

**Good Medicines Better Health** 

### **About this book**

This book aims to help health professionals start a discussion about high blood pressure (hypertension) with clients and their families.

It can be used when a client:

- is diagnosed with high blood pressure
- is prescribed a new medicine to treat their high blood pressure.

#### Using this book

The book is designed so that information on the:

- left-hand page is for the health professional (Aboriginal Health Worker, nurse, doctor or pharmacist)
- right-hand page is for the client and their families.

ISBN: 978-1-921748-05-9 CON-10

© 2010 National Heart Foundation of Australia, National Prescribing Service Limited, National Aboriginal Community Controlled Health Organisation and Aboriginal Health Council of SA Inc.

Terms of use: This material has been developed for general information and educational purposes only. It does not constitute medical advice.

Please consult your healthcare provider if you have, or suspect you have, a health problem. The information contained in this material has been independently researched and developed by the National Heart Foundation of Australia in consultation with the copyright partners and is based or the available scientific evidence at the time of writing.

The entire contents of this material are subject to copyright protection.

#### What this book contains

**Pages 1 – 5** contain general information about high blood pressure as well as lifestyle advice

Page 6 contains general advice about the medicines that are used to treat high blood pressure

Pages 7 – 11 contain information about each of the common medicine groups used to treat high blood pressure.

You will only need to use the page relevant to the particular medicine a client is taking. For example, if a client is ordered an ACE inhibitor, then use page 7.

#### Resources for clients to take home

- a brochure about hypertension for clients and their families
- an information sheet about each of the different medicine groups used to treat high blood pressure:
  - ACE inhibitors
  - Angiotensin Receptor Blockers
  - Calcium Channel Blockers
  - Beta Blockers
  - Thiazide diuretics

# **Contents page**

Page	
01	What is blood pressure?
02	How do we know if we have high blood pressure?
03	Problems with high blood pressure (hypertension)
04	Who is likely to get high blood pressure?
05	Things I can do about high blood pressure
06	Medicines to lower blood pressure
07	Medicines to lower blood pressure – ACE Inhibitors
80	Medicines to lower blood pressure – Angiotensin Receptor Blockers
09	Medicines to lower blood pressure – Calcium Channel Blockers
10	Medicines to lower blood pressure – Beta Blockers
11	Medicines to lower blood pressure – Thiazide diuretics
12	Finally

# What is blood pressure?

Blood pressure is the pressure, or force, of the blood pushing against the walls of the arteries.

### What is high blood pressure? (hypertension)

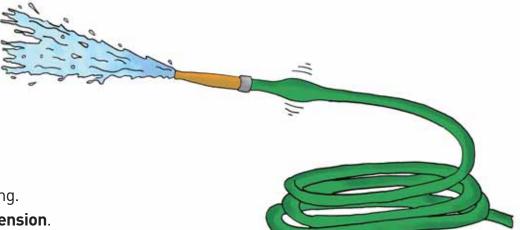
- High blood pressure is when there is more pressure against the walls of the arteries than we need.
- Think of the artery as a garden hose.
  - When the garden hose has a wide opening, not much pressure is needed to push water through the hose.
  - When the garden hose has a narrow opening, or is a bit blocked, greater pressure is needed.
  - If the pressure inside the hose gets too high for too long, it can cause damage.
- If the pressure inside the arteries gets too high for too long, it can cause damage to the body.
- 'High blood pressure' and 'hypertension' mean the same thing.
   Doctors and medical people call high blood pressure hypertension.

Everyone needs blood pressure to push blood around the body but no one needs HIGH blood pressure.



