

Impact of asthma and impact reduction strategies in australia



**ASSIGN
BUSTER**

Asthma

Introduction:

Asthma is an inflammatory disease of the lung. Asthma causes are still unknown, but researchers have labelled asthma as genetic (hereditary) and can be caused by environmental factors (Asthmaaustralia. org. au, 2019). The swelling process can happen throughout the whole airway from the nose to the lung. As the airway becomes inflamed, it becomes tighter, therefore allowing less air to pass through to the lung tissue. This can cause the asthma suffers to wheeze, cough and chest tightness, therefore results in struggling to breathe (Asthmaaustralia. org. au, 2019). People who have asthma have very sensitive airways, which can lead to the airways in the lungs to react and the patient could have an asthma attack (also known as a 'flare up') (Asthmaaustralia. org. au, 2019). These symptoms can provoke an asthma attack. When experiencing an asthma attack, the muscles in and around the airway found in the lungs start to tighten up and the symptoms begin to worsen. According to (Asthmaaustralia. org. au, 2019) "Asthma cannot be cured, but it can be controlled using the right medication provided from a doctor." Since 11% of Australian has the inflammatory disease known as asthma (2.5 million people), this case study will examine the problems of asthma in Australia and effectively recommend how to reduce its impact on Australia's population.

Background:

Asthma is a serious problem in Australia, in fact it's the most common chronic disease in children (WHO Asthma, 2019). The most recent data <https://assignbuster.com/impact-of-asthma-and-impact-reduction-strategies-in-australia/>

(Asthma snapshot, 2019) suggests that 1 in 9 people in Australia have reported having asthma in 2015, with 1 in 5 people over the age of 15 having an action plan to control their asthma. There is an awareness week about asthma called 'Asthma week'. Asthma week is held from the first to the seventh of September spreading awareness of the dangers to help people control the condition (Asthma Week, 2018). The week also discusses hospitalisation as "South Australian children have the highest hospitalisation rate in Australia with a total of 361 children per 100,000 population admitted to hospital in SA, which is much higher than the Australian average (309)" (Asthma in SA, 2019).

Asthma reportedly is valued at \$1.2 billion a year in healthcare costs which can lead to up to \$28 billion a year in total (\$11,740 per person) (Asthma statistics, 2019).

Asthma in Australia has been a detrimental health issue over the last 35 years, there has also been six large reoccurring thunderstorm asthma events, which have happened in November (this coincide with the peak grass pollen season) (Thunderstorm asthma, 2017). Thunderstorm asthma occurs when there are high amounts of pollen in the air (Spring/Summer), the main problem with thunderstorm asthma, is that it can affect anyone (even if you haven't experienced asthma like symptoms in the past). During the thunderstorm outbreak in Melbourne (2016), there were cases of 9-10 people who died and more than 8,500 people in hospitals and medical centres who needed desperate help (Thunderstorm asthma victim, 2019).

Asthma severity can vary from mild to irregular intervals, which can cause problems for the individual. These problems can range from minimal to persistent wheezing and shortness of breath. The disease can have a severe impact on the way people view their lifestyle (people have said the asthma has caused an impact on their quality of life). This disease can also be life threatening for those who depend on medication (Thunderstorm asthma, 2017). When the thunderstorm occurred, it could take just 15 to 30 minutes to send someone in need from wheezing to respiratory failure (Davey, 2019). Mick Stephenson who is an emergency operation general manager for the Victorian ambulance department stated, " In the 15 minutes from 7: 00pm when we would expect about 30 triple-0 calls for ambulance there were 200 calls — that's a call every 4. 5 seconds" (Thunderstorm asthma emergency, 2019) Mr Stephenson said that this event was extraordinary and unpredictable. According to the (Asthma snapshot, 2019) Hospitalisations can increase during the later stages of winter and heavily increase during the months in spring and summer. Therefore, there needs to be an action where people who struggle with hay fever need to complete asthma tests from a doctor. This allows for an action plan to be in place, so people who have a high risk of having an asthma attack in these events are prepared.

