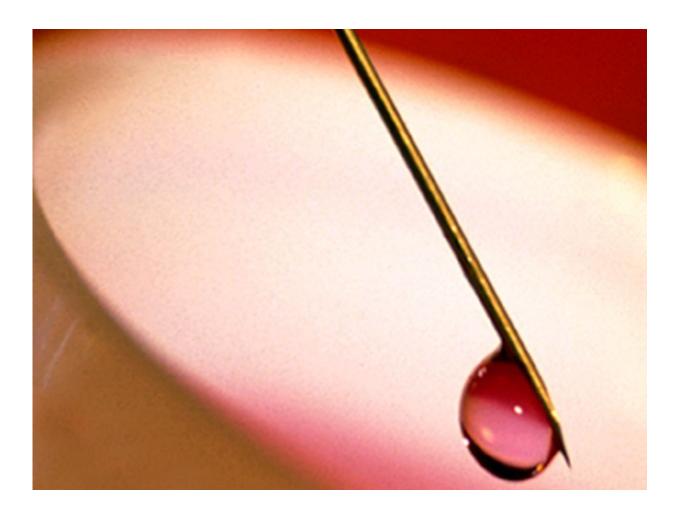


Drop-to-drop variation seen with fingerprick blood

February 29 2016



(HealthDay)—There is drop-to-drop variation in blood component



measures from fingerprick blood that is greater than variation in drops of venous blood, according to a study published recently in the *American Journal of Clinical Pathology*.

Meaghan M. Bond and Rebecca R. Richards-Kortum, Ph.D., both from Rice University in Houston, used a hematology analyzer to analyze the hemoglobin concentration, total white blood cell (WBC) count, threepart WBC differential, and platelet count in six successive drops of blood collected from one fingerprick from each of 11 donors. Additionally, a hemoglobinometer was used to measure the <u>hemoglobin</u> <u>concentration</u> of 10 drops of fingerprick blood from each of seven donors.

The researchers found that the average percent coefficient of variation (CV) for successive <u>drops</u> of fingerprick blood ranged from three times higher (for lymphocyte count) to more than seven times higher (for granulocyte count), compared to venous controls measured using a hematology analyzer. For hemoglobin, the average percent CV for fingerprick blood was up to five times higher, compared to venous blood measured using a point-of-care hemoglobinometer.

"These data suggest caution when using measurements from a single drop of fingerprick <u>blood</u>," the authors write.

More information: Full Text

Copyright © 2016 HealthDay. All rights reserved.

Citation: Drop-to-drop variation seen with fingerprick blood (2016, February 29) retrieved 5 May 2024 from <u>https://medicalxpress.com/news/2016-02-drop-to-drop-variation-fingerprick-blood.html</u>



This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.