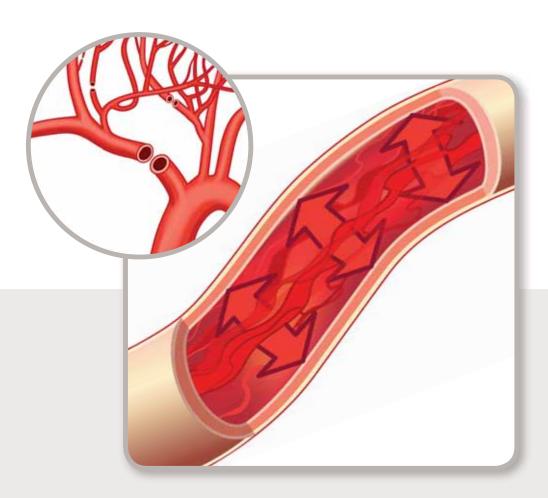
#### **Action Point**

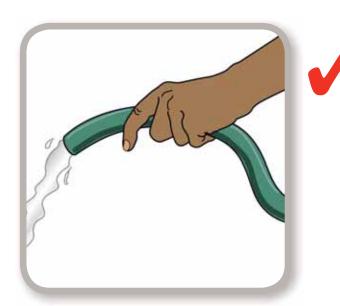
• Remind your clients that all discussions are confidential, so they can talk openly with you

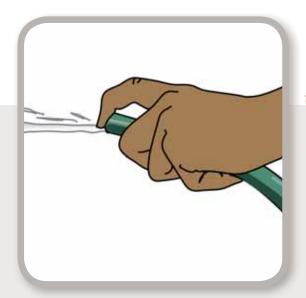


# What is blood pressure?

Blood pressure is the pressure, or force, of the blood pushing against the walls of the arteries.









# How do we know if we have high blood pressure?

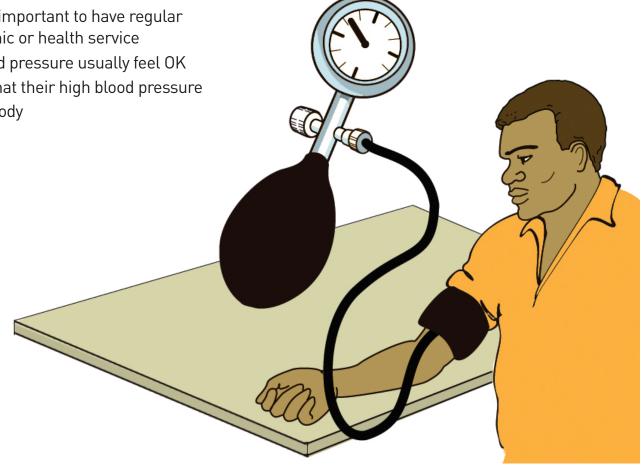
• High blood pressure usually has no symptoms.



#### **Action point**

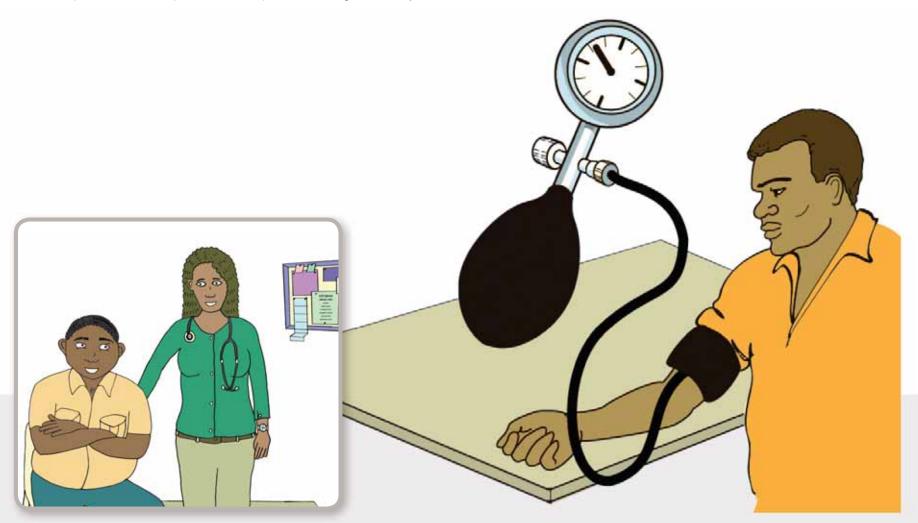
 Remind your clients that it is very important to have regular blood pressure checks at their clinic or health service

