

# **Section VII. Home BP Measurement**

**2015 Canadian Hypertension  
Education Program  
Recommendations**



## VII. Home Measurement of Blood Pressure

**Home BP measurement should be encouraged to increase patient involvement in care**

- Which patients?
  - Uncomplicated hypertension
  - Suspected non adherence
  - Office-induced blood pressure elevation (white coat effect)
  - Masked hypertension

**Average BP  $\geq$  135/85 mm Hg should be considered elevated**

# Advantages of Home Blood Pressure Measurement

- More rapid confirmation of the diagnosis of hypertension
- Improved ability to predict cardiovascular prognosis
- Improved blood pressure control
- Can be used to assess patients for white coat hypertension and masked hypertension
- Improved adherence to drug therapy



## VII. Suggested Protocol for Home Measurement of Blood Pressure for the diagnosis of hypertension


- Home blood pressure values should be based on:
  - Two measures separated by one minute,
  - Morning and evening,
  - For an initial 7-day period.
- First day home BP values should not be considered.
- The following six days blood pressure readings should be averaged.
- Average BP equal to or over 135/85 mmHg should be considered elevated (for those patients whose clinic BP target is less than 140/90 mmHg).

# Recommended Electronic Blood Pressure Monitors for Home Blood Pressure Measurement

- Monitors that have been validated as accurate and available in Canada are listed at [www.hypertension.ca](http://www.hypertension.ca) in the 'device endorsements' section
- The boxes containing the device are also GENERALLY marked with



# VII. Home Measurement of BP: Patient Education

- Assist patients select a model with the correct size of cuff
- Measure and record the patients mid arm circumference so they can match it to cuff size.
- Recommend devices listed at [www.hypertension.ca](http://www.hypertension.ca) or marked with this symbol 
- Ask patients to carefully follow the instructions with device and to record only those blood pressures where they have followed recommended procedure
- Advise patients that average readings equal to or over 135/85 mmHg are high
- In patients with diabetes lower therapeutic targets and diagnostic criteria are likely required

# Resources for Home Monitoring

- [www.hypertension.ca](http://www.hypertension.ca)
- Information to assist you in training patients to measure blood pressure at home
  - Brief action tool for Health Care professionals under resources in the Education tools for health care professionals section
- Information for patients on how to purchase a device for home measurement and how to measure blood pressure at home
  - Learn how to measure your blood pressure at home and home measurement of blood pressure under resources in the education tools for health care professionals section).
- A training DVD on home measurement of blood pressure is available for download at [www.hypertension.ca](http://www.hypertension.ca)

# Advice for hypertensive patients: When to contact a health care professional based on home blood pressure readings

Systolic BP (mmHg)	Diastolic BP reading	
Less than 130	Less than 85	Usual follow-up
130-179*	85-109*	Check reading again using the <u>correct technique</u> . If the readings remain high, discuss with your healthcare provider at your next regularly scheduled appointment
180 – 199*	110-119	Check reading again using the <u>correct technique</u> . If the readings remain high, schedule an appointment with your doctor to discuss your treatment plan.
More than 200*	More than 120	Check reading again using the <u>correct technique</u> . If the readings remain high, schedule an urgent appointment with your doctor to discuss your treatment plan.


\*Patients with diabetes, chronic kidney disease or who are at high risk of cardiovascular events require individualized advice.

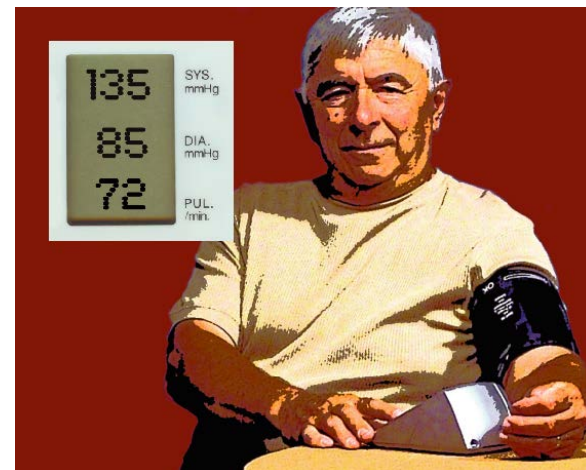
(Resource available at [www.hypertension.ca](http://www.hypertension.ca) in the 3 Minute Hypertension Action Tool or [www.heartandstroke.ca/BP](http://www.heartandstroke.ca/BP))



# Home Measurement: Doing it Right

## EQUIPMENT

- Validated device
- Look for the  logo or go to [www.hypertenion.ca](http://www.hypertenion.ca) for a list of validated devices available in Canada
- Ensure the cuff size is appropriate



# Home Measurement: Doing it Right

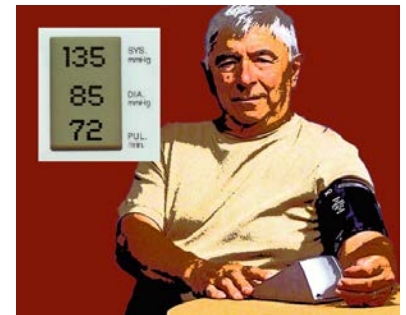
## Preparation

### DO

- Read and carefully follow the instructions provided with the device
- Relax in a comfortable chair with back support for 5 minutes
- Sit quietly without talking or distractions (e.g. TV)

### DON'T

- Measure if stressed, cold, in pain or if your bowel or bladder are uncomfortable
- Measure within 1 hour of heavy physical activity
- Measure within 30 minutes of smoking or drinking coffee

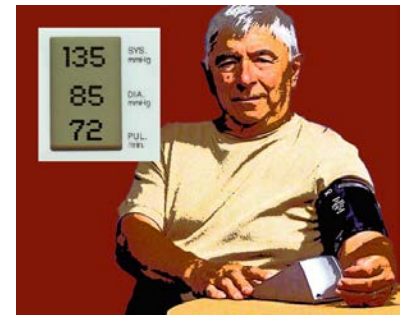


# Home Measurement: Doing it Right

## Preparation

### DO

- Put the cuff on a bare arm
- Support the arm on a table so it is at heart level
- Record two readings in the morning and evening daily for 7 days (discarding the first day readings) to help diagnose hypertension
- Review your blood pressure log with your health care provider



## VII. Home Measurement of BP: Confirm Contradictory Home Measurement Readings

If office BP measurement is elevated and home BP is normal *or vice versa*



Repeat home monitoring or perform 24-hour ambulatory blood pressure monitoring