to be made in the first paragraph. References should be set out using the Vancouver style, the full text of which can be found in *British Medical Journal* 1988; 296:401-5.

Please submit items in hard copy and on diskette, preferably using WordPerfect, to the editor, NSW Public Health Bulletin, Locked Mail Bag 961, North Sydney 2059. Facsimile (02) 391 9029. Please contact your local Public Health Unit to obtain copies of the NSW Public Health Bulletin.

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<sup>1.</sup> McGinnis J, Lee P. Healthy People 2000 at mid-decade.  $\emph{JAMA}$  1995; 273:1123-1129.

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