

# Preventing the Early Demise of >20,000 Australians

Each year there are 20,000 Australians - perhaps more - whose premature demise could have been prevented by the relatively simple action of following a service manual approach to their health. Most of us know the value of a service manual approach to looking after their car. If we used a similar approach to our health, then we should be able to prevent the early demise of many Australians.

This is not a claim for a remarkable cure for a common ailment or an invitation for you to purchase an expensive program. It is a simple introduction to the evidence for taking some easy steps to having a longer, healthier life, with the improved quality of life that goes with that. More importantly, it also simplifies the long list of health messages that have become part of the daily media barrage into something anyone can follow.

## The Problem

Several of the conditions that are behind the majority of deaths in Australia clearly have a preventable component. That is, there are things that you, or anyone else could do, to reduce the risk of having life shortened by one of these conditions.

Coronary heart disease, stroke, lung cancer, chronic airways disease, bowel cancer and breast cancer together account for over 50,000 of the 140,000 people that die each year in Australia, according to national 2006 mortality data:

(Source - [http://www.aihw.gov.au/mortality/data/current\\_data.cfm](http://www.aihw.gov.au/mortality/data/current_data.cfm))

<b>Disease</b>	<b>Males</b>	<b>Females</b>	<b>Total</b>
Coronary heart disease	12,186	10,797	22,983
Stroke	4,480	6,985	11,465
Lung cancer	4,665	2,683	7,348
Chronic airways disease	2,702	2,059	4,761
Bowel cancer	2,149	1,709	3,858
Breast cancer	25	2,618	2,643
<b>Total</b>			53,058

Unfortunately many people put doing something about their risk of becoming a statistic into the too hard basket, or wait until after the damage is done.

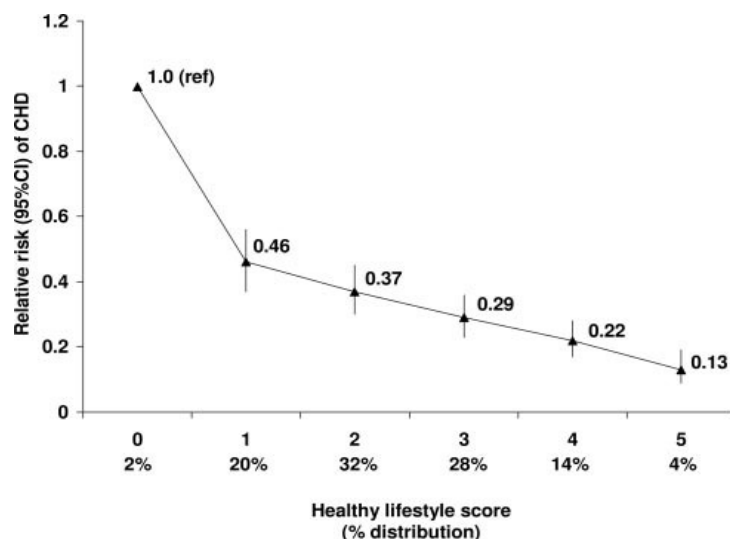
The Gold Book, written by a cancer surgeon who has seen more than enough of the consequences of inaction, takes advice from all the significant expert sources that Australians would normally go to, eventually. It then distils that information and gives any reader a simple path to follow, personalised for your stage of life and the conditions that you can do most about.

By adopting a simple preventative health care approach as recommended in the Gold Book service manuals, over one third of the above 50,000 deaths could potentially be prevented each year in Australia. The reasons for this claim are stated and supported below.

## Coronary Heart Disease

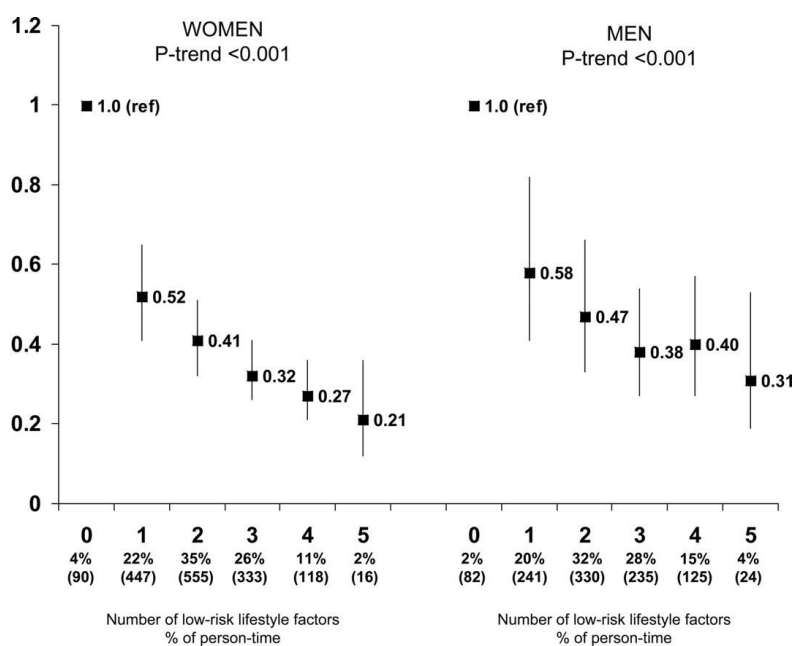
There is now an extensive volume of research proving the potential to prevent the development of coronary heart disease. One example of this is the Health Professionals Follow-up Study of over **42,000** men published in *Circulation* (*Circulation* 2006;114:160-167).

