

Indigenous health and the ANDS

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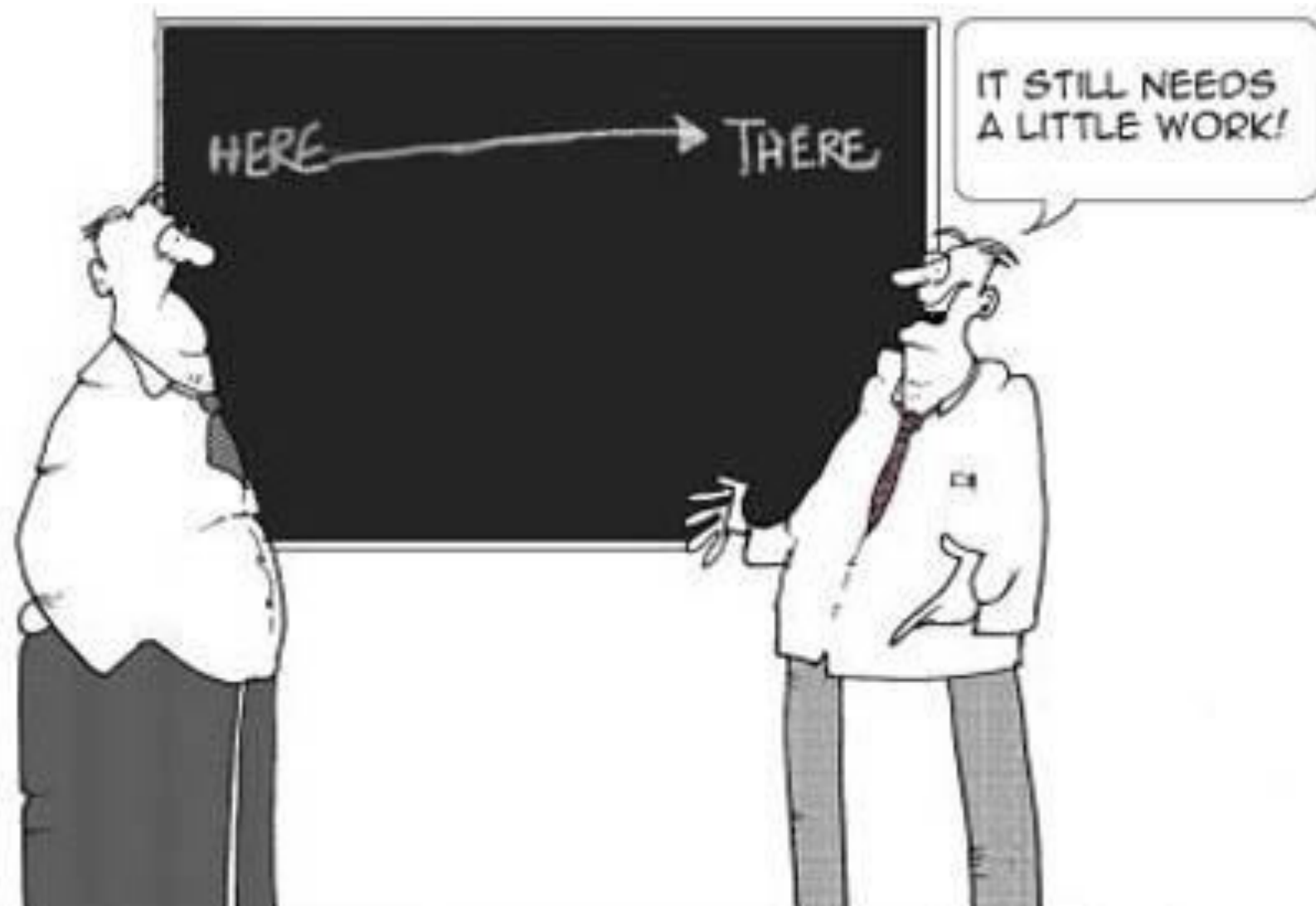
Fremantle Hospital