 Explain that people with high blood pressure usually feel OK and look OK, on the **outside**, but that their high blood pressure can cause problems **inside** their body



# How do we know if we have high blood pressure?

• You may not FEEL any different if you have high blood pressure



# Problems with high blood pressure (hypertension) Why do we treat high blood pressure?

# High blood pressure can speed up blocking of the arteries which can damage the:

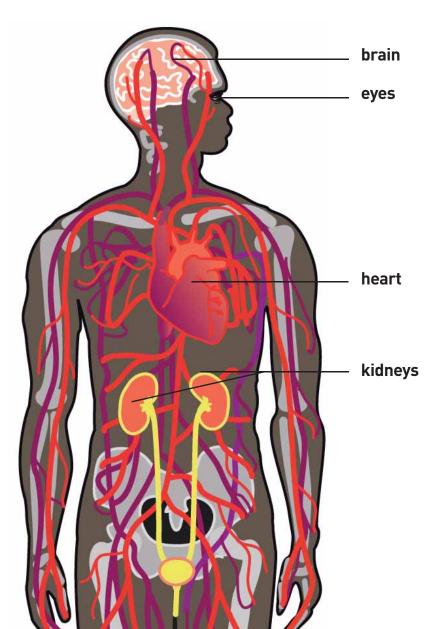
- Heart leading to heart attacks
- Brain leading to stroke
- Kidneys leading to kidney trouble and dialysis
- Eyes leading to eye trouble and blindness



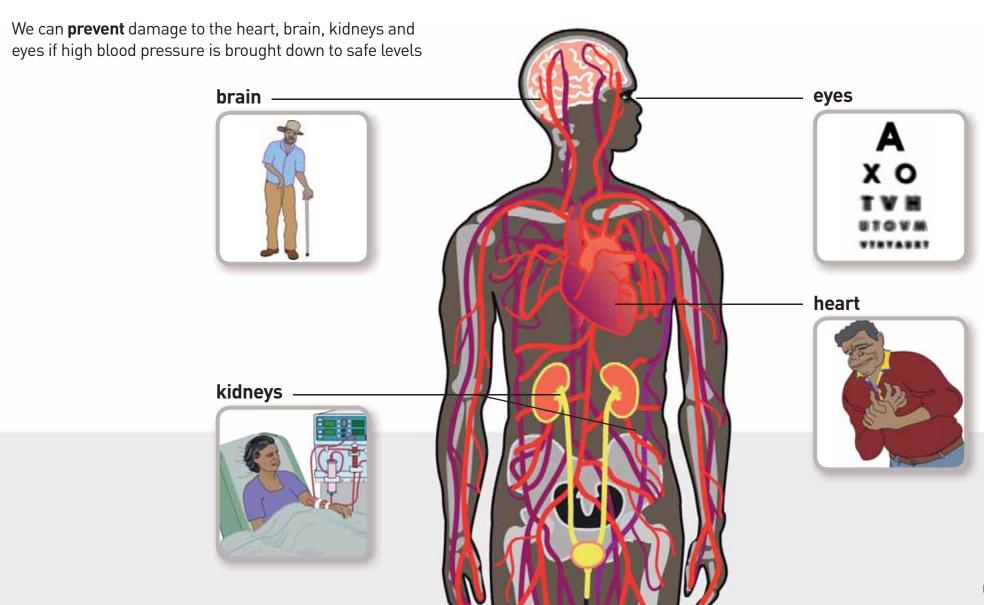
#### **Action point**

- Discuss: how high blood pressure can affect the brain, eyes, heart and kidneys
- Remind your clients: that if high blood pressure is brought down to normal levels we can prevent damage to the heart, brain, kidneys and eyes

**Early treatment** = less damage



# Problems with high blood pressure (hypertension)



# Who is likely to get high blood pressure?

#### Men and women who:

- smoke
- don't get enough physical activity
- eat too much **fat and salt**
- drink too much alcohol
- are overweight