This prospective follow-up study confirmed that men who demonstrated all five healthy lifestyle factors (didn't smoke, weren't overweight, exercised moderately for more than 30 minutes per day, had a modest alcohol consumption and ate a healthy diet) lowered their incidence of coronary heart disease events to only 13% of the risk that people who had the opposite of these lifestyle behaviours (see graph).



## Stroke

An increasing concern about having to live with the consequences of stroke becomes ever more real as we get older. Not surprisingly, there is also much data in the health literature pointing to the primary prevention of stroke by a healthy lifestyle. One of the key research projects supporting the potential to reduce the risk of stroke was published two years ago, also in *Circulation* (*Circulation* 2008; 118:947-954). A prospective observational study of over **114,000** men and women were followed for at least 20 years. For those who demonstrated all five healthy lifestyle factors (didn't smoke, weren't overweight, exercised moderately for more than 30 minutes per day, had a modest alcohol consumption and ate a healthy diet), their stroke rate was reduced by a massive 80% in women, and 70% in men. The following graph from this study documents that the more of these lifestyle features, the less likely people were to develop a stroke:

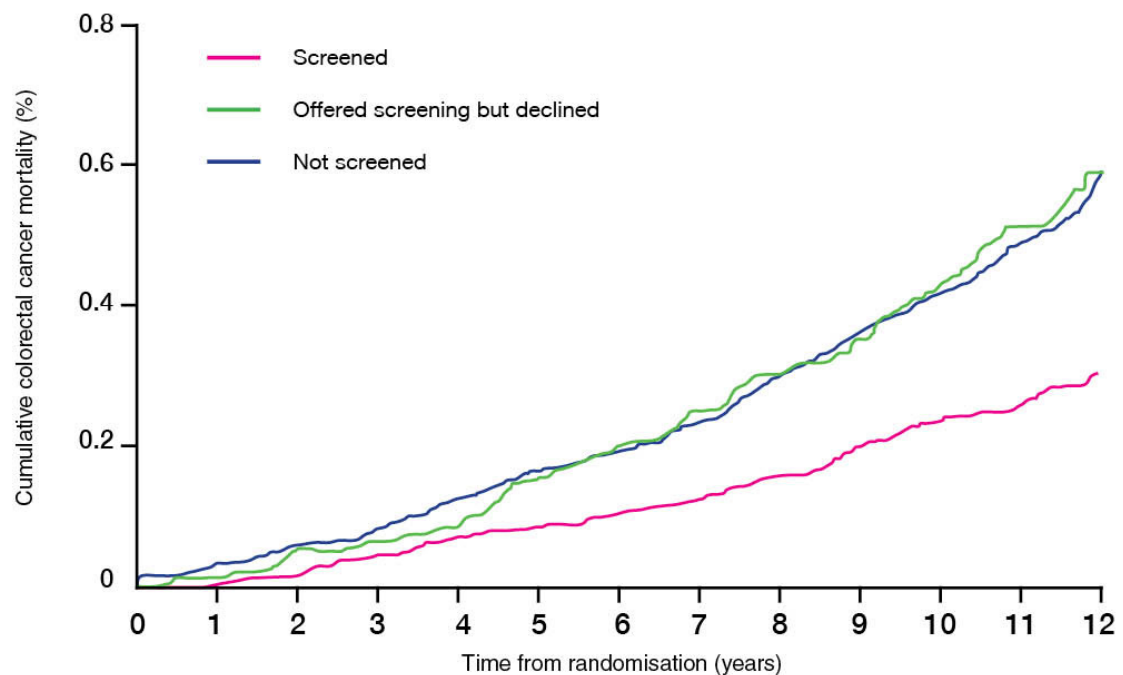


## Lung Cancer and Chronic Airways Disease

It is widely accepted that over 95% of lung cancer and over 80% of chronic airways disease is caused by smoking. More than 12,000 Australians die from these diseases each year, and this number could fall by well over 90% if we as a nation could enjoy the health benefits of being smoke free. Importantly, individuals can make the choice not to become another smoking statistic and general practitioners provide help for anyone willing to accept it.

