

A large, dense pile of discarded prosthetic limbs and orthopedic equipment, including numerous截肢假肢 (amputee prostheses) and orthopedic casts, all in shades of blue.

4400

REASONS TO END AMPUTATIONS

What is the burden of diabetes in Australia?



1.7 million

Australians with diabetes

280

Australians develop diabetes every day

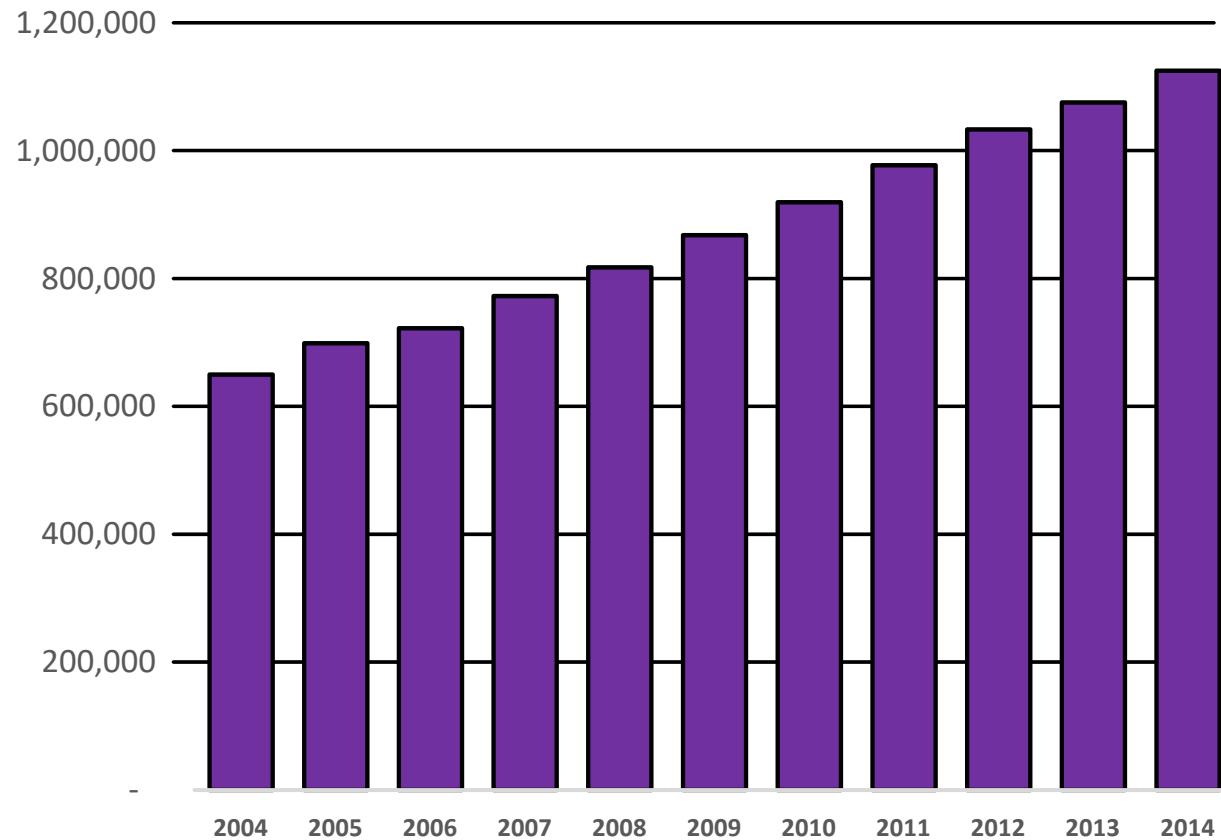
2 million

Australians are at high risk of developing type 2 diabetes (have prediabetes)