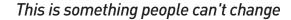
These are things people can choose to change



**Action point** 

• Talk to your client about the habits that are relevant to them

People with a family history of high blood pressure are at increased risk





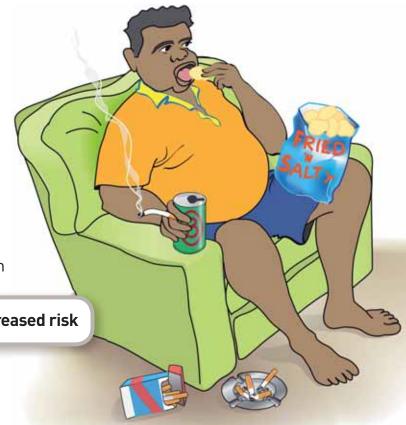
**Action point** 

Encourage your client's family members to have their blood pressure checked

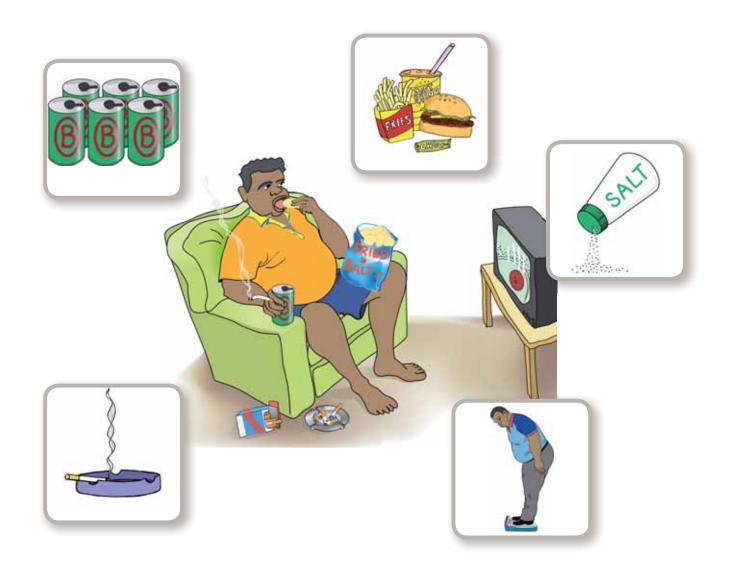


Action point

Ask what your client thinks might be contributing to their high blood pressure



# Who is likely to get high blood pressure?





People with a family history of high blood pressure are at increased risk

# Things I can do about high blood pressure

Some men and women can reduce high blood pressure to within safe limits just by changing their **daily lifestyle**.

Aim to help your clients make <u>small changes</u> that they <u>can achieve</u> and build on their successes.

#### For example:

- ✓ smoking less
  - aim to quit
- ✓ losing weight:
  - even losing 1 kilo can improve someone's heart health
- ✓ doing more physical activity:
  - walking around for at least 30 minutes each day
  - sitting around less
- ✓ changing their diet:
  - eating less fat
  - eating less salt in and on food
  - eating more healthy foods like fruit, vegetables, lean meat and fish
  - drinking more water
  - drinking less 'cool drink' and alcohol
  - eating less take-away food



### Action point

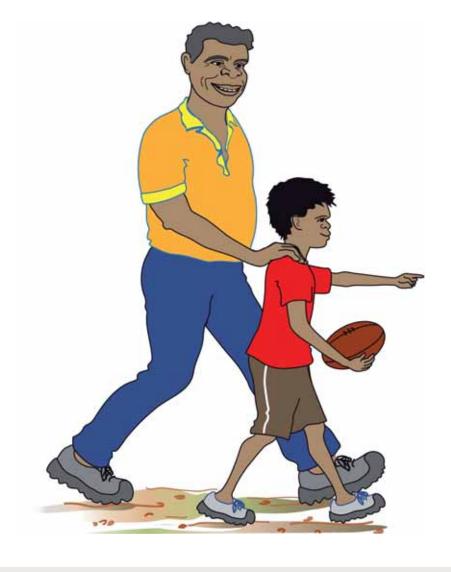
- Ask your clients to choose one daily habit they would like to change
- Help them to choose the habit that will make the most difference to their heart health
- Choose a small change that they can achieve
- Support them to start making that change today!

