

# Worse prognosis for prediabetes defined by HbA1c

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(HealthDay)—Prediabetes defined by hemoglobin A1c (HbA1c) is

associated with worse prognosis than definition by fasting plasma glucose (FPG) or two-hour plasma glucose (2hPG), according to a study published online Feb. 16 in *Diabetes Care*.

Dorte Vistisen, Ph.D., from Steno Diabetes Center Copenhagen in Denmark, and colleagues followed 5,427 participants aged 50 to 79 years without [diabetes](#) for a median of 11.5 years to examine the [incidence rates](#) of a major event (nonfatal/fatal cardiovascular disease or all-cause mortality) for different definitions of prediabetes. Of the cohort, 11.6 percent had prediabetes by the World Health Organization (WHO)/International Expert Committee (IEC) criteria and 36.8 percent had prediabetes by the American Diabetes Association (ADA) criteria. In a subset of 4,730 individuals with additional measures of 2hPG, 14.0 percent had prediabetes.

The researchers found that the incidence rate in the context of prediabetes versus normoglycemia was 54 and 37 percent higher with the WHO/IEC and ADA definitions, respectively, and decreased to 17 and 12 percent after adjustment for confounders. Prediabetes by HbA1c correlated with a doubling in the incidence rate by the IEC and ADA criteria. Excess risk was reduced to 13 and 17 percent, respectively, upon adjustment. In the adjusted analysis, prediabetes by FPG or 2hPG was not linked to excess risk.

"The excess risk among individuals with prediabetes is mainly explained by the clustering of other cardiometabolic risk factors associated with hyperglycemia," the authors write.

Several authors disclosed financial ties to the pharmaceutical industry.

**More information:** [Abstract/Full Text \(subscription or payment may be required\)](#)

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