Conflicts of interest

None relevant to this talk



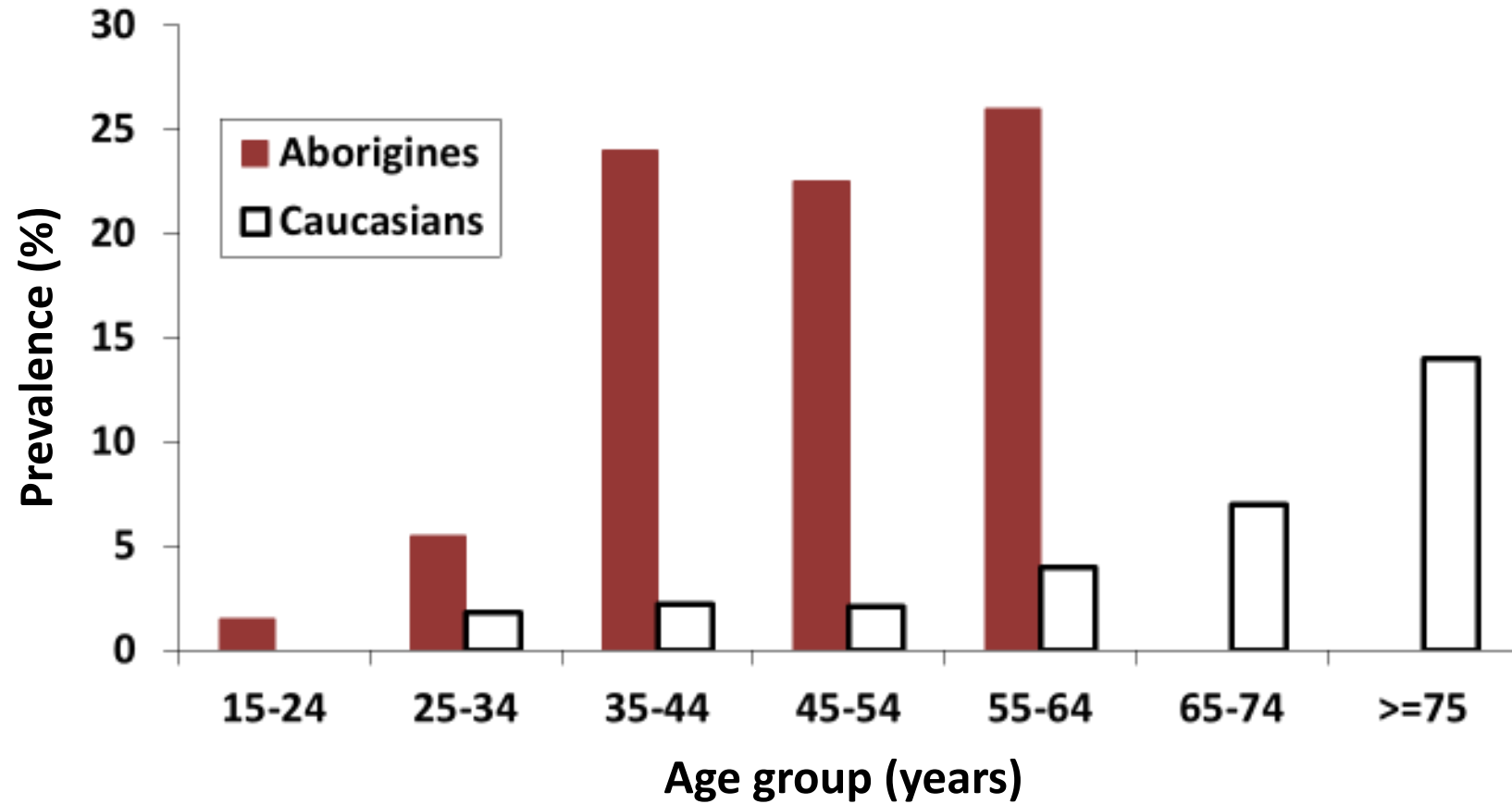
