

HCA Course: The Clinical Assessments

Gill Dunn
Diabetes Specialist Nurse
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Session Objectives

Explore:-

- The assessments required for the annual review
- Importance of accurate testing
- Recording and templates
- Competency and accountability

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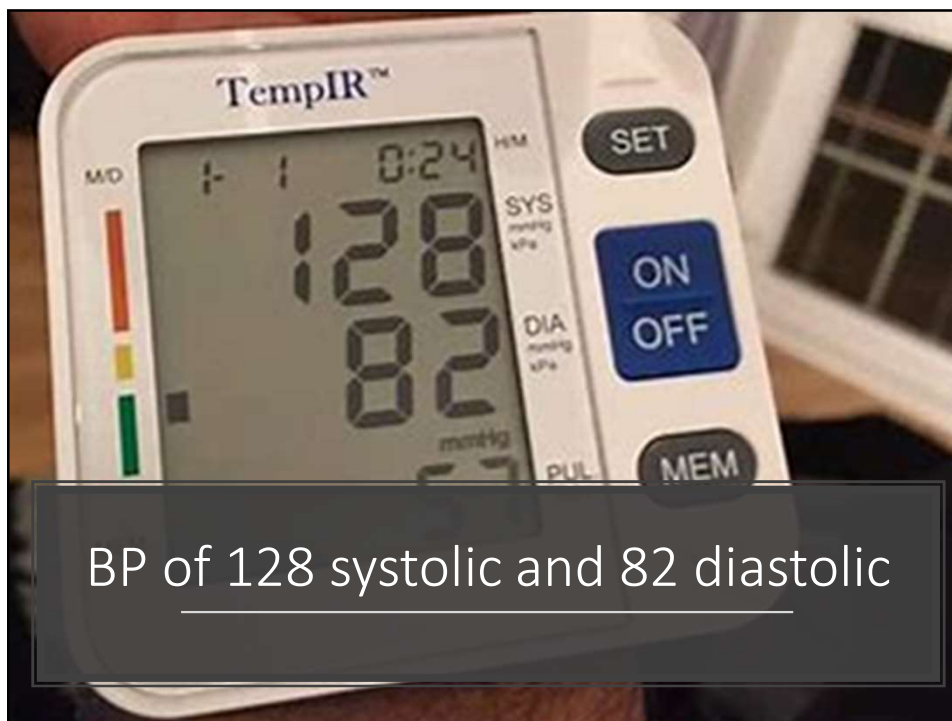
Blood Pressure

Around **50%** of heart attacks and strokes are associated with high blood pressure

<https://www.bhf.org.uk>

- Blood Pressure, or BP, measures the force that your heart uses to pump blood around your body.
- A BP measurement includes two numbers. For example, 128 over 82.
- The top number, is called the systolic blood pressure. This is the pressure generated when your heart pumps.
- The bottom number, is the diastolic blood pressure. This is the pressure when your heart is resting between beats.

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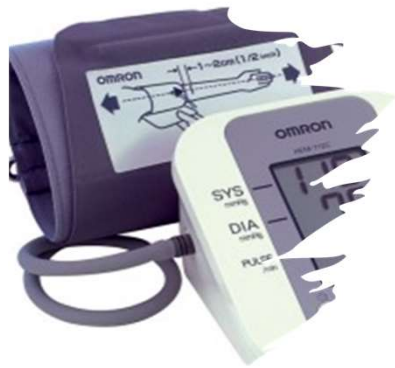


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Targets			
Age	Clinic	HBPM	ABPM
18-79	<140/90	<135/85	
>80	<150/90	<145/85	
CKD	120—129/80	--	

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Measuring Blood Pressure



- Must be an accurate reading
- Usually digital electronic monitor
- Calibration /validated/maintained and recalibrated annually

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Measuring Blood Pressure



- Preparation- relaxed no full bladder
- Sitting position- feet flat on floor back supported
- Arm position- flat surface/level with heart
- Position cuff –bottom edge just above elbow
- Correct cuff size- covering 80% of the arm
- No speaking during reading

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Home Blood Pressure Monitoring

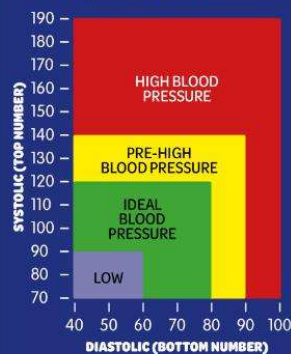


- Take at least two readings 1 minute apart
- Record twice daily ideally am and pm
- At least 4 days ideally 7
- Discard readings on first day
- Use average of all readings

[Home blood pressure monitoring explained.pdf \(bihsoc.org\)](https://bihsoc.org/home-blood-pressure-monitoring-explained.pdf)

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Do you have high blood pressure?