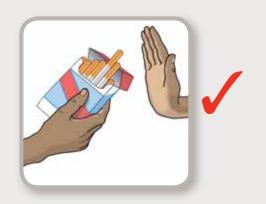
Some people also need to take **medicines** to lower their blood pressure to safe levels

# Things I can do about high blood pressure?

Some people can reduce high blood pressure to within safe limits just by changing their daily lifestyle.

Some people also need to take **medicines** to lower their blood pressure to safe levels













05.

# Medicines to lower blood pressure

Medicines that are used to lower blood pressure are called **antihypertensive** medicines or blood pressure medicines.

Important things to tell your clients about taking blood pressure medicines

### **Daily medicine:**



#### **Action point**

Remind your clients to take their medicine every day.
 Even if they don't feel any different; the medicine is still working.

### Long time:



#### **Action point**

 Advise your clients they will most probably need to take the medicine for the rest of their life

# Some people can't take certain blood pressure medicines

for example, pregnant women



#### **Action point**

 Check if client is pregnant, thinking about having a baby or breastfeeding

#### **Side effects:**



#### Action point

- Explain that side effects:
  - do not affect everyone
  - often happen for only the first few weeks after starting a new medicine
- Advise your clients to come back to the clinic if they are concerned about side effects
- Explain that most side effects are common and mild
- A common side effect of blood pressure medicine is feeling dizzy when:
  - standing up quickly and
  - getting out of bed quickly
- Explain that feeling dizzy won't last more than a week or two after starting a new blood pressure medicine.

#### **Caution: Mixing medicines**

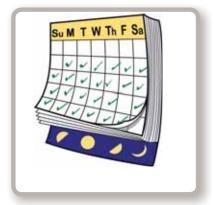


### Action point

- Explain not all medicines can be taken together
- Encourage clients to talk about all the medicines they are taking

# Medicines to lower blood pressure

Medicines that are used to lower blood pressure are called **antihypertensive** medicines.



**Every day** 



**Side effects** 



Long time



Mixing medicines



Some people can't take certain blood pressure medicines

# Medicines to lower blood pressure

### ACE Inhibitors (eg: ramipril and perindopril)

- lower blood pressure
- help to keep the heart and kidneys healthy
- are suitable for people who are diabetic

#### Women need to tell their doctor if they:

- might be pregnant
- are pregnant
- are breastfeeding

#### as ACE inhibitors may not be suitable.



#### **Action point**

 ask female clients if they are pregnant, breastfeeding or planning to have a baby

# Some medicines should NOT be taken with an ACE inhibitor

• ibuprofen (like Nurofen®) and some other medicines.



#### **Action point**

 Remind your client to tell the Aboriginal Health Worker, nurse, doctor and pharmacist about all the medicines they are taking, even if they have bought the medicine at a supermarket or store.

#### **Side effects of ACE inhibitors**

### Serious side effects

A **serious** and **uncommon** side effect of ACE inhibitors can be:

 swelling in the face and throat and difficulty breathing

If this happens, the client needs to call 000 for an ambulance or see a doctor straight away.



#### Mild and common side effects of ACE inhibitors are:

dizziness



### Action point

- Advise your client
  - to stand up slowly
  - to get out of bed slowly
  - that dizziness will only last a week or two
- cough



#### **Action point**

- advise that cough affects about 1 in 10 people
- if cough continues, check with your doctor



#### **Action point**

Advise your client to come back to the clinic if they are concerned about side effects

# Medicines to lower blood pressure

#### ACE Inhibitors (eg: ramipril and perindopril)

- lower blood pressure
- help to keep the heart and kidneys healthy
- are suitable for people who are diabetic

### Women need to tell their doctor if they:







might be pregnant are

are pregnant are breastfeeding

as ACE inhibitors may not be suitable.