## Bowel Cancer

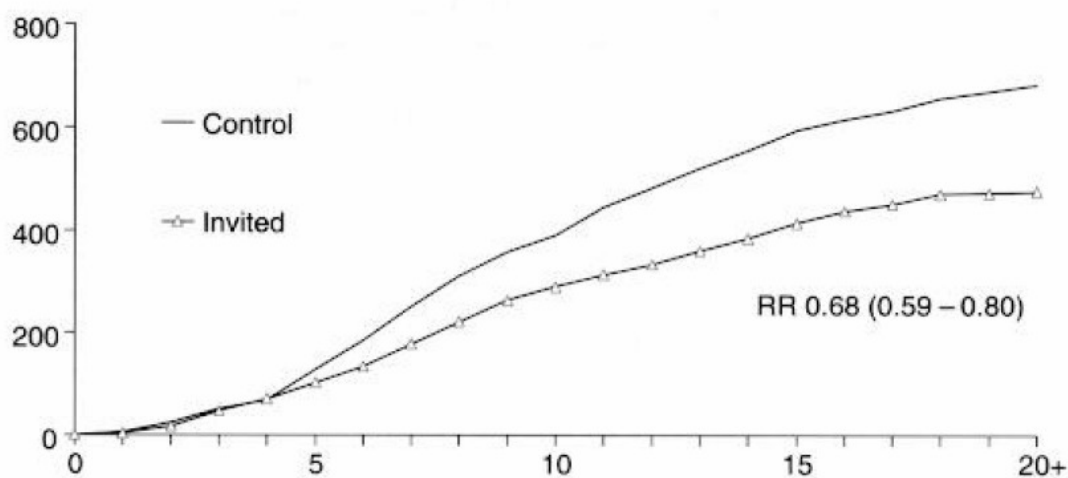
An increasing number of studies are showing the importance of bowel cancer screening. The most significant publication to date in this area comes from Britain. (Atkin et al, *Lancet* 375; May 8 2010, 1624 – 1633). This study randomised over **170,000** people to either a single flexible sigmoidoscopy or simple observation. After 12 years of follow up, they showed an astounding **50% reduction in the incidence of rectal cancer, and a 43% reduction in the mortality rate from bowel cancer** between those that received a single flexible sigmoidoscopy performed by a nurse and those that didn't. The following survival curves demonstrate the key mortality finding in the two groups (the green (top) line is for those who were randomised to receive screening but chose not to partake).



However, it is the slope of the curves which is most surprising. They point to a much higher reduction in deaths if this study were to continue for a further 12 years.

## Breast Cancer

Similar findings were discovered by Tabar et al (*Radiologic Clinics of North America* Vol 38;4 July 2000). Seven years after randomising **133,000** women, Tabar demonstrated a 33% reduction in death rate from those who were offered regular screening mammography versus those that were not.



Again, the slope of the curves in these two groups reveals a significant separation by the 7 year mark, but then these start to roughly parallel each other. This is due to Tabar et al's decision to offer the control group regular breast cancer screening from that time point on. We can only guess what the real difference in mortality between the two groups would have been if the study had been left to run its course over the full 20 years. However, we can presume that the mortality difference would have been much higher if the study was continued in its original design.

## Conclusion

Most of the science in the above examples is not new. Many of the decisions one needs to make to reduce the risk of illness are relatively simple. Even so, many Australians (perhaps most) are not deciding to take the simple steps needed to avoid the potential impacts of even these major and in large part preventable conditions.

Just think of the number of Australian lives that could potentially be prevented from dying early if we all acted in this way.

It should be possible to achieve substantial mortality reductions in our community.

These reductions are summarised in the following table, which shows the expected number of lives prevented from early demise occurring in Australia each year - a total of over 20,000 lives saved. The key assumption made in this table is that there would be a minimum 30% reduction in early cardiac and stroke mortality obtained by adopting a service manual approach.

<b>Disease</b>	<b>Males</b>	<b>Females</b>	<b>Total</b>	<b>Potential % Reduction</b>	<b>Potential Early Deaths Prevented</b>
Coronary heart disease	12,186	10,797	22,983	30%	6,895
Stroke	4,480	6,985	11,465	30%	3,440
Lung cancer	4,665	2,683	7,348	90%	6,613
Chronic airways disease	2,702	2,059	4,761	80%	3,809
Bowel cancer	2,149	1,709	3,858	43%	1,659
Breast cancer	25	2,618	2,643	30%	793
<b>Total</b>			<b>53,058</b>		<b>23,209</b>

The implications of this data are enormous for each of us as individuals and for our country.

We all need to take very seriously the **individual responsibility** that we each should have for our own preventative health care.

While national statistics are not important to an individual, they do point out the very real potential each person has to avoid having to live their final years with limited function due to a weak heart or compromised lungs, or living with the consequences of a stroke, or having to manage the consequences of, and treatment for, preventable cancers, or just simply passing away before they needed to.

Losing over 20,000 people to preventable deaths each year is an enormous and preventable tragedy. If we could adopt a service manual approach, we would not only prevent an early demise for many of us, but we would save our health care system from unnecessary multi-billion dollar expenditure.

Death brings separation and loss into the lives of those who are still here. Preventative health care goes a long way to providing long term friendship and companionship to those we love and care for in our daily lives.

Think about it. Now is the time to act.

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