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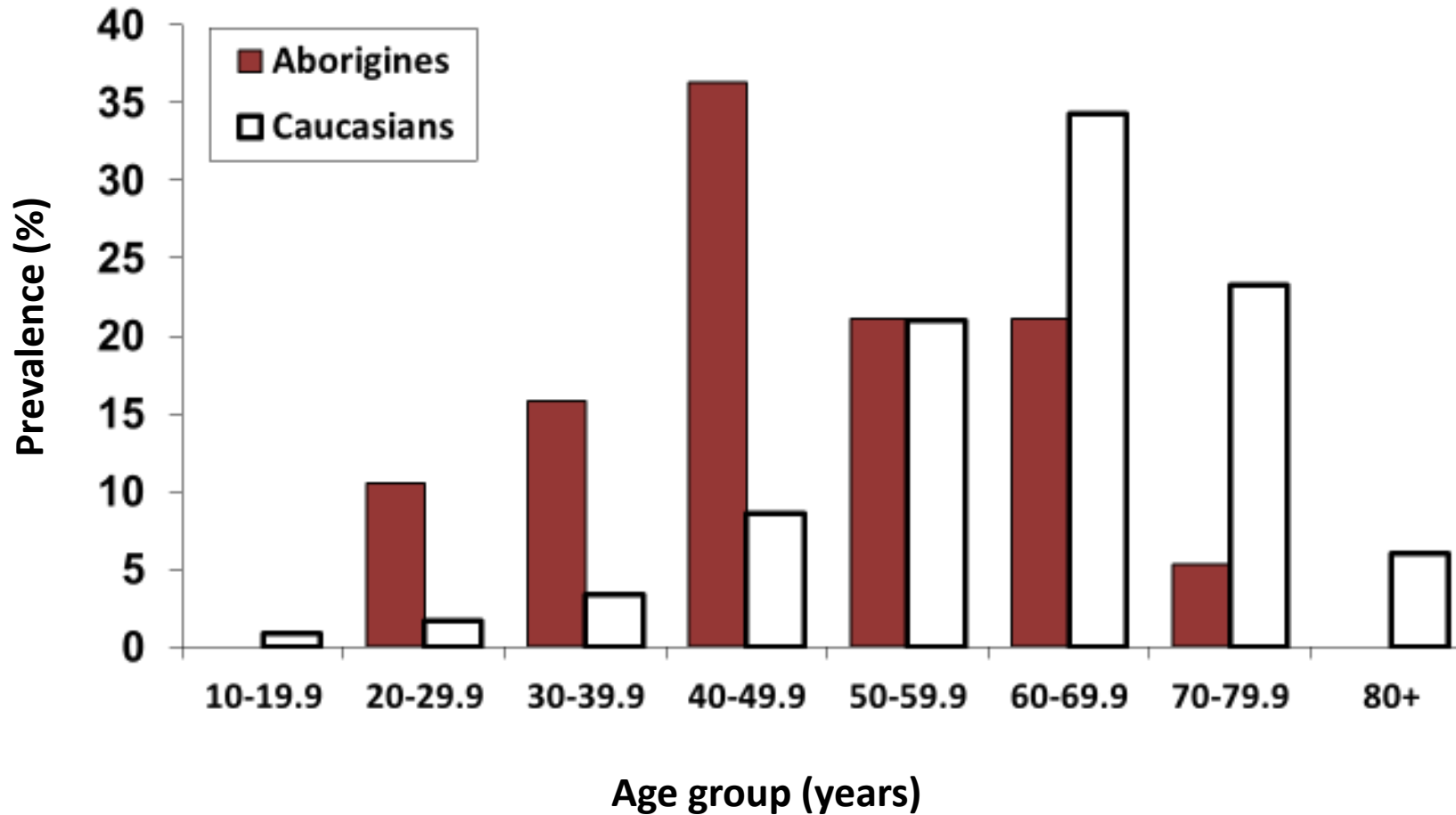
IT STILL NEEDS
A LITTLE WORK!

