

Chairwoman Kahle, Majority Vice Chair Meerman, Minority Vice Chair Witwer, and members of the House Health Policy Committee. My name is Dr. Barry Sample, and I am the Senior Science Consultant with Quest Diagnostics Employer Solutions. Quest Diagnostics is in support of Senator Vanderewall's Senate Bill 134. This legislation prohibits defrauding an alcohol, drug, or urine screen test and bans the sale and distribution of synthetic urine for that purpose, thereby reducing the opportunity to undermine the integrity of drug testing performed by laboratories. Similar laws are also in place in at least 18 other states.

Quest Diagnostics is the world's leading provider of diagnostic information services and serves one in three adult Americans and half the physicians and hospitals in the United States annually. We are particularly proud of our presence in Michigan, which includes over 800 employees, 5 rapid response labs in Cadillac, Baldwin, Saginaw, Flint, and Dearborn, and 49 patient service centers. With our robust infrastructure in Michigan, and we service over 16,000 physicians and 37 hospitals.

Quest's commitment to Michigan has only strengthened in response to the COVID-19 pandemic. To date, we have already conducted statewide nearly 1,700,000 viral PCR tests.

We have been tracking and reporting the trends in workforce drug testing performed by our network SAMHSA-certified labs –with the Quest Diagnostics Drug Testing Index since 1988. During this time, the overall positivity rate in the Combined U.S. Workforce has gone from a high of about 13.5%, in 1988, to 4.6%, today. Does that mean that drug use by workers is decreasing? – Perhaps, that is part of the story. Our data, as well as government drug use data indicates that applicants and employees of companies with a drug testing program are much less likely to test positive for, or use, drugs – by as much as 50% or more as compared to workers and applicants at companies that do not conduct drug testing. For example, in our data, workers subject to Federally-mandated pre-employment and random testing, have a positivity rate that is almost half that of private-sector workers. The latter are typically subject only to pre-employment tests. Another part of the story, are the products that are designed to help a donor beat a drug test – i.e. **CHEAT**.

These products include substances that a donor consumes in order to dilute or cleanse their urine specimen; products that are added to – i.e., adulterate – a specimen; and, even more insidious, products – devices -- that cannot be easily detected – short of an observed collection. This last group enables a donor to substitute clean, negative urine for their own.

In order to determine if a specimen is real, adulterated, or substituted, laboratories perform a variety of tests to determine specimen validity. As laboratories enhanced their tests for specimen validity, the anti-drug testing industry responded with a continual evolution and sophistication of the products and devices used to defeat the drug testing process. It is a continual "cat and mouse" game; and unfortunately, this industry is developing systems that may be undetectable by laboratories. Over the last 10 years the incidence of the largest type of adulterated specimens has increased 12.5%.

An invalid specimen is one with an adulterant that cannot be identified or one with abnormally low indicators of dilution, or, more recently, indicator of a poorly made synthetic urine product. Over this same 10-year period, the incidence of invalid specimens has doubled – the majority, 73%, of the increase has occurred in the last 5-years.

Synthetic urine has become an increasingly popular means of eluding a positive drug test result. These products are typically comprised of uric acid, creatinine, salts, and coloring – designed to mimic a normal human urine specimen and to pass standard laboratory tests of specimen validity. When combined with innovative delivery systems, they can effectively undermine the integrity of the drug test specimen collection process. Today, synthetic urine can be easily bought in head shops, via online distributors, and in some retail establishments. Quest Diagnostics and other laboratories perform validity testing to help ensure that the drug test specimen is consistent with normal human urine and that it has not been tampered with. However, manufacturers of synthetic urine have responded by adding additional constituents to their products in an effort to defeat these specimen validity tests.

There are two main effects of these invalid specimens. An invalid result usually requires an immediate, observed, in Federal testing programs, recollection of another urine specimen – the associated costs of such second specimens due to invalid results reported by our laboratories would directly cost employers an additional \$1 million annually – not including lost opportunity costs related to the delay in putting someone to work. The more insidious cost is the impact of "buying time" for a donor to clear their system of drugs. In this case the donor would be able to produce a "negative" result on the recollection and be hired. Since, most private-sector employers do not test current employees, this represents a drug user that has been put to work, and who is, thereby, putting him or herself as well as co-workers at risk.

Since the use of the devices employed to provide a "clean" urine specimen is not detectable by laboratory tests of specimen validity, individuals using these products are able to totally circumvent the testing process. Perhaps an indicator of the effectiveness of some of these products is the difference in positivity rates in oral fluid – which is an observed collection – as compared to urine – which is collected in the privacy of the restroom – drug tests. Both oral fluid and urine detect recent drug use. However, oral fluid is generally considered to have a detection window at least 24 hours shorter than urine. Nonetheless, the positivity rate, in General U.S. Workforce testing, for oral fluid drug tests is 30% higher than in urine drug tests (7.3% vs. 5.6%). The differences in positivity rates and the type of collection suggests that the use of products such as synthetic urine are at least partially effective in subverting the drug testing process.

As a scientist who has pursued drug test cheaters, I can tell you how frustrating it is to encounter technology being used to subvert the drug testing process. Prohibiting the sale, distribution and use of synthetic urine and other efforts to undermine the integrity of drug testing in Michigan will help to reduce drug test cheating, reduce costs to business and government, and provides confidence in test results. There is no legitimate use for synthetic urine, other than to cheat a drug test, and there is no reason for it to be available in the marketplace. This bill will help protect the safety of our workplaces, roads, and transit systems, while also driving compliance with probation and parole drug testing and aiding in drug addiction recovery and treatment.

In closing, I would like to leave you with the thoughts of Robert Stephenson, the then Director, Division of Workplace Programs, Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services, during his Congressional testimony in 2005.

To us and our Federal agencies, every one of the adulterated, substituted and invalid tests we see out there represents a potential threat to public safety and national security.

Chairwoman Kahle and members of the committee thank you for your thoughtful consideration of SB 134. We encourage your support of the bill. I would be happy to entertain any questions you may have regarding either my oral or written testimony.

DocuSigned by: K. H. Barry Sample Ph.D. R. H. Barry Sample, PhD

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