Hazelwood Mine Fire Inquiry

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✓ Health: Terms of Reference 6 and 7

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Submission to Hazelwood Mine Fire Inquiry

Heart Foundation (Victoria)

10 August 2015

Introduction

Focus of this submission

The Heart Foundation (Victoria) is pleased to make a submission to the Hazelwood Mine Fire Inquiry. Our submission does not address issues relating to cause of the fire or the specific health impact. Rather, it looks at the burden of heart disease in the Latrobe Valley and makes three recommendations for better health for the local community. In this regard, our submission addresses the following Terms of Reference:

> *7. Short, medium and long term measures to improve the health of the Latrobe Valley communities having regard to any health impacts identified by the Board as being associated with the Hazelwood Coal Mine Fire.*[1]

By taking this approach, our submission is consistent with the Inquiry's first report, which noted the Latrobe Valley "has an ageing population and higher incidence of cardiovascular disease" (heart attack and stroke).

The first report also highlighted the need for a concerted effort to improve health in the Latrobe Valley, noting that "to assist the community to recover from this incident and to improve health outcomes for the future, it would be beneficial for the Latrobe Valley to be the focus of renewed efforts to improve community health."[2]

Heart disease in the Latrobe Valley

As noted above, the Latrobe Valley has a higher incidence of cardiovascular disease than the Victorian average. This is further illustrated by the Heart Foundation's *Victorian Heart Maps*, which present data for a range of cardiac conditions including heart attack and cardiac arrest by local government area.

Table 1 summarises data from the *Victorian Heart Maps* for the City of Latrobe and shows it has higher rates of hospital admissions for heart attack, unstable angina and heart failure, as well as out-of-hospital cardiac arrest than the Victorian average.

The same table also shows the standardised morbidity ratio (SMR) for the City of Latrobe for each of these conditions. The SMR is a statistical method that tells us whether these conditions are higher or lower than expected, after adjusting for population size and age.

Using the SMR, Table 1 shows that hospital admissions for heart attack in the City of Latrobe are 14% higher than expected (SMR 1.14); unstable angina is 34% higher than expected (SMR 1.34); heart failure is 16% higher than expected (1.16); and cardiac arrest is 41% higher than expected (SMR 1.41).

Table 1: Hospital Admissions and Out-of-Hospital Cardiac Arrest: City of Latrobe, 2007-08 to 2012-13

	Rate per 10,000		
	City of Latrobe	**Victorian Average**	**SMR (City of Latrobe)**
Heart Attack	27.5	23	1.14
Unstable Angina	18.0	13	1.34
Heart Failure	28.6	24	1.16
Cardiac Arrest	9.9	7	1.41

Recommendations

Summary of recommendations

1. Educate Latrobe Valley residents about the warning signs of heart attack.
2. Introduce heart health checks for residents in the Latrobe Valley to assess and manage their risk of heart attack.
3. Boost access to cardiac rehabilitation for patients who have suffered a heart attack in the Latrobe Valley.

1. Educate Latrobe Valley residents about the warning signs of heart attack

The Victorian Government should implement a local community campaign to educate Latrobe Valley residents about the warning signs of heart attack. The campaign should have two components:

1. Use local media – TV, radio and newspapers – to educate residents about the warning signs of heart attack. Messages should be tailored to the local community.
2. Encourage people suffering heart attack symptoms – or worried someone close by is suffering a heart attack – to call Triple Zero (000) and ask for an ambulance.

As well as broadcast media, education messages can be strengthened by sending the Heart Foundation's *Heart Attack Action Plan* to households in the Latrobe valley with a resident aged over 45 years. The *Action Plan* is a fridge magnet or wallet card that describes the signs and symptoms of heart attack and outlines the steps people should take if they or someone they know has a heart attack.

Educating people about the warning signs of heart attack is needed because only 50% of heart attack patients arrive at hospital by ambulance.[3] The majority wait longer than three hours before calling Triple Zero (000). This is too long. Ideally, medical treatment for heart attack should commence within 60-90 minutes of the first warning sign.[4,5]

Acting quickly and calling an ambulance is the vital first step to getting fast medical treatment for heart attack, increasing patient's chances of survival. It also reduces the risk of significant heart muscle damage, which can lead to ongoing, costly and life-long medical treatment.