Diabetes prevalence by age

O'Dea, K. J Intern Med 1992;232:103-117



Fremantle Diabetes Study Phase 1: Diabetes prevalence by age



Westernised Aboriginals taken back to a traditional lifestyle

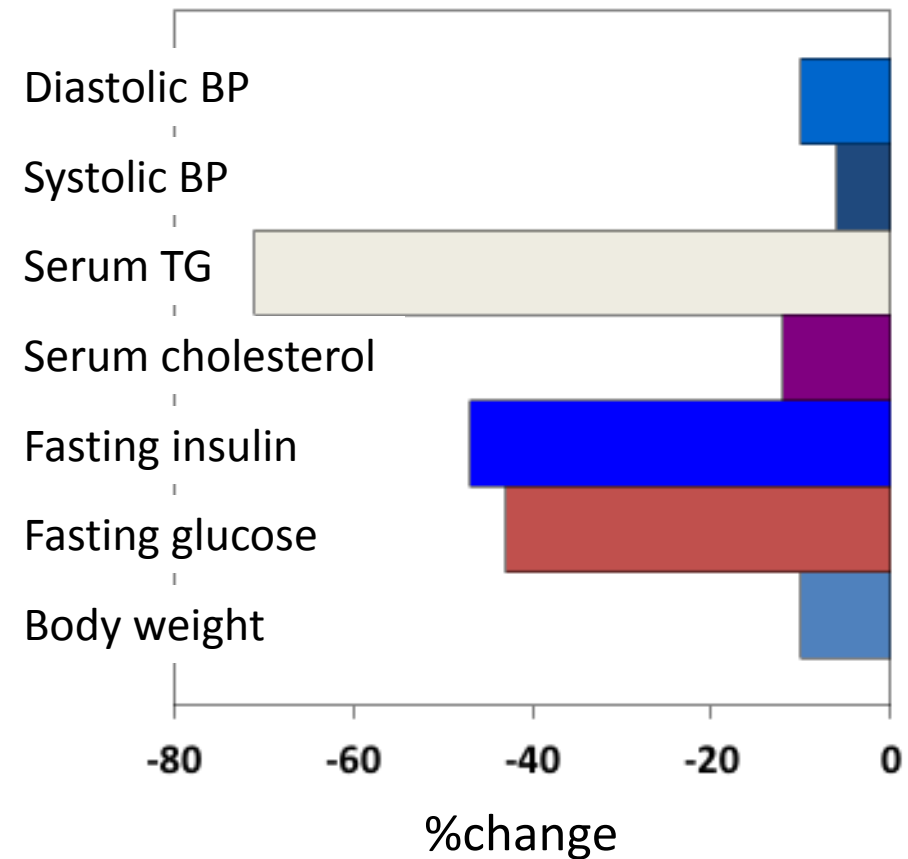
O'Dea K. *Diabetes* 1984;33:596-603

- Study performed with co-operation of the Mowanjum Community, Kimberley
- 10 adults with type 2 diabetes taken to coastal then inland environment over 7 weeks
- Serial measurements made through study period

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Characteristics and outcome of type 2 diabetes in urban Aboriginal people: the Fremantle Diabetes Study

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Continuing Disparities in Cardiovascular Risk Factors and Complications Between Aboriginal and Anglo-Celt Australians With Type 2 Diabetes

The Fremantle Diabetes Study

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that diabetes is common among Aboriginal people in an urban Australian community and that it presents at a relatively young age (10). Aboriginal patients with diabetes in FDS phase I had worse glycemic control,

Had the situation improved in the 15 years between 1993-1996 and 2008-2011?