Home blood pressure readings should be 5mmHg lower than in clinic for each measurement.

Blood Pressure UK is an operating name of the Blood Pressure Association, Charity Registration No. 1058044

Get regular checks and Know Your Numbers!®

Write down your numbers as exactly as they are on your machine. Look at the blood pressure chart to see what your numbers mean, and follow our guidelines for home blood pressure testing to see what action you should take.



Blood Pressure UK
Helping you to lower your blood pressure

Blood Pressure Reading	1	2	3	Average
Date/time:				
Systolic (top number)				
Diastolic (bottom number)				

We are here to support you

High blood pressure is a serious condition but it can be successfully treated. Blood Pressure UK provides information and support for people with high blood pressure.

For a free information pack please email kyn@bloodpressureuk.org

For more information or if you have a question or concern about high blood pressure, please visit our website at www.bloodpressureuk.org or email us at help@bloodpressureuk.org

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Clinic Blood Pressure Monitoring



If considering a diagnosis:

- Do not use digital monitor if irregular pulse
- Take at least two readings 1 minute apart
- Measure in both arms
- Use average of all readings

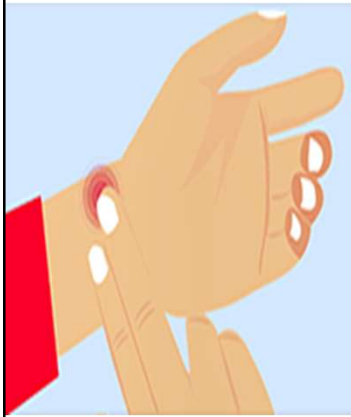
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Heart Rate

- The heart rate, or pulse rate, is the number of times your heart beats in one minute. Expressed as **beats per minute (BPM)**
- A normal heart rate is between **50 and 90 beats per minute**, but it can vary. It can speed up or slow down depending on the situation.
- Regularity
- If the pulse is regular then each beat happens consistently and in rhythm. An irregular heart beat feels different. It may feel like a skipped beat, or you may feel that the rate swaps from fast to slow.

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Checking the Pulse



- Do not rely on digital BP monitor or pulse oximeter
- Finding the pulse: wrist
- Continue to feel/palpate for 1 minute or 30 seconds x2

[How to check your pulse - Heart Health | BHF](#)
Know Your Pulse Factsheet
www.heartrhythmalliance.org/resources/view/389/pdf

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Irregular Pulse

- If irregular palpate for full 60 seconds
- May feel occasional irregularities
- Irregular pulse- arrhythmia/ atrial fibrillation
- Bradycardia- slow pulse < 60BPM
- Tachycardia – fast pulse >100BPM

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Respiration Rate:

- Respiration Rate is the number of breaths during a one minute period
- One of the main vital signs
- Abnormal rate indicates underlying illness and often first sign of deterioration
- Body attempting to maintain oxygen delivery
- Pain, anxiety, asthma, shock, heart failure

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Measuring the Respiration Rate



- Normal rate is between 12-20BPM
- Always count breathing rate over one whole minute
- Try to observe without patient being aware

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Taking a Temperature



Normal internal or 'core' temperature is at around 37°C

A high temperature above 38degrees can indicate an infection

- Digital thermometer
- Digital tympanic thermometer
- Heat sensors to determine body temperature

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Height



- Remove footwear prior to taking the measurement
- Ask patient to stand with their back to the wall and look directly forward. The back of their feet and the back of their head should all be in contact with the wall.
- Lower the measuring device until it rests gently on the top of your clients head and record the measurement

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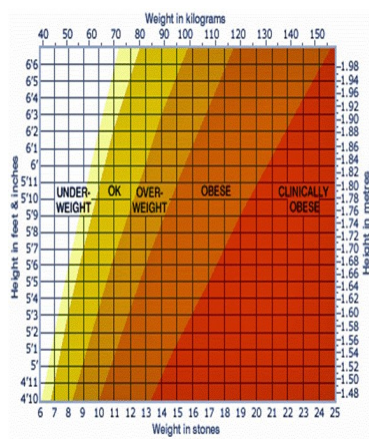
Weight



1. Zero the scales
2. Ask the client to remove any 'heavy' items from their person
3. Ensure you note the clients state and time of day for testing to ensure any subsequent tests can be taken under identical conditions
4. When measuring weight – ask patient to look straight ahead and stay still on the scales. Wait for the needle/digital screen to settle before recording the measurement

