

Japanese Society of Hypertension (JSH) Guidelines for Self-Monitoring of Blood Pressure at Home

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Home blood pressure (BP) measurements are indispensable for the improvement of hypertension management in medical practice as well as for the recognition of hypertension in the population. The Working Group for Establishment of Guidelines for Measurement Procedures of Self-Monitoring of Blood Pressure at Home of the Japanese Society of Hypertension has established standards for all techniques and procedures of home BP measurements. The recommendations are as follows. Recommendation: 1) Arm-cuff devices based on the cuff-oscillometric method that have been validated officially, and the accuracy of which has been confirmed in each individual, should be used for home BP measurement. 2) The BP should be measured at the upper arm. Finger-cuff devices and wrist-cuff devices should not be used for home BP measurements. 3) Devices for home BP measurement should be adapted to the American Association for Medical Instrumentation (AAMI) standards and the British Hypertension Society (BHS) guidelines. In addition, the difference between the BP measured by the auscultatory method and that measured using the device should be within 5 mmHg in each individual. The home measurement device should be validated before use, and at regular intervals during use. 4) Home BP should be monitored under the following conditions. The morning measurement should be made within 1 h after waking, after micturition, sitting after 1 to 2 min of rest, before drug ingestion, and before breakfast. The evening measurement should be made just before going to bed, sitting after 1 to 2 min of rest. 5) Home BP should be measured at least once in the morning and once in the evening. 6) All home BP measurements should be documented without selection, together with the date, time, and pulse rate. Use of devices with a printer or an integrated circuit memory is useful to avoid selection bias. 7) The home BP in the morning and that in the evening should be averaged separately for a certain period. The first measurement on each occasion should be used for totaling. 8) Home BP values averaged for a certain period indicate hypertension when 135/80 mmHg and over and definite hypertension when 135/85 mmHg and over. Normotension is defined as less than 125/80 mmHg and definite normotension as less than 125/75 mmHg. Home BP measurements based on these guidelines can be considered an appropriate tool for clinical decision-making, and it is hoped that these guidelines will serve to reduce confusion and confirm the place of home BP measurement in clinical practice. (*Hypertens Res* 2003; 26: 771–782)

Key Words: blood pressure, home measurement, self-measurement, device, measurement procedure