Since FDS Phase 1 was started, health initiatives such as government-subsidized diabetes-specific care plans and improved delivery of primary care services to diabetic patients have been designed to improve outcomes and reduce racial/ethnic inequalities

FDS Phase 1 vs FDS Phase 2

	Phase 1		Phase 2	
	Aboriginal (n=19)	Anglo-Celt (n=796)	Aboriginal (n=106)	Anglo-Celt (n=796)
Age (years)	51.2±11.4	64.9±11.4	54.3±11.9	67.2±10.6
Age at diagnosis (years)	45.6±13.1	59.2±11.6	43.5±14.4	57.7±11.2
HbA_{1c} (%)	9.6 [7.8-10.7]	7.1 [6.2-8.4]	8.4 [6.6-10.6]	6.7 [6.2-7.5]
Insulin ± oral hypoglycaemics	16.7	10.3	22.9	20.0

FDS Phase 1 vs FDS Phase 2

	Phase 1		Phase 2	
	Aboriginal	Anglo-Celt	Aboriginal	Anglo-Celt
<p>Aboriginal patients were still younger at diagnosis, had worse glycaemic control than Anglo-Celts, and were not treated as intensively including with insulin</p>				
HbA _{1c} (%)	9.6 [7.8-10.7]	7.1 [6.2-8.4]	8.4 [6.6-10.6]	6.7 [6.2-7.5]
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Insulin ± oral hypoglycaemics	16.7	10.3	22.9	20.0
Systolic BP (mmHg)	138±24	152±23	141±28	146±22
Current smoking (%)	42.1	15.4	44.0	8.2

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Aboriginal patients were as likely to be hypertensive as Anglo-Celts, but were more than five times more likely to be current smokers

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Current smoking (%)	42.1	15.4	44.0	8.2
Urinary ACR (mg/mmol)	12.7 (1.7-95)	5.0 (1.5-17)	4.0 (0.1-289)	2.0 (0.1-34)
Any retinopathy (%)	27.8	13.5	33.0	19.2

FDS Phase 1 vs FDS Phase 2

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Aboriginal patients were more likely to have albuminuria than Anglo-Celts, and there was a trend to a greater prevalence of retinopathy in Aboriginal patients

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Current smoking (%)	42.1	15.4	44.0	8.2
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Any retinopathy (%)	27.8	13.5	33.0	19.2

FDS Phase 1 vs FDS Phase 2

Phase 1 (mean ≈19 years f-u)	Aboriginal (n=18)	Anglo-Celt (n=819)	P-value
Deceased by 30 June 2005 (%)	44.4	36.0	0.47
From cardiac causes (%)	27.8	14.4	0.16
Age at death (years)	59.8±8.7	77.7±9.3	<0.001

Phase 2 (mean 4.3 years f-u)	Aboriginal (n=18)	Anglo-Celt (n=819)	P-value
Deceased by 31 March 2014 (%)	13.3	10.4	0.40
From cardiac causes (%)	28.8	8.0	0.049
Age at death (years)	59.1±14.0	78.7±9.6	<0.001

Mortality in FDS Phase 2

- After adjusting for confounders, Aboriginals were four times more likely to have died than ACs (HR (95% CI: 4.70 (2.23-9.89), $P < 0.001$)
- Seven (58.3%) of the 12 Aboriginal deaths were due to cardiovascular causes vs 28.0% of AC deaths ($P = 0.049$); deaths for 6 (8.0%) AC and one (8.3%) Aboriginal were due to renal disease ($P > 0.99$)
- There was still approaching a two decade difference in longevity in FDS2 vs FDS1



DIABETES
EDUCATION
and
SELF
MANAGEMENT
for
ONGOING and
NEWLY
DIAGNOSED



Adapted DESMOND for indigenous Australians

Element	Existing DESMOND	A+DESMOND
Training	General DESMOND pre-requisite for training in Aboriginal module	Core and Aboriginal module streamlined into one accreditation
Involvement of lay leaders	Accredited educators deliver all aspects of DESMOND	Community members deliver limited aspects of A+DESMOND
System improvement	Focus on training individual educators	Support to implement quality improvement process and peer support

Goal 5: Reduce the impact of diabetes among Aboriginal and Torres Strait Islander peoples

Potential areas for action

Develop and implement community-wide, culturally relevant awareness programmes (including school education programmes) that communicate the seriousness of diabetes and its complications. Education should be provided in a culturally and language appropriate manner, which includes translating materials and services



PRINCIPLES



"SIDE STEP AND CHRONIC DISEASE WITH ONE DEADLY STEP"



[Home](#)[About Diabetes](#)[Living with diabetes](#)[Food & Activity](#)[Research & Advocacy](#)[For Health Professionals](#)[News & Resources](#)[Just been diagnosed?](#)[Managing your diabetes](#)[Medicine](#)[Diabetes and daily life](#)[Preventing complications](#)[Stories & experiences](#)[Aboriginal & Torres Strait Islander people](#)[For young people](#)[For family & carers](#)[Donate Now](#)

There are many ways to donate to Diabetes Australia and help support our cause.