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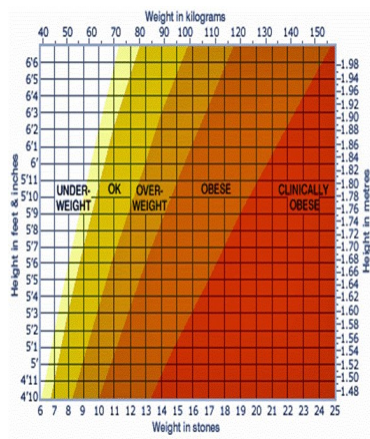
BMI



- The BMI calculation divides an adult's weight in kilograms by their height in metres squared. For example, A BMI of 25 means 25kg/m².
- Muscle is much denser than fat, so very muscular people, may be a healthy weight even though their BMI is classed as obese.

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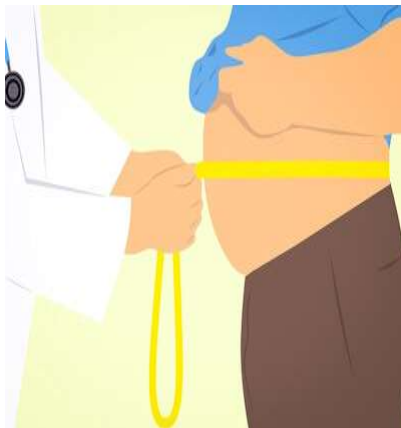
BMI



- Optimum BMI 18.5-24.9
- >23 associated with increased risk of adverse health outcomes
- >27.5 with high risk of adverse health outcomes
 - CVD
 - Sleep apnea
 - Some types of cancer
 - Joint health and mobility

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Waist Circumference



InterAct study,

Strong link to waist size and diabetes risk

- <80cm (31.5in) for all women
- <94cm (37in) for most men
- <90cm (35in) for South Asian men.

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Waist Measurement

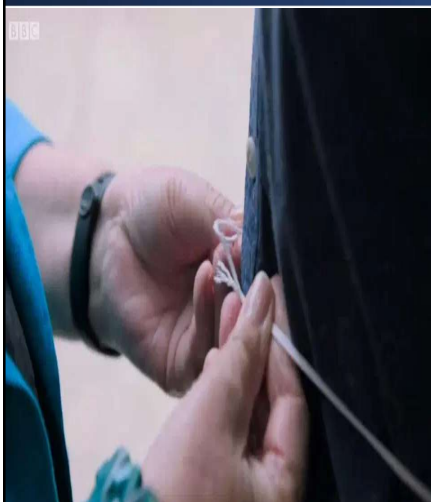
To correctly measure waist circumference:

1. Stand and place a tape measure halfway between lower rib and hip bone.
2. Make sure tape is horizontal around the waist.
3. Keep the tape snug around the waist, but not compressing the skin.
4. Measure the waist just after they breathe out

Waist measurement (bhf.org.uk)

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Waist Circumference



String Test

- Use a piece of string to measure height
- Fold in half
- Should now fit around waist

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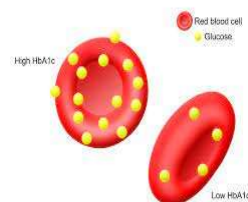
Blood Tests



HbA1c
U&E's
eGFR
Lipid profile
LFT's
FBC
TFT's

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HbA1c Test



- Looks at how much glucose has attached to a red blood cell over the last 2-3 months
- Venous sample taken without fasting
- Normal Hb required for accurate results
- Used for diagnosis and monitoring
- Does not provide a daily picture

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Renal Function and eGFR Test



- Urea & electrolytes
- Creatinine- protein clearance
- eGFR measures glomerular filtration rate
- Marker of renal disease and deterioration

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Albumin/Creatinine Ratio (ACR)



- Nationally less than 40% of patients have an ACR
- 'Any Wee Will Do'
- Home ACR Testing app now available

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Urine Dipstick Test



- Use fresh urine where possible
- Check expiry date of dipstick
- Remove from container without touching reagent squares
- Dip stick with urine
- Colour compare strip with container
- Check timing of reading for each test

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Resources


- Diabetes UK: Information prescriptions- Hypertension/Cholesterol
www.diabetes.org
- Blood Pressure UK
www.bloodpressureuk.org
- British heart Foundation: www.bhf.org
- [Overview](#) | [Hypertension in adults: diagnosis and management](#) | [Guidance](#) | [NICE](#)
- diabetesonthenet.com//pcds/entry-level-modules-series

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CONTACT INFO




+44 207 692 8709




admin@belmatt.co.uk
info@belmatt.co.uk



www.belmatt.co.uk



Suite 570, 405 Kings Road
Chelsea
SW10 0BB



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