



New Developments in Diabetic Testing

The secret's out. North America is fat. There is growing concern over this new reality and for good reason. With obesity comes a corresponding risk of undiagnosed diabetes. It is estimated there are approximately 16 million people in the United States with diabetes and, of that number, about 45% are undiagnosed and therefore untreated. This problem is likely to get worse unless there is a major change in North American diets. Presently, it is recommended that specific screening for diabetes always be considered if the applicant is either obese, has a first degree relative with diabetes, is hypertensive or has hypertriglyceridemia.

To recognize this very real added risk in the general population, we have changed the upper range of our serum glucose to 110 mg/dL and recommend reflexes to A1c and microalbumin testing on all cases exceeding this limit. Our studies, as well as a recent American Diabetes Association recommendation, prompted this decision. They recommend that every person with serum glucose of 110 mg/dL and higher be screened for diabetes. In addition, due to the failure to centrifuge serum samples in a timely manner after collection, many samples received at the lab may have artificially low glucose values. This can hinder the underwriter's ability to identify the diabetic risk. Finally, it is important to recognize that the mortality associated with diabetes over the last two decades has increased from 2.77 to 4.22 deaths per 100,000 people.

However, we are concerned that even with these changes in our current testing profile we might still be missing some undiagnosed diabetes. Our concern is based on the following:

Fact: In the busy world of specimen collection we recognize that 20-25% of insurance samples are either not centrifuged or are delayed. This action can result in artificially low glucose values. Our data shows that well over half of the hemoglobin A1c positive applicants have normal fructosamine values. More troubling, approximately 28% of hemoglobin A1c positive samples have both normal fructosamine and glucose levels. We believe that the lowering of our serum glucose level will, to a large extent, address this problem. However, it will not entirely remove this risk.