[Donate](#)[Contact your State or Territory organisation](#)

For further information about individual diabetes management, membership or the NDSS – you can contact your state or

[Home](#) > [Living with diabetes](#) > [Aboriginal & Torres Strait Islander people](#)

Aboriginal and Torres Strait Islanders

[Tweet](#) [Email](#)

Aboriginal and Torres Strait Islander people are almost four times more likely than non-Indigenous Australians to have diabetes or pre-diabetes. Improving the lives of people affected by all types of diabetes and those at risk among Aboriginal and Torres Strait Islander communities is a priority for Diabetes Australia.

Watch the short video below for a quick guide to the benefits of the National Diabetes Services Scheme (NDSS).



You can reduce the risk of developing type 2 diabetes by eating a more healthy diet and being physically active which will help maintain a healthy weight to keep your sugar (glucose) levels normal and your body strong.

Goal 5: Reduce the impact of diabetes among Aboriginal and Torres Strait Islander peoples

Potential areas for action

Promote pre-conception, pregnancy and early years programmes that enhance the education and health of Indigenous men and women; detect gestational and previously undiagnosed diabetes and manage it through pregnancy; and coordinate follow-up and postnatal care for mothers and babies

Enhance the pre-conception education and health of Indigenous women, including through targeted efforts to reduce the use of alcohol, tobacco and other drugs and to promote a healthy diet

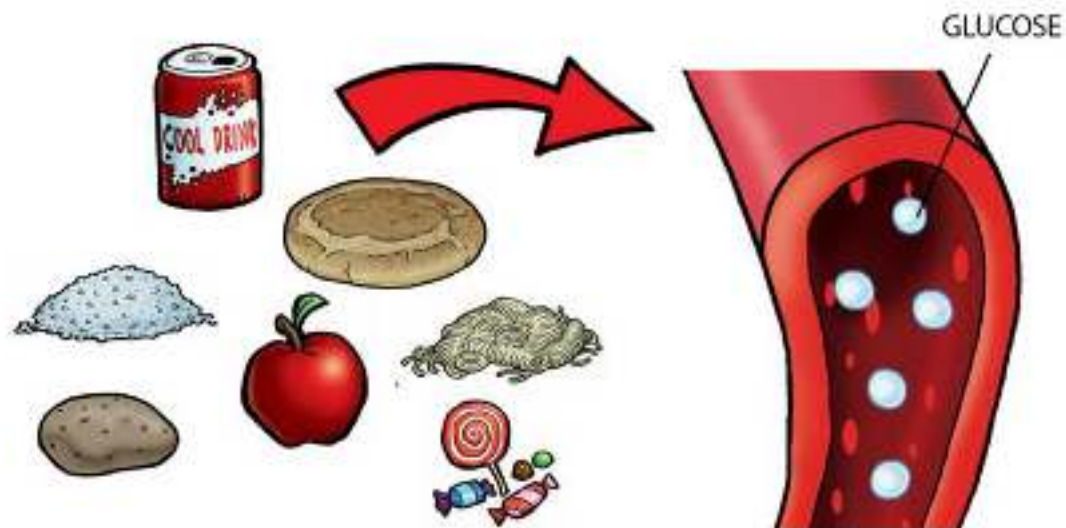
Diabetes In Pregnancy

What is gestational diabetes?

- Gestational diabetes is a type of diabetes that you can get when you are pregnant
- Gestational diabetes is when you have high blood glucose (sugar) levels during pregnancy
- Gestational diabetes is sometimes called GDM (Gestational diabetes mellitus) by health workers

What causes gestational diabetes?

