# **Diagnosing hypertension**

Clinic BP ≥140/90 mmHg

Offer ambulatory BP monitoring (ABPM) to confirm diagnosis of hypertension.

If unsuitable for ABPM, offer home BP monitoring (HBPM). Refer to *Box A*.

Clinic BP from 140/90 to 159/99 mmHg, and subsequent ABPM daytime average or HBPM average from 135/85 to 149/94 mmHg

Clinic BP ≥160/100 but <180/120 mmHg, and subsequent ABPM daytime average or HBPM average ≥150/95 mmHg

Diagnose Stage 1 hypertension Diagnose Stage 2 hypertension

### Stage 1 and 2 hypertension

- Investigate for target organ damage (e.g. kidney damage, retinopathy, left ventricular hypertrophy.
- Complete all of the tasks listed in **Box B**.

Clinic systolic BP ≥180 mmHg **or** clinic diastolic BP ≥120 mmHg



# **Diagnose Stage 3 hypertension**

#### Stage 3 hypertension

- Assess target organ damage as soon as possible.
- Consider starting drug treatment immediately without ABPM/HBPM if target organ damage.
- Repeat clinic BP in 7 days if no target organ damage.
- Refer for same-day specialist review if signs of retinal haemorrhage or papilloedema or life-threatening symptoms (e.g. chest pain, signs of heart failure, acute kidney injury or new-onset confusion) or suspected phaeochromocytoma (e.g. labile or postural hypotension, palpitations, pallor, headache, abdominal pain or diaphoresis).
- Complete all of the tasks listed in Box B.

## Box A. Ambulatory and home blood pressure monitoring

#### ABPN

- Use ABPM to confirm a diagnosis of hypertension.
- Ensure at least two measurements per hour are taken during waking hours (e.g. between 8 a.m. and 10 p.m.).
- Use the average value of at least 14 measurements.
- If ABPM is not tolerated, use HBPM.

#### HRPM

For information on how to monitor BP correctly at home and a diary sheet for recording measurements, see BIHS resources:

- ➤ The basics explained: bit.ly/3g1xnPa
- ➤ Diary: bit.ly/2XexWMS
- For each BP reading, ensure that two consecutive measurements are taken, at least 1 minute apart and with the person seated; AND
- BP is recorded twice daily (ideally morning and evening); AND
- BP recording continues for at least 4 days, ideally 7 days.
- Discard measurements taken on the first day. Use the average value of all remaining measurements.

## Box B. At diagnosis

- Code hypertension.
- Record height, weight, BMI, smoking status, family history of heart disease.
- Take baseline U&E, eGFR, lipids, TSH and LFT.
- Obtain urine specimen (dipstick to check for haematuria and send for ACR).
- Use results above to calculate CVD risk using QRISK®3 tool. If QRISK3 >10%, offer statin (refer to NICE NG238).<sup>7</sup>
- Consider <u>QRISK3-Lifetime</u> calculator for people aged <40 years.</li>
- Arrange non-urgent 12-lead ECG (to assess for LVH).
- Examine the fundi for the presence of hypertensive retinopathy.