

November 5, 2002

OPINION NO. 2002-41

MOTORCYCLES: Helmets that comply with the National Highway Traffic Safety Administration standards can be identified through examination of the mandatory stickers and the construction of the helmet. The Office of the Attorney General recommends that a change be made to the current statutes to make enforcement easier through a graduated system of fines and education to the motorcycle riding public. This change will provide the motorcycle riding public with incentives to ensure that they purchase a helmet that conforms to the safety standards set forth in Nevada and Federal law.

Colonel David Hosmer
Chief, Nevada Highway Patrol
Department of Public Safety
555 Wright Way
Carson City, Nevada 89711

Dear Colonel Hosmer:

You have requested an opinion from this office to assist both Nevada Highway Patrol troopers and the motorcycle riding public in recognizing motorcycle helmets that are legal for use in the State of Nevada.

QUESTION

How can Nevada Highway Patrol troopers recognize a motorcycle helmet that does not comply with the standards set for the State of Nevada?

ANALYSIS

First, Nevada Revised Statute (NRS) 486.231 requires motorcycle riders and passengers to wear helmets that comply with the standards set by the Department of Public Safety (Department). The Department has adopted by reference the standards set by the National Highway Traffic Safety Administration (NHTSA) in 49 C.F.R. §571.218. Nevada Code (NAC) 486.015. Violations of the helmet law are misdemeanor crimes under NRS 486.381.

Statistics concerning the use of proper motorcycle helmets indicate the riders are forty percent more likely to have a fatal accident without a helmet than with a helmet.¹ In addition, in the most traumatic accidents involving head injuries, "it has been shown that the public at large bears a major portion" of the costs of treatment.²

The NHTSA standards require the manufacturer of a helmet to perform certain technical tests to determine the ability of a helmet's shell to withstand puncture and penetration. Additionally, the NHTSA standards require testing to determine whether the chinstrap will remain attached to the helmet and how much of the energy of an impact will be attenuated by the helmet. These tests are required to be performed by the manufacturer, who then self-certifies the helmet by placing a sticker of contrasting color with the letters "DOT" on the back of the helmet. 49 C.F.R. §571.218(S5.6.1)(e).

The absence of the "DOT" sticker is an indicator that the helmet does not comply with the safety standards set out in the regulation. However, a helmet that is missing the "DOT" sticker, but meets the NHTSA standards, may still be legally worn. On the other hand, information provided by the NHTSA indicates that some persons who sell novelty helmets also provide a "DOT" sticker for the purchaser to apply to the nonconforming helmet themselves. These stickers alone do not make the helmet "legal."

Others stickers that may appear on a legal helmet show that the helmet has passed additional scrutiny and has been found to comply with the standards. Private foundations, such as Snell Memorial Foundation (SNELL) and American National Standards institute (ANSI) test helmets and certify that these helmets pass the standards. Legitimate stickers from these bodies can be relied upon to determine that the helmet is in compliance.

The federal standards also require manufacturers of conforming helmets to place a notice on the inside of the helmet, in a place that can be viewed without removing the inside padding. 49 C.F.R. §571.218(S5.6.1)(f). This notice sticker must include information on substances that can compromise the helmet's integrity, such as paints and solvents, and to warn purchasers not to modify the helmet. *Id.* The name of the manufacturer of the helmet must also appear, along with the model designation, size, and month and year of manufacture. 49 C.F.R. § 571.218(S5.6.1)(a-d). The absence of these stickers is a good indication that the helmet does not comply, as they are almost universally inside the helmet and thus less likely to fall off.

Helmets that comply with the NHTSA standards are constructed of a plastic or fiberglass shell to achieve proper protection from penetration and a polystyrene inner liner to absorb the energy of an impact to the head. 49 C.F.R. § 571.218(S5.1)(S5.2). The best way to differentiate between a helmet that complies and one that does not is the presence, or absence, of the material used to attenuate impact in the event of a crash. According to my research, no helmet has passed the required testing without at least a one-inch thickness of polystyrene foam or other impact resistant material.³ Novelty helmets will usually have only an outer shell and some comfort padding. These helmets without the impact absorbing materials do not meet NHTSA standards.

Helmets may not have any rigid projections that extend more than 0.20 inches or 5 millimeters. This allows the helmet to have snap fasteners on the outside, but very little else. 49 C