When you eat or drink, your body breaks down carbohydrate foods into glucose (sugar), which then goes into your blood.



Goal 5: Reduce the impact of diabetes among Aboriginal and Torres Strait Islander peoples

Potential areas for action

Develop and implement community-wide interventions to increase the availability, affordability and consumption of fresh foods and reduce the consumption of sugar-sweetened beverages and high-fat, high-sugar, high-salt and highly processed foods

Aboriginal Health Resources

We have adapted many of our information and resources into formats that speak to Aboriginal people.

Below are some of our most popular booklets, which can be printed out and downloaded. We have several more resources for both individuals and professionals housed at [Diabetes WA Aboriginal Health \(external site\)](#).

[Got diabetes? Follow these footsteps \(poster\) \(PDF 926KB\)](#)

[Pregnancy and type 1 or type 2 diabetes \(Pictorial guide\) \(PDF 8.09MB\)](#)

[Gestational diabetes \(Pictorial guide\) \(PDF 9.93MB\)](#)

[Torres Strait Islander Informational Flyer \(PDF 377KB\)](#)

Some of our most popular printed booklets are Diabetes in Pregnancy, Exercise and Diabetes, Managing My Diabetes, Healthy Eating, My Feet and Diabetes. If you would like to receive a printed copy, please [send our Customer Service team an email](#).

If you can't find what you're looking for or you have a question that isn't answered here, call our [Diabetes WA Helpline](#) on 1300 001 880.



Goal 5: Reduce the impact of diabetes among Aboriginal and Torres Strait Islander peoples

Potential areas for action

Promote access to necessary specialist support through strategically located regional networks of care, optimising telehealth services and linked facilities for the treatment of the serious complications of diabetes — in particular, kidney and eye disease



Lions Outback Vision Van



Lions Outback Vision
Saving sight is our vision



www.outbackvision.com.au

Lions Outback Vision
Saving sight is our vision



CHECK TODAY. SEE TOMORROW


**"Don't be shame,
 go and get an eye check"**



**Diabetes can cause blindness.
 Get your eyes checked YEARLY.**

Ask your local clinic about making an appointment today.





CHECK TODAY. SEE TOMORROW


**"I didn't listen. I never realised,
 diabetes can affect your eyes"**



**Diabetes can cause blindness.
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**CHECK TODAY.
 SEE TOMORROW**

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Goal 5: Reduce the impact of diabetes among Aboriginal and Torres Strait Islander peoples

Potential areas for action

Encourage primary health care services to better identify and manage diabetes (including among adolescents and children), incorporate risk calculators and electronic decision support mechanisms and increase opportunities for Aboriginal and Torres Strait Islander patients to better self-manage their diabetes

Diabetes risk assessment tool

1. Your age group
- Under 35 years [0 points]
 - 35-44 years [2 points]
 - 45-54 years [4 points]
 - 55-64 years [6 points]
 - 65 years or over [8 points]

2. Your gender
- Female [0 points]
 - Male [3 points]

- 3a. Are you of Aboriginal, Torres Strait Islander, Pacific Islander or Maori descent?
- No [0 points]
 - Yes [2 points]

4. Have either of your parents, or any of your brothers or sisters been diagnosed with diabetes (type 1 or type 2)?
- No [0 points]
 - Yes [3 points]

5. Have you ever been found to have high blood glucose (sugar) (for example, in a health examination, during an illness, or during pregnancy)?
- No [0 points]
 - Yes [6 points]

6. Are you currently taking medication for high blood pressure?
- No [0 points]
 - Yes [2 points]

7. Do you currently smoke cigarettes or any other tobacco products on a daily basis?
- No [0 points]
 - Yes [2 points]

8. How often do you eat vegetables or fruit?
- Every day [0 points]
 - Not every day [1 point]

9. On average, would you say you do at least 2.5 hours of physical activity per week (for example, 30 minutes a day on 5 or more days a week)?
- Yes [0 points]
 - No [2 points]

*10a. Your waist measurement (in cm) taken below the ribs (usually at the level of the navel, and while standing)

The correct place to measure your waist is halfway between your lowest rib and the top of your hipbone, roughly in line with your navel. Measure directly against your skin, breathe out normally, make sure the tape is snug, without compressing the skin.