\$14.6 billion

Annual cost of diabetes to the Australian community and economy

Total NDSS Registrants with Diabetes

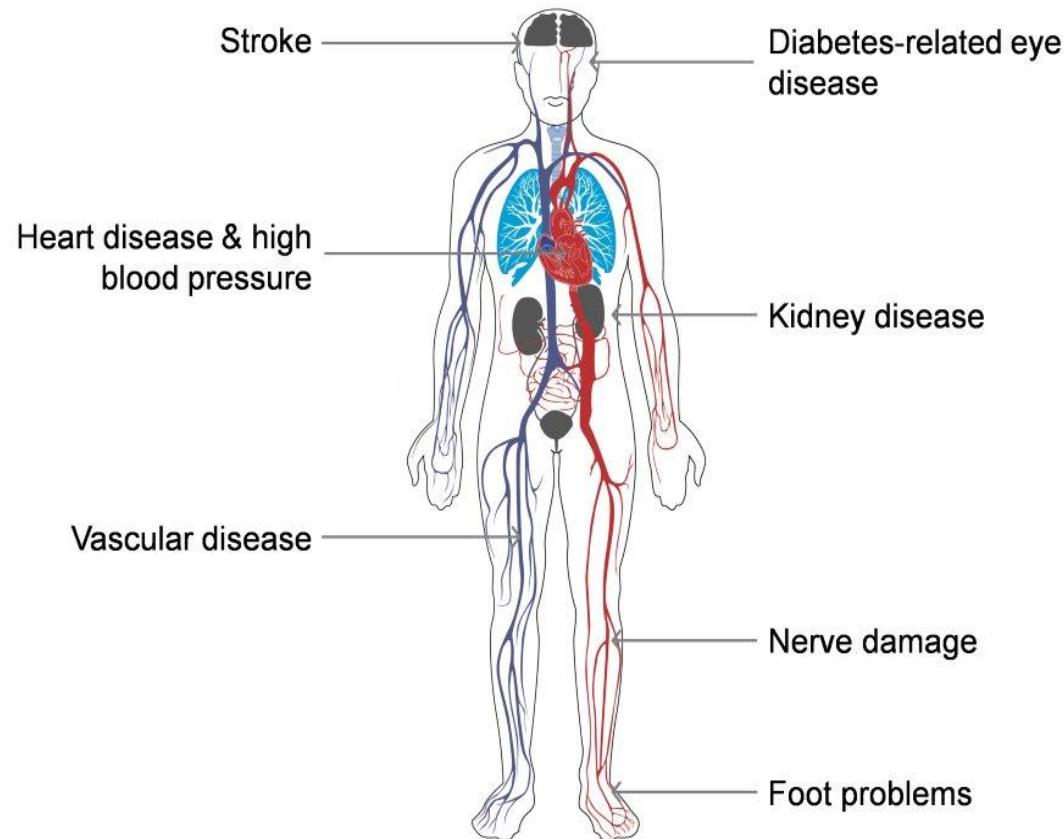


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| Diabetes Type | Number | % | Registered in Past Year |
|---------------|-----------|------|-------------------------|
| Type 1 | 118,812 | 10% | 3,145 |
| Type 2 | 1,075,677 | 86% | 65,143 |
| Gestational* | 37,493 | 3% | 37,493 |
| Other | 7,569 | < 1% | 972 |
| Total | 1,239,551 | 100% | 106,753 |

Complications of Diabetes

Complications of diabetes





ESTIMATED 30%
HOSPITAL ADMISSIONS
DIABETES RELATED

840,000 DIABETES RELATED HOSPITAL ADMISSIONS



320,000
HAD DIABETES WITH
CARDIOVASCULAR
AND/OR KIDNEY DISEASE



4,400
DIABETES RELATED
AMPUTATIONS



3,500
PEOPLE WITH
DIABETES ON
DIALYSIS

Impact of diabetes on foot health

- More than 4,400 amputations every year in Australia as a result of diabetes.¹
- Second highest rate in the developed world.²
- Recent data suggests rates of diabetes-related amputations increased by over 30% between 1998 and 2011.³

1. Australian Commission on Safety and Quality in Health Care, (2016). Australian Atlas of Healthcare Variation. [online] Australian Government. Available at: <http://www.safetyandquality.gov.au/atlas/> [Accessed 29 Jun. 2016].

