

Integrating Ketone and Glucose Monitoring for Optimized Diabetes Management

The DKA Playbook: Applying Guidelines to Real-World Diagnosis

Stay up to date with the most recent guidelines for DKA



Diabetic ketoacidosis (DKA) can occur in individuals requiring intensive insulin therapy, regardless of diabetes type. Therefore, those with either type 1 or type 2 diabetes may be at risk.

Checking ketone levels is important, yet many clinicians, as well as people with diabetes, have suboptimal engagement with ketone testing.^{1,2}

New 2024 American Diabetes Association consensus statement on DKA diagnostic criteria

Diagnosis should be based on the following three criteria:³



BLOOD GLUCOSE

Glucose ≥ 200 mg/dL (11.1 mmol/L) or prior history of diabetes



KETONES

β -hydroxybutyrate concentration ≥ 3.0 mmol/L or urine ketone strip ≥ 2



ACIDOSIS

pH < 7.3 and/or bicarbonate concentration < 18 mmol/L

ALL THREE ARE NEEDED FOR A DIAGNOSIS OF DKA

Types of ketone measurement methods³



Studies have shown the superiority of outcomes associated with measuring β -hydroxybutyrate in blood from capillary testing vs measuring acetoacetate using a nitroprusside reaction in urine or serum.⁴

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KEY MESSAGES

- The risk and prevalence of DKA events is much greater in real-world practice than in clinical trial reports.
- The new 2024 American Diabetes Association consensus statement on hyperglycemic crises in adults with diabetes updated diagnostic criteria by reducing their definition of hyperglycemia in recognition of the wider range of glucose levels at presentation with DKA.³
- Remember, any type of ketone testing is better than no ketone testing! Educating your patients on the importance of testing is key!

References: 1. Albanese-O'Neil A, et al. *Diabetes Care*. 2017;40:e38-e39; 2. Heprich M, et al. *BMJ Open Diabetes Res Care*. 2023;11:e003662; 3. Umpierrez GE, et al. *Diabetes Care*. 2024;47:1257-1275; 4. Laffel LM, et al. *Diabet Med*. 2006;23:278-284.