Goal 5: Reduce the impact of diabetes among Aboriginal and Torres Strait Islander peoples

Potential areas for action

Consider the adequacy of the diabetes educator workforce working with and within Aboriginal and Torres Strait Islander primary care settings and support the capacity development of the workforce to improve access to essential, high-quality, evidence-based diabetes care

NATIONAL POLICY PRIORITIES 2010



DIABETES IN ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLES

POLICY:

1. Increase the number of Indigenous health workers trained in diabetes management, early detection and prevention and increase the capacity for more training programs.
2. Advance the role and status of Indigenous health workers.
3. Increase the number of allied health visits available under the MBS for Indigenous people.
4. Support Indigenous people to undertake professional training in medicine, nursing and allied health disciplines.
5. Engage Indigenous communities in the development and implementation of culturally appropriate diabetes prevention and management strategies.

Goal 5: Reduce the impact of diabetes among Aboriginal and Torres Strait Islander peoples

Potential areas for action

Provide stimulating early years education and intervention programmes which help address developmental vulnerabilities and address the social and environmental determinants of Aboriginal and Torres Strait Islander peoples' health

Encourage uptake and use of the My Health Record among health care providers in rural and remote locations, with online access to the individual's medical history and prescriptions

My Health Record Statistics

as at 7 October 2018



Australian Government
Australian Digital Health Agency



My Health Record

Consumer Statistics

 **6,194,852 Consumers registered**

Demographic Breakdown



54% are female



46% are male

Age Range	Aged 19 or less	Aged 20–39	Aged 40–64	Aged 65 or higher
% of total registrations	36%	25%	25%	15%

State	ACT	TAS	SA	NT	NSW	VIC	QLD	WA
% of population	28%	25%	23%	25%	26%	20%	32%	21%

Approximately 25% of Australia's population is registered for a My Health Record

Provider Organisation Statistics

 **14,027 Healthcare provider organisations registered**

Organisation Type*	Count
General Practice Organisations	6,690
Public Hospitals and Health Services	829
Private Hospitals and Clinics	180
Pharmacies	3,791
Aged Care Residential Services	189
Pathology and Diagnostic Imaging Services	72
Other categories of healthcare providers including Allied Health	1,879
Organisations with a cancelled registration	397

*Organisation type based on Healthcare Provider Organisation (HPI-O) data, except for Hospital provider data which is based on jurisdictional reported facilities that are connected to the My Health Record system.

My Health Record Usage

 **Clinical Document Uploads** **7,984,887**

Shared Health Summary	2,113,664
Discharge Summary	2,272,422
Event Summary	688,768
Specialist Letter	96,399
eReferral Note	96
Pathology Reports	2,484,135
Diagnostic Imaging Report	329,403

 **Prescription and Dispense Uploads** **25,051,159**

Prescription Documents	18,679,321
Dispense Documents	6,371,838

 **Consumer Documents** **202,123**

Consumer Entered Health Summary	130,563
Consumer Entered Notes	48,673
Advance Care Directive Custodian Report	19,795
Advance Care Planning Document	3,092

 **Medicare Documents** **783,337,593**

Australian Immunisation Register	2,728,063
Australian Organ Donor Register	686,120
Medicare/DVA Benefits Report	460,851,927
Pharmaceutical Benefits Report	319,071,483

Some reflections

- There seems to be a range of programs covering all potential area for action but these are state-based/regional and not well co-ordinated nationally
- There is a difference between publishing information sources and guidelines and ensuring their implementation – this can be challenging
- There is a paucity of objective data relating to indigenous diabetes that might be addressed, in part, by My Health Record



CLOSING THE GAP



FILLING IN THE GAP

Thank you for your attention