# Some medicines should NOT be taken with an ACE inhibitor

**ibuprofen** (like Nurofen®) and some other medicines. Always tell your Aboriginal Health Worker, nurse, doctor and pharmacist about **all** the medicines you are taking, even if you buy them yourself at a supermarket or store.

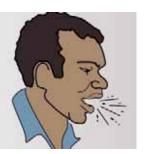
#### Side effects of ACE inhibitors

ACE inhibitors can have unwanted effects, called side effects. Side effects do not happen to everyone and often go away after a short time.

#### Mild and common side effects:



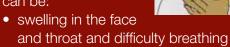
dizziness



cough

### Serious side effects

A **serious** and **uncommon** sideeffect of ACE inhibitors can be:



If this happens you need to call 000 for an ambulance or see a doctor straight away.

Talk to your Aboriginal Health Worker, nurse, doctor or pharmacist about side effects.

# Medicines to lower blood pressure

#### **Angiotensin Receptor Blockers**

(eg: irbe<u>sartan</u>, cande<u>sartan</u> & telmi<u>sartan</u>)

- lower blood pressure
- help to keep the heart and kidneys healthy
- are suitable for people who are diabetic

#### Women need to tell their doctor if they:

- might be pregnant
- are pregnant
- are breastfeeding

#### as Angiotensin Receptor Blockers may not be suitable.



#### **Action point**

 ask your female clients if they are pregnant, breastfeeding or planning to have a baby

### Some medicines should NOT be taken with an Angiotensin Receptor Blocker

• ibuprofen (like Nurofen®) and some other medicines.



#### **Action point**

 Remind your client to tell the Aboriginal Health Worker, nurse, doctor and pharmacist about all the medicines they are taking, even if they have bought the medicine at a supermarket or store.

#### **Side effects of Angiotensin Receptor Blockers**

### **Serious side effects**

A **serious** and **uncommon** side effect of Angiotensin Receptor Blockers (ARBs) can be:

 swelling in the face and throat and difficulty breathing

If this happens, the client needs to call 000 for an ambulance or see a doctor straight away.



**Mild and common** side effects of Angiotensin Receptor Blockers are:

dizziness



#### **Action point**

- Advise your client
  - to stand up slowly
  - to get out of bed slowly
  - that dizziness will only last a week or two
- headache



#### **Action point**

 Advise client to come back to the clinic if they are concerned about side effects

# Medicines to lower blood pressure

#### **Angiotensin Receptor Blockers**

(eg: irbe<u>sartan</u>, cande<u>sartan</u> & telmi<u>sartan</u>)

- lower blood pressure
- help to keep the heart and kidneys healthy
- are suitable for people who are diabetic

### Women need to tell their doctor if they:







might be pregnant are pregnant

are breastfeeding

as Angiotensin Receptor Blockers may not be suitable.

# Some medicines should NOT be taken with an Angiotensin Receptor Blocker

**ibuprofen** (like Nurofen®) and some other medicines. Always tell your Aboriginal Health Worker, nurse, doctor and pharmacist about **all** the medicines you are taking, even if you buy the medicine yourself at the supermarket or store.

#### Side effects of Angiotensin Receptor Blockers

Angiotensin Receptor Blockers can have unwanted effects, called side effects. Side effects do not happen to everyone and often go away after a short time.

#### Mild and common side effects:



dizziness



headaches

# Serious side effects

A serious and uncommon side effect of Angiotensin Receptor Blockers can be:



swelling in the face and throat and difficulty breathing

If this happens you need to call 000 for an ambulance or see a doctor straight away.

Talk to your Aboriginal Health Worker, nurse, doctor or pharmacist about side effects.

