

## IS IT NECESSARY TO MEASURE 2 TIMES OR 3 TIMES IN A ROW TO CATEGORIZE A PATIENT'S BLOODPRESSURE LEVEL?

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## Objective

To assess whether 2 consecutive 1-minute blood pressure measurements classify blood pressure levels in the same way as 3 measurements.

## Méthods

The French Fundation and Hypertension Comitee health data warehouse contains 4172 medical records of subjects aged 35 years who volunteered to participate in nationwide health surveys conducted in France between 2015 and 2022 (French League Against Hypertension Survey). Blood pressure was measured with an automatic blood pressure monitor in the morning in a seated position with 1 minute between each measurement. Each subject was categorized according to the systolic and diastolic blood pressure of measurement 2 and the mean of measurement 2 and 3. The subject was classified as H if SBP > 140 or DBP >90. Subject was N if SBP <= 130 or DBP <= 90. Concordance in classifications between measure 2 and the mean of measure 2 and 3 was performed for each subject.

## Results - Conclusion

Agreement between measurement 2 and the mean of measurements 2 and 3 was 98% for SBP and 95% for DBP for Hypertensives. Agreement for Normotensives was 92% for SBP and 94% for DBP.

Measuring blood pressure 2 times in a row with an automatic blood pressure monitor is sufficient to categorize a patient's blood pressure and to identify blood pressure variability.