

practical and effective ways to ensure the diabetes exemption program satisfies the statutory requirement achieving a level of safety equivalent to, or greater than, the level of safety obtained by complying with the safety regulation. FMCSA believes that the three-year requirement is crucial to this screening and monitoring protocol until data supports a different threshold. The three-year requirement provides sufficient time to expose anomalies in driving records that enhance predictability of future driving performance. It also allows the driver to develop a routine for managing his or her diabetic condition and establish a driving record demonstrating those adaptive skills.

FMCSA based the three-year driving experience requirement on the best available scientific evidence. The previous work the agency performed under its diabetes waiver program in the mid-1990s supports the three-year requirement. Drivers in that program, who had three years of experience while using insulin, had accident rates lower than the national rate. The driving performance of those who met the three-year requirement and other program requirements was analyzed relative to 1993 through 1996 large truck national accident rates found in the National Highway Traffic Safety Administration's General Estimates System. The accident rate of the waiver group with over 9 million miles of driving exposure was 1.960 accidents per million miles versus a national accident rate of 2.272 for the same period.

On August 24, 1994, the agency convened a meeting to conduct a review of the vision waiver program. The diabetes waiver program used the same three-year requirement as the vision program. Agency officials and a variety of researchers in highway safety and vision attended the meeting. (See the Final Descriptive Report "Qualification of Drivers—Vision, Diabetes, Hearing and Epilepsy;" FHWA; DTFH61-92-Z-00158, May 30, 1997). The group discussed both the formation of the waiver program and the design of the associated study. Relative to the design of the waiver program and the enrollment of drivers, it was decided that the program was well conceived within the context of congressional mandate expressed in the Motor Carrier Safety Act of 1984. The group determined that the conditions developed for screening and enrolling drivers into the waiver program were appropriate. To qualify for a vision waiver, a driver had to have an extremely safe driving record for three full years before applying to the

program. The group agreed based on the safety literature that the best predictor of future driving performance is past performance. As a result, the group concluded that the enrolled drivers would be as safe in the waiver program as they were before the program.

Because the FMCSA is required to develop programs that are as safe as or safer than the prevailing norm, the agency believes this is compelling evidence to require the three-year driving experience requirement in its diabetes exemption program. However, the agency will revisit the issue in the future. FMCSA will examine how reducing the three-year experience requirement can be accomplished while satisfying the statutory requirement under 49 U.S.C. 31315 and 31136(e).

FMCSA believes that its medical advisory panel recommendation that persons could be qualified to drive a CMV, after a one-or two-month period of adjustment to insulin use, does not take into account the complex demands of operating a large vehicle in interstate commerce. Diabetes is a chronic disease requiring constant control and monitoring. CMV drivers, however, are frequently required to work long hours and travel significant distances, often requiring overnight stays away from home. Because of economic pressures to arrive at a delivery site on schedule, drivers may often have difficulty maintaining a regular diet, exercise, and the blood sugar monitoring patterns necessary to manage their diabetes properly. Failure to manage diabetes properly significantly increases the likelihood of an adverse event, such as loss of consciousness while driving due to hypoglycemia (low levels of glucose in the blood). Advances in the medical treatment of diabetes do not equal compliance. There is a strong behavioral component in managing diabetes.

With respect to comments urging FMCSA to change the regulations on ITDM and CMV operation, FMCSA does not believe there is evidence to support such a change. In the TEA-21 Report to Congress conducted for this program, the FMCSA could find no precedence for regulatory change for a condition like ITDM. ITDM is a chronic health problem.

Diabetes is a condition that is potentially quite labile, even if an individual demonstrates good control of blood glucose levels at a point in time. The expert medical panel convened for the TEA-21 Report to Congress agreed that diabetics have special medical problems. For this reason, they concurred that diabetics should be examined by endocrinologists who are experienced with the condition. In

relation to monitoring the ITDM driver's management of the condition, the panel suggested, among other things, that quarterly reporting of glucose monitoring data would be a good method of determining whether the driver is following the monitoring guidelines. The panel also agreed that these drivers should receive ongoing education in hypoglycemia awareness, and that this education should be monitored on an annual basis. For this reason, FMCSA believes the evidence supports the requirement that a responsible, qualified driver should undergo periodic examinations. The need for periodic examinations is underscored by the possible occurrence of diabetic complications such as retinal disease and peripheral neuropathy.

FMCSA believes that the periodic examinations, and the monitoring of the examinations, both assure the health of the individual and the safety of the public at large. Consequently, FMCSA has determined that the preferred context in which to guarantee such screening and monitoring is in an exemption program.

IBT was concerned about the driver record requirement that prevents the applicant from obtaining an exemption because of involvement in an accident for which the driver "contributed to the cause." IBT believes this type of assessment is too subjective. However, FMCSA's analysis of the driving record of each individual driver is not subjective. The analysis of the accident report seeks to determine whether the reporting police officer has issued a citation indicating that the driver is at fault or has contributed to the cause of the accident. The analysis also examines the accident report to determine whether there is evidence of driving behavior that could indicate a hypoglycemic event, such as crossing the median, swerving, or driving off the road. In cases where a diabetic driver receives medical attention, reports on glucose levels can be obtained.

The AOA took exception to the exclusion of optometrists from the proposed exemption process. The protocols that were in the proposed program have been revised, today's final disposition notice allows applicants to obtain and submit a signed statement from an ophthalmologist or optometrist, indicating that they have been examined, the applicant does not have diabetic retinopathy, and meets the vision standard at 49 CFR 391.41(b)(10). However, if the driver has any evidence of diabetic retinopathy, FMCSA requires an examination by an ophthalmologist to offer additional expert opinion regarding stability and risk of