According to (Asthmaustralia. org. au, 2019) thunderstorm asthma is so deadly due to the grass pollen grains that get swept up into the clouds as the thunderstorm is forming. As moisture is absorbed into the clouds, a substantial quantity of small particles of allergen are set free from the clouds (a pollen grain is able to break up into 700 smaller particles). These allergen particles are released down by the strong winds of the storm to '

ground level', which can be breathed deeply into the lung (as these particles are so small), causing asthma triggers (Thunderstorm asthma, 2017). In some people who have allergy issues, this will cause the lungs to become inflamed/aggravated. Irritation can cause swelling, which leads to the small airways in the lung narrowing and extra mucus builds up. This makes it difficult to breathe and can cause the person with the condition to have triggers such as wheezing, chest tightness and coughing (Thunderstorm asthma, 2017). These asthma symptoms may become severe very quickly, this can be dangerous so there needs to be awareness about this epidemic.

Detriments (Social, Behavioural and Biomedical):

Social:

The social determinants of health can be defined as " the conditions in which people are born, grow, live, work and age". (Social Determinants of Health, 2008). The rates of genetically gaining asthma is affected by where the child lives, as well as their parents. Asthma severity can be determined by where you live, for example asthma can vary by remoteness and socioeconomic areas. Men aren't affected by this factor according to (Asthma snapshot, 2019). During 2014-15 (Asthma snapshot, 2019) discovered the frequency of asthma was significantly higher for women in remote regions (15%) than urban areas (11%). The frequency of the inflammatory disease for Indigenous Australian's were almost double compared to the rest of Australia (Asthma snapshot, 2019). A study was conducted in 2012-13 where (Asthma snapshot, 2019) found that, 18% of Indigenous Australian's suffered with the

inflammatory disease, also women had a rate of 20% which is differentiated by the males of 15%.

According to (Asthma snapshot, 2019) people who suffered with asthma stated that they viewed their lifestyle as poor. Asthma affects a person's wellbeing and can impact their mental health; this can be due to their asthma being controlled poorly. (Asthma snapshot, 2019) discovered that in 2014-15 people with the disease were prone to report their health as poor or fair, rather than excellent. Asthma causes a 'poorer quality of life' if not controlled well due to needing a medication to relieve themselves struggling to breathe. In 2012, asthma was not controlled well by adolescents in Australia; in fact, 2,868 teenagers controlled their condition poorly. It is stated that more than 50% of the teenagers were prescribed to use some sort of reliever (Asthma snapshot, 2019).

Behavioural:

The main behavioural risk for obtaining the condition of asthma leads to current or past lifestyle choices. These risk factors can increase the development of the chance of getting the condition or develop more health problems later on in their lifetime. The risk of strengthening the rate of getting asthma can be due to smoking. The (Risk factors Asthma, 2019) discovered that the victims of this disease were found to have smoked in their past life, 35.8% of ex-smokers had contracted asthma in comparison to 30.8% who had never smoked (these results were gained from people who were 18 and above). (Risk factors Asthma, 2019) also found that "parental smoking during pregnancy or infancy is linked to asthma symptoms in children, and

smoking by a parent or child/adolescent is linked to asthma symptoms in adolescence”.

Biomedical:

Additional risks for asthma can include inactivity and weight. The National Health Survey (NHS), found that in 2014-15 people with asthma tend to have limited amounts of exercise and/or overweight, compared to people without the condition (Risk factors Asthma, 2019). Inactivity is also an important factor with health outcomes. Asthma links with obesity, people with asthma are 35. 6% more likely to become obese (Risk factors associated with asthma – Australian Institute of Health and Welfare, 2019). Studies have found that exercise can decrease chronic respiratory diseases (Risk factors Asthma, 2019). The NHS found in 2014-15, 61. 7% people who reported being physical inactive compared to 53. 6% without. It was found that 38. 3% of those adults were sufficiently active (Risk factors Asthma, 2019).

