

TEST LAB BLOOD PRESSURE KITS



WE FOUND BEST BUY BLOOD PRESSURE MONITORS FROM £19.95 - AND FOUR WE DON'T RECOMMEND

How we test

Each monitor was evaluated for accuracy using criteria based on UK and international standard tests. Readings were compared with a mercury sphygmomanometer.

The user experience

Four trained testers evaluated the monitors for speed and ease of use, while 32 volunteers rated them for comfort. In addition, five regular users home-tested a wrist and arm model each.

0 MANY DON'T KNOW THEIR BLOOD PRESSURE IS HIGH, AS THEY HAVE NO SYMPTOMS

16M ESTIMATED NUMBER OF PEOPLE IN THE UK WHO HAVE HIGH BLOOD PRESSURE

70% OF PEOPLE OVER 70 HAVE HIGH BLOOD PRESSURE

An accurate blood pressure reading should enable someone with no other symptoms to identify high blood pressure or hypertension and act to prevent heart attack, stroke and kidney problems.

Obviously the last thing you want is an inaccurate monitor, but our lab test of a range of models available on the high street found four that scored 30% or less – all wrist monitors. We also found one Best Buy wrist monitor, but overall arm monitors scored better because they are easier to use correctly, and therefore more accurate.

Professor Andy Shennan of the British Hypertension Society Blood Pressure Monitoring Committee, explains: 'whereas a cuff on your arm is naturally at heart height, one on your wrist isn't – making wrist monitors more prone to inconsistencies.'

How to buy

You don't have to spend a fortune to get an accurate monitor for home use – the Best Buy Kinetik BMP1C costs just £19.95. More expensive models, like the £104.95 Best Buy Omron M7, come with fancier features, such as a data-averaging function. Ultimately, your choice will depend on what features you need, but before you buy:

Check that the model you want is validated by the British Hypertension Society (BHS) – some don't say on the box. You can check at www.bhsoc.org or call 07717 467 973. (The BHS doesn't rate usability as we do, however.)

If you have broad arms (in our test, more than 13 inches in circumference), find out how much you'll pay for a larger cuff. This can be costly; an additional larger cuff for the A&D is £19.56 – which doubles the £19.57 price of the machine. Don't be tempted to stick with a smaller one if it

doesn't fit, as you can get an incorrect reading with the wrong size cuff.

Consider whether you are happy to inflate the cuff manually using a rubber bulb, as with the A&D monitor, or if you would prefer to do it automatically by pressing a button, as with the other four arm monitors.

Focus on features

Features do vary and some are more useful than others. Which? member and tester 60-year-old Stephen Hartley tried the Homedics machine and reported that he liked being able to record his history using the computer connection.

This model was the only one on test with this function, and although it's nice to have, you could also plot your readings on an Excel spreadsheet or on paper – such as the handy booklets provided with the Boots monitors. And only two of our tested models – the Homedics and IBP monitors – could store more than one user's readings.

The A&D and IBP monitors have a function to detect an irregular heartbeat and four – both Boots monitors, Homedics and IBP – have a blood pressure risk category indicator. Professor Shennan calls these functions 'an optional extra'. See table, right, for other features. Alternatively, you may prefer a simple one-push model, such as the Boots arm monitor.

There are advantages to using a home monitoring kit to supplement professional checks: you may avoid 'white coat syndrome' – a spike in blood pressure because you're in a doctor's surgery – or want to monitor and share readings with your doctor over time. However, home monitoring doesn't suit everyone, so before you snap up one of our Best Buys discuss suitability and frequency of checks with a health professional.

The Blood Pressure Association website (www.bpassoc.org.uk, or call 0845 2410989) provides more detailed information about how to use a home monitor correctly.

BEST BUY Blood pressure monitors

All three Best Buys scored five stars for accuracy in our lab test, although not for comfort. The £19.95 Kinetik, which is available in Argos, is good value but fairly basic. It can be used with a mains adaptor (not included) and stores up to 60 readings. Ashika Patel, a 46-year-old user, said: 'I found the cuff quite fiddly to fit, but the display was easy to read.'

Top of the table was the more widely available and more expensive Omron, at just over £100. Martin Duffy, a 53-year-old user, found it speedy and well set out with simple instructions and a useful memory function – although he did find it bulky. He said: 'It helps to be able to look back and see how much your blood pressure readings vary.'



The Omron is a sturdy, easy-to-use model with a good range of functions that would also suit someone with limited dexterity or visual impairment.

Wrist monitors are handy if you travel a lot, but tend to be less accurate. The compact Best Buy Boots Blood Pressure Wrist Monitor, £49.99, is the only model of those we tested that we recommend. Gina Kaushal, 52, told us it was 'very easy and quick to use'. However, she wasn't sure she was positioning her arm correctly, which is a potential source of error. This model can store 30 readings.

The Omron arm and Boots wrist monitors were the fastest, at 26 and 28 seconds – about half the time taken by the Homedics and IBP models.

	SPECIFICATION							WHICH? TEST PERFORMANCE						
	EASILY PORTABLE	LARGER CUFF NEEDED	DATE/TIME STAMP	DATA AVERAGING	CONNECTS TO A PC	LARGE DIGIT DISPLAY	LARGE START BUTTON	ACCURACY	COMFORT	TIME TAKEN	EASE OF USE	SCORE (%)		
ARM MONITORS														
1	OMRON Digital Automatic (M7)	104.95			✓	✓		✓	✓	★★★★★	★★★★	★★★★★	★★★★★	96
2	KINETIK Fully Automatic BMP1 C	19.95	✓	✓				✓	✓	★★★★★	★★★	★★★★	★★★★	91
3	HOMEDICS MiBody 360	69.99	✓	✓	✓		✓	✓		★★★★★	★★★	★★★	★★★★	89
4	BOOTS 5690447	29.99	✓	✓						★★★★	★★★★	★★★★★	★★★★	75
5	A&D MEDICAL Palm Top Monitor UA704	19.57		✓						★★★★	★★★	★★★★★	★★★★	74
WRIST MONITORS														
1	BOOTS 5690439	49.99	✓					✓		★★★★★	★★★★	★★★★★	★★★★★	96
2	IBP Automatic HL186Z	19.95	✓			✓	✓	✓		★★	★★★★	★★★	★★★★★	30
3	BRAUN VitalScan Plus 1600	29.99	✓							★★	★★★★	★★★★	★★★★★	29
4	LLOYDSPHARMACY LBPW1	9.99	✓							★	★★★★★	★★★★★	★★★★★	17
5	MAPLIN HEALTH N47GH	19.99	✓							★	★★★★	★★★★★	★★★★★	15

Using the table

Specification

Larger cuff needed For 13in-plus arms **Date/time stamp** Records date and time of each reading **Data averaging function**

Averages multiple readings

Test performance Accuracy All ★★★★★ monitors meet our criteria, based on US Association for the Advancement of

Medical Instrumentation and British Hypertension Society standards.

Comfort How comfortable the cuff pressure was **Time taken** Monitors rated ★★★★★ take

around 53 to 56 seconds, those rated ★★★★★ take around half this time.

Ease of use Instructions, application, removal, programming functions.

Score

Accuracy 70%
Comfort 10%
Ease of use 10%
Time taken 10%



JOIN THE DEBATE Shocked by how many poor scorers we found in our tests? Come and tell us what you think at www.whichconversation.co.uk. And if you're trying to improve your diet, turn to p64 for our analysis of butters and spreads, including cholesterol-lowering ones.

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