# Medicines to lower blood pressure

#### **Calcium Channel Blockers**

(eg: amlodipine, lercanidipine, and diltiazem)

- lower blood pressure
- are also used for angina (chest pain) and heart rhythm problems

### Women need to tell their doctor if they:

- might be pregnant
- are pregnant
- are breastfeeding

### as Calcium Channel Blockers may not be suitable.



**Action point** 

 ask female clients if they are pregnant, breastfeeding or planning to have a baby



#### Side effects of Calcium Channel Blockers

Mild and common side effects of calcium channel blockers are:

dizziness



**Action point** 

- Advise client
  - to stand up slowly
  - to get out of bed slowly
  - that dizziness will only last a week or two
- swollen ankles
- flushing
- rash
- headache



Action point

 Advise your clients to come back to the clinic if they are concerned about side effects

# Some medicines should NOT be taken with a Calcium Channel Blocker



Action point

 Remind your client to tell the Aboriginal Health Worker, nurse, doctor and pharmacist about all the medicines they are taking, even if they have bought the medicine at a supermarket or store.

# Medicines to lower blood pressure

#### **Calcium Channel Blockers**

(eg: amlodipine, lercanidipine, and diltiazem)

- lower blood pressure
- are also used for angina (chest pain) and heart rhythm problems

### Women need to tell their doctor if they:



might be pregnant





are breastfeeding

as Calcium Channel Blockers may not be suitable.

# Some medicines should NOT be taken with a Calcium Channel Blocker

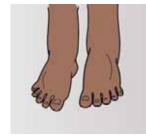
Always tell your Aboriginal Health Worker, nurse, doctor and pharmacist about **all** the medicines you are taking, even if you buy them yourself at a supermarket or store.

#### Side effects of Calcium Channel Blockers

Calcium Channel Blockers can have unwanted effects, called side effects. Side effects do not happen to everyone and often go away after a short time.

#### Mild and common side effects:







dizziness

swollen ankles

flushing





rash

headache

Talk to your Aboriginal Health Worker, nurse, doctor or pharmacist about side effects.

# Medicines to lower blood pressure

#### **Beta Blockers**

### (eg: aten<u>olol</u> and metopr<u>olol</u>)

- lower blood pressure
- can be used for angina (chest pain), heart failure
- help to protect the heart after a heart attack

# People need to tell their doctor if they:

- might be pregnant
- are pregnant
- are breastfeeding
- have asthma or other breathing or short-wind problems

# as Beta Blockers are unlikely to be suitable.



#### Action point

- check if the client is using any inhalers for asthma or short-wind problems
- ask female clients if they are pregnant, breastfeeding or planning to have a baby

#### Side effects of Beta Blockers

dizziness



**Action point** 

- Advise client
  - to stand up slowly
  - to get out of bed slowly
  - that dizziness will only last a week or two
- breathing troubles and/ or dry cough



**Action point** 

- Advise your client to come back to the clinic straight away or as soon as they can if they have breathing troubles
- tiredness



**Action point** 

 Advise your client that they might feel tired for the first few weeks after starting a Beta Blocker medicine.

- coldness in the fingers and toes
- tummy trouble



**Action point** 

 Advise your client to come back to the clinic if they are concerned about side effects

# Some medicines should NOT be taken with a Beta Blocker



**Action point** 

 Remind your client to tell the Aboriginal Health Worker, nurse, doctor and pharmacist about all the medicines they are taking, even if they have bought the medicine at a supermarket or store.

# IMPORTANT INFORMATION: Advise the client not to stop taking Beta Blocker tablets suddenly

Sometimes, stopping a Beta Blocker suddenly can cause the heart to beat too fast

# Medicines to lower blood pressure

**IMPORTANT:** Do not stop taking Beta Blocker tablets suddenly. If you do stop taking them suddenly, you may experience problems.

#### Beta Blockers (eg: atenolol and metoprolol)

- lower blood pressure
- can be used for angina (chest pain) and heart failure
- help to protect the heart after a heart attack

### People need to tell their doctor if they:

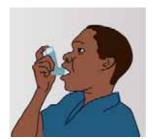






might be pregnant are pregnant

are breastfeeding



have asthma or other breathing or short-wind problems

as Beta Blockers are unlikely to be suitable.