Goal:

Due to the high rate of Australians aged over 16 years who do not follow an asthma action plan to control their condition, it is vital for more awareness to be spread to reduce this rate. The recommended goal for an asthma program should be to increase the knowledge around thunderstorm asthma and to decrease the percentage of people who do not follow a management plan. Asthma is the largest chronic disease taking up to 10. 8% of the population who have this disease. This goal would help people with high allergy issues to be aware of the dangers in the spring to summer season when there is a risk of thunderstorm asthma. The goal would also be <https://assignbuster.com/impact-of-asthma-and-impact-reduction-strategies-in-australia/>

extremely effective as this will help people gain an understanding of how dangerous asthma can be. This goal will link with the ideas of asthma week, this is helpful but not discussed enough. If asthma was talked about in schools (due to asthma being common in children and adolescences) children would be more aware and put an action in place for an extended interval of time, to avoid the dangers of asthma.

Conclusion:

Asthma is a major problem in Australia and especially South Australia, due to its extremely high hospitalisation rate in the state. Asthma can be prevented if the child or adult follows their action management plan to keep their triggers under control. It is evident that humankind who reside in rural regions of Australia are more likely to contract the inflammatory disease, due to their exposure of environmental factors. Therefore, asthma management plans should be in place for everyone who has the condition therefore decreasing the high rate of asthma, leading to an improvement in chronic health in Australia.

Bibliography:

- Asthma Week. (2018). Retrieved from <https://www.asthmaaustralia.org.au/sa/about-asthma/resources/asthma-week>
- Asthma snapshot. (2019). Asthma - Australian Institute of Health and Welfare. Retrieved from <https://www.aihw.gov.au/reports/chronic-respiratory-conditions/asthma/contents/asthma>
- Asthma statistics. (2019). Retrieved from <https://www.healthdirect.gov.au/asthma-statistics>

<https://assignbuster.com/impact-of-asthma-and-impact-reduction-strategies-in-australia/>

- Asthmaustralia. org. au. (2019). What is asthma? – An Asthma Australia site. Retrieved from <https://www.asthmaustralia.org.au/national/about-asthma/what-is-asthma>
- Commission on Social Determinants of Health. (2008). Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health. Geneva: World Health Organisation
- Davey, M. (2019). Thunderstorm asthma deaths: ambulance dispatch ‘unlikely’ factor – coroner. Retrieved from <https://www.theguardian.com/australia-news/2018/nov/09/thunderstorm-asthma-deaths-ambulance-dispatch-time-unlikely-factor-coroner>
- Evidence for chronic disease risk factors. (2019). Behavioural and biomedical risk factors – Australian Institute of Health and Welfare. Retrieved from <https://www.aihw.gov.au/reports/chronic-disease/evidence-for-chronic-disease-risk-factors/contents/behavioural-and-biomedical-risk-factors>
- Risk factors associated with asthma. (2019). Australian Institute of Health and Welfare. Retrieved from <https://www.aihw.gov.au/reports/asthma-other-chronic-respiratory-conditions/asthma-associated-comorbidities-and-risk-factors/contents/risk-factors-associated-with-asthma>
- State of Asthma in SA Report. (2019). Retrieved from <https://www.asthmaustralia.org.au/news/national/state-of-asthma-in-sa-report>
- Thunderstorm asthma victims had 15 minutes from symptoms to cardiac arrest, expert tells inquest. (2019). Retrieved from <https://www.>

[abc. net. au/news/2018-06-25/thunderstorm-asthma-inquest-victims-cardiac-arrest/9907120](https://www.abc.net.au/news/2018-06-25/thunderstorm-asthma-inquest-victims-cardiac-arrest/9907120)

- Thunderstorm asthma. (2017). Retrieved from <https://www.asthmaaustralia.org.au/sa/about-asthma/resources/onair/2017/feb/thunderstorm-asthma>
- Two die in ‘thunderstorm asthma’ emergency in Melbourne. (2019). Retrieved from <https://www.abc.net.au/news/2016-11-22/two-die-in-thunderstorm-asthma-emergency-in-melbourne/8044558>
- WHO | Asthma. (2019). Retrieved from <https://www.who.int/respiratory/asthma/en/>
- WHO | Management of asthma. (2019). Retrieved from <https://www.who.int/respiratory/asthma/burden/en/>