2. Bureau of Health Information: Healthcare in focus: how NSW compares internationally. Sydney: NSW Government; 2008.

3. Lazzarini, P., Gurr, J., Rogers, J., Schox, A. and Bergin, S. (2012). Diabetes foot disease: the Cinderella of Australian diabetes management?. Journal of Foot and Ankle Research, 5(1), p.24



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Every year there are 10,000 hospital admissions in Australia for diabetes-related foot ulcers in Australia – many of these end with people having a limb, or part of a limb, amputated.⁴

People with diabetes hospitalised for lower limb amputation have longer stays in hospital than other diabetes-related conditions. The average length of stay is around 26 days.⁵

4. Davis, W., Norman, P., Bruce, D. and Davis, T. (2006). Predictors, consequences and costs of diabetes-related lower extremity amputation complicating type 2 diabetes: The Fremantle Diabetes Study. *Diabetologia*, 49(11), pp.2634-2641.

5. Diabetes. (2008). Canberra: Australian Government, Australian Institute of Health and Welfare.

The average cost of a diabetes-related limb amputation is around \$23,555, and an additional annual spend of \$6,065 every year afterwards. Over five years a diabetes related amputation costs the health system almost \$50,000 and that doesn't include social costs.⁶

It is estimated that diabetic foot disease costs Australia around \$875 million every year.⁷

⁶. Lazzarini, P., Gurr, J., Rogers, J., Schox, A. and Bergin, S. (2012). Diabetes foot disease: the Cinderella of Australian diabetes management?. *Journal of Foot and Ankle Research*, 5(1), p.24.

⁷. Based on research from the Australian Diabetic Foot Network.

Impact of diabetes on foot health



People with diabetic foot ulcers have morbidity and mortality rates on par with aggressive forms of cancer.⁸

Around 85% of diabetes related amputations are preventable if wounds are detected early and managed appropriately.⁹

8. Armstrong, D., Kanda, V., Lavery, L., Marston, W., Mills, J. and Boulton, A. (2013). Mind the Gap: Disparity Between Research Funding and Costs of Care for Diabetic Foot Ulcers. *Diabetes Care*, 36(7), pp.1815-1817

9. Bakker, K., Apelqvist, J. and Schaper, N. (2012). Practical guidelines on the management and prevention of the diabetic foot 2011. *Diabetes/Metabolism Research and Reviews*, 28, pp.225-231.

Impact on Aboriginal and Torre Strait Islander Australians



Aboriginal and Torre Strait Islander Australians with diabetes are 38 times more likely to undergo a major leg amputation compared to non-Indigenous Australians with diabetes. They are also 27 times more likely to undergo a minor leg amputation.¹⁰

Nearly all (98%) amputations in Aboriginal and Torres Strait Islander people are related to diabetes.¹¹

^{10.} Norman PE, Schoen DE, Gurr JM, Kolybaba ML. High rates of amputation among Indigenous people in Western Australia [letter]. Med J Aust 2010; 192: 421.

^{11.} Ibid.

Rates of hospital admissions for diabetes-related amputations (per 100,000 people)¹²:

- Northern Territory (Outback) – 91 admissions
 - Queensland (Outback) – 73 admissions
 - Darwin – 48 admissions
-
- North Sydney and Hornsby – 8 admissions
 - Brisbane East – 11 admissions
 - Melbourne Inner – 14 admissions

12. Australian Commission on Safety and Quality in Health Care, (2016). Australian Atlas of Healthcare Variation. [online] Australian Government. Available at: <http://www.safetyandquality.gov.au/atlas/> [Accessed 29 Jun. 2016].

- Consider complication prevention programs in PHNs and across the health system more generally
- PHNs to work directly with GP's, other health professionals, and hospitals to better coordinate care.
- Develop national clinical care standards and guidelines
- Timely access to new treatments and devices

Australia needs a Diabetes Amputation Prevention Initiative to end the tragedy of diabetes-related amputations within a generation

Key Objectives

- Every PHN has a Diabetes Amputation Prevention plan in place for their community
- The plans ensure that every person with diabetes has a care plan and receives structured self-management education and appropriate supports for regular foot checks
- Plans to risk assess people with diabetes for foot problems and ensure early intervention to prevent problems from escalating to a point where an amputation is necessary.
- Integration of expert Diabetes High Risk Foot Services for every PHN

- “Patient” activation using social media, contemporary messaging
- Use the “register” of people with diabetes (the NDSS database) to enable targeted alerts, reminders, education, linkages
- Regular checks; early intervention, early referral
- Link primary care professionals to a network of diabetes centres and high risk foot services across Australia
- Integrate vascular surgical services and save limbs wherever possible



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