#### Some medicines should NOT be taken with a Beta Blocker

Always tell your Aboriginal Health Worker, nurse, doctor and pharmacist about all the medicines you are taking, even if you buy them yourself at a supermarket or store.

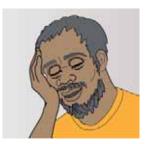
#### Side effects of Beta Blockers

Beta Blockers can have unwanted effects, called side effects. Side effects do not happen to everyone and often go away after a short time.

#### Mild and common side effects:







dizziness

breathing troubles

tiredness







Talk to your Aboriginal Health Worker, nurse, doctor or pharmacist about side effects.

# Medicines to lower blood pressure

#### Thiazide diuretics

(eg: hydrochlorothiazide and indapamide)

lower blood pressure

#### Women need to tell their doctor if they:

- might be pregnant
- are pregnant
- are breastfeeding

### as thiazide diuretics may not be suitable.



#### **Action point**

 ask female clients if they are pregnant, breastfeeding or planning to have a baby

# Some medicines should NOT be taken with a thiazide diuretic



#### **Action point**

Remind your client to tell the Aboriginal Health Worker, nurse, doctor and pharmacist about all the medicines they are taking, even if they have bought the medicine at a supermarket or store.

#### Side effects of diuretics

dizziness



**Action point** 

#### Advise client

- to stand up slowly
- to get out of bed slowly
- that dizziness will only last a week or two
- muscle weakness or cramps

#### **Advise clients:**

- they will pass urine more often a few hours after taking this medicine.
- to take this medicine in the morning, soon after waking up.



# Medicines to lower blood pressure

#### Thiazide diuretics

(eg: hydrochlorothiazide and indapamide)

lower blood pressure

### Women need to tell their doctor if they:







nt are breastfeeding

as thiazide diuretics may not be suitable.

#### Mild and common side effects:

Thiazide diuretics can have unwanted effects, called side effects. Side effects do not happen to everyone and often go away after a short time.





dizziness

muscle weakness or cramps

# Some medicines should NOT be taken with a thiazide diuretic

Always tell your Aboriginal Health Worker, nurse, doctor and pharmacist about **all** the medicines you are taking, even if you buy them yourself at a supermarket or store.

- You will pass urine more often a few hours after taking a thiazide diuretic.
- Take this medicine in the morning, soon after waking up.

# **Summing up:**

- Ask the client if they have any questions
- Remind your client about:

### 1. Regular check ups at the clinic

### 2. Daily lifestyle changes

- small changes to daily lifestyle can lower blood pressure
- look back on page 5 and remind the client what you talked about
- encourage your client to start a small change today such as quitting or reducing smoking

#### 3. Medicines

Remind your clients:

- to take their medicine every day
- that most side effects only last a short while a week or two
- to refill their prescriptions before they run out of medicine

#### Remember

 Remember to encourage your client to call or drop in to the clinic if they have any questions in the future



# **Summing up:**

- 1. Have regular check ups
- 2. Change daily lifestyle
- 3. Know how to manage your medicines

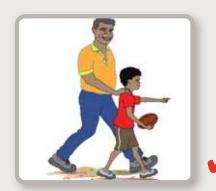
#### Remember:

Medicines are only part of staying well and healthy













# **HIGH BLOOD PRESSURE** [hypertension]



#### **Acknowledgements:**

This resource was made possible by a grant from NPS Better choices, Better health which is funded by the Australian Government Department of Health and Ageing.

The Heart Foundation would like to thank and acknowledge those who provided valuable input, guidance, advice and encouragement to the development of these resources. These include:

- Ms Michele Robinson (AHCSA), Ms Lyn Dimer (Heart Foundation) and Ms Joanne Hedges (VAHS) who have tirelessly contributed their time and expertise.
- Health professionals and clients from many places and organisations throughout Australia; in particular from the Victorian Aboriginal Health Service (VAHS), Port Lincoln Aboriginal Health Service (PLAH) and Central Australian Aboriginal Congress (CAAC).

Illustrations: Sonny Keeler and Julie Taylor, JAT Illustrational