2. Introduce heart health checks for residents in the Latrobe Valley to assess and manage their risk of heart attack

The Victorian Government should encourage GPs, community health services and Aboriginal Health Services in the Latrobe Valley to screen local residents for their risk of heart attack and stroke. The Heart Foundation can work with local health services and health professionals to boost their capacity to deliver this approach to screening and assessment.

Using an absolute risk assessment approach (described below), the program should target people over 45 years of age, and Aboriginal and Torres Strait Islander peoples over 35 years of age. A screening program will help reduce the number of heart attacks and strokes and subsequent admissions to hospital for these conditions in the Latrobe Valley.

Two sets of data show why a screening program is needed in the Latrobe Valley:

- Firstly, the most recent Victorian Population Health Survey[6] shows the prevalence of smoking, obesity and daily consumption of soft drinks – three risk factors for heart disease – are higher in the City of Latrobe than the Victorian average. This is summarised in Table 2 on the following page.

- Secondly, data from the Australian Bureau of Statistics[7] showed that nearly 40% of Victorians over 45 years have high blood pressure, yet 62% of people with the condition are not taking appropriate medication. Similarly, more than 40% of Victorians over 45 years have high cholesterol, yet 90% are unaware of it. Unmanaged risk increases the likelihood of unnecessary hospital admissions for heart attack and stroke.*

Table 2: Risk factors in the City of Latrobe

	City of Latrobe	Victorian average
Smoking	19.8%	15.7%
Obesity	23.8%	17.3%
Daily soft drink consumption*	22.5%	15.9%
** This refers to sugar-sweetened soft drink consumption, not artificially sweetened soft drinks.*		

Because conditions like heart attack and stroke share similar risk factors, the Heart Foundation recommends that assessments be done concurrently, known as an absolute risk assessment.[8] At the moment, assessments focus on individual risk factors rather than the combined impact of multiple risk factors. The more risk factors you have, the greater your chance of a heart attack or stroke.[9]

Focusing on absolute rather than individual risk, GPs, nurses and Aboriginal health workers in the Latrobe Valley would collect information about the patient, including smoking status, blood pressure, cholesterol, and family history. An on-line calculator is used to estimate the patient's risk of heart attack or stroke, which is expressed as a percentage over the next five years.

Treatment guidelines are then used to help determine the best way to manage care based on the level of risk. For example, for patients whose risk is greater than 30%, reducing LDL (bad) cholesterol with a statin by 2.5 mmol/L would prevent 142 heart attacks or strokes per 1,000 people. By contrast, just 12 heart attacks or strokes per 1,000 people are prevented by prescribing a statin to patients whose risk is less than 5% over the next five years.[10,11]

3. Boost access to cardiac rehabilitation for patients who have suffered a heart attack in the Latrobe Valley

The Victorian Government should boost access to cardiac rehabilitation in the Latrobe Valley to help patients recover from heart attack. This can be achieved by:

- Setting a target that 65% of heart attack patients in the Latrobe Valley complete cardiac rehabilitation. Evidence shows this would reduce unplanned hospital readmissions by between 30%[12] and 45%.[13]
- Implement a pilot program in the Latrobe Valley to open up funding for local community-based services to provide cardiac rehabilitation. Currently, funding is limited to hospitals, which means programs are not as accessible to patients as they should be.

Better access to cardiac rehabilitation is needed because recovery from heart attack is compromised because not enough people are referred to cardiac rehabilitation when they are discharged from hospital. This means they miss out on the advice and support they need, increasing their risk of a second heart attack. Research shows:

* While this data was for all of Victoria, it is likely the results will be at least as high in the City of Latrobe.

- Only 50% of heart attack patients are referred to cardiac rehabilitation on discharge and just one-in-three (33%) complete these vital recovery programs.[14]
- 34% of cardiac patients are readmitted to hospital within six months of their first cardiac admission.[15]

Evidence shows that cardiac rehabilitation works. Patients who complete rehabilitation programs are more likely to exercise, quit smoking and take medications to manage high blood pressure and cholesterol.[16] Significantly, Australian research shows that cardiac rehabilitation can reduce readmissions to hospital by up to 45% in the first 12-months and mortality by 25% over the same period.[17] But despite the evidence, too many patients miss out. Boosting access to cardiac rehabilitation can help change this.

References

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