

# The common killer most Australians have never heard of:

**S E P S I S**

A special report by:



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September 2016

# #sepsiskills More than prostate & breast cancer in Australia

## The need...

Sepsis is the leading cause of death from infection around the world. Despite advances in modern medicine like vaccines, antibiotics, and acute care, millions of people around the world die unnecessarily of sepsis every year. In Australia alone, the burden of death from sepsis is greater than the national road toll and more than 30,000 Australians suffer sepsis each year. Yet, most people don't know what sepsis is, let alone the symptoms.

### What is sepsis?

Sepsis is the life-threatening condition that arises when the body's response to an infection damages its own tissues and organs. Often confused with other conditions early on, delayed recognition of the signs and symptoms of sepsis can lead to multi-system organ failure and ultimately death. Organ failure and death are more likely if sepsis is not recognized early and not treated promptly.

People at greatest risk of sepsis are those over the age of 60, newborn babies and their mothers, those living with a chronic illness and/or undergoing chemotherapy, and people who are not vaccinated against common illnesses, including influenza and pneumococcal pneumonia. The public is largely unaware that deaths from infections like SARS, H1N1, Ebola, malaria, for example, are all due to sepsis.

### The growing burden of sepsis

The risk of sepsis increases dramatically with age. With our ageing population, the number of people suffering sepsis will increase markedly over the coming decades posing an increasing burden on the health system. In Australia, estimated cost of treating acute episodes of sepsis in Australia is greater than \$600M. Additional costs to the health system are incurred by sepsis survivors who are at increased risk of death and greater users of healthcare services for many years further.

### It's a fact

- Sepsis kills up to 5.3 million people each year globally
- In Australia, sepsis kills more than prostate and breast cancer
- Sepsis takes the lives of almost one in three people that contract it.
- Around 80% of cases of sepsis begin in the community, not in hospital
- Sepsis is one of the most common, preventable deadly diseases in the world
- Sepsis strikes fast and is always the result of an infection
- Even healthy adults and children can develop sepsis from an infection.

### Greater community awareness

In Australia, new research\* shows the majority of Australians do not know what sepsis is or its symptoms:

- Only 40% had heard of sepsis compared with 73% who had heard of emphysema, 75% cystic fibrosis and 85% for breast cancer.
- Awareness of the symptoms and signs of sepsis was very low. 14% of Australians are aware they include fever/chills/sweating, 3% rapid heart rate, 2% rapid breathing, 1% confusion/delirium and 1% organ failure.
- When asked about the causes of sepsis, 25% mentioned infection or bacterial infection, 2% bacteria, 1% contamination of a wound, 1% germs/toxins and 1% an immune response.
- Just 4% of were aware that the proportion of people diagnosed with sepsis who will die from it is around 1 in 3, while 6% think the proportion is higher, 33% lower and 58% say they don't know.

\*A galaxy survey of a representative sample of 1000 Australians commissioned in August 2016 by The George Institute for Global Health and the Australian Sepsis Network in Australia.

# Our recommendations

*It is time for sepsis to be put at the top of the health agenda around the world. The Global Sepsis Alliance is calling on every country to establish a national action plan by 2020. The George Institute and the Australian Sepsis Network endorse this with a call for action nationally to raise public and health professional awareness of sepsis and its symptoms, to prevent unnecessary death from sepsis, and to provide greater support for sepsis survivors.*

**1) Document sepsis in the Australian burden of disease statistics to gain a true picture of how many people are affected. (Alongside other common killers such as cancer and cardiovascular disease.)**

Despite its prevalence globally, sepsis remains a Cinderella condition with public awareness low or non-existent. It does not feature in death or burden of disease statistics either in Australia or internationally. Such robust data is critical for health planning for already stretched health systems around the world. It will help improve awareness of sepsis among policy makers and funding agencies to establish targeted programs to reduce this burden; and to assess the safety and efficacy of new treatments and population programs. Better data on sepsis in authoritative data sets, like the Australian Burden of Disease and Global Burden of Disease, is an urgent public health priority to help raise awareness of this condition and its deadly impact. In addition, facilitating the development and management of a national registry for sepsis would also assist in gathering critical clinical evidence.

**2) Ensure a uniform and excellent standard of care offered to all patients with sepsis through development and dissemination of clinical practice standards in Australia. In particular:**

- Establish a National Safety and Quality Health Service standard for sepsis to ensure safe and high quality care with minimum performance expectations, processes and structures for all health services (e.g. hospital, aged-care service).
- Establish a National Clinical Care Standard for sepsis to ensure patients have access to appropriate care and health professionals and health services provide care in line with the best evidence for sepsis.

**3) Improve the management of sepsis by rolling out across all hospitals early intervention programs such as the NSW Clinical Excellence Commission Sepsis Kills program for hospital emergency departments.**

Every hour delay in administering antibiotics increases the risk of death by eight percent. Improving awareness and reducing time to treatment in the community and throughout all departments in all hospitals across Australia will substantially reduce the number of people dying\*\*.

\*\* From NSW CEC "Sepsis Kills" Program where reduced time to antibiotic administration in the emergency department has been accompanied by reduced mortality

**4) Establish support group for survivors and family and co-ordinated post sepsis care in the community.**

Post-sepsis syndrome describes physical, cognitive and mental problems that affect up to 50% of people who survive sepsis. People who have suffered more severe sepsis and especially those treated in an intensive care unit are at greatest risk of suffering post-sepsis syndrome. Older people who survive severe sepsis are also at greater risk for long-term cognitive impairment and physical problems than people of the same age who were treated for other illnesses. Currently these longer term effects are poorly recognised and there are no coordinated medical or support services available to sepsis survivors or their carers.

**#sepsiskills**  
**Only 4%**  
of people  
are aware  
that the  
death rate is **1/3**

#sepsiskills  
**Only 25%**  
of people  
are aware of its  
**causes**

**“We see people arrive at hospital who are severely ill but thought they just had a bout of the flu. Early treatment saves lives but in many cases it can be too late to save them...”**

Professor Simon Finfer.  
The George Institute for Global Health  
Chair of the Australian Sepsis Network

#sepsiskills  
**Only 14%**  
of people  
are aware of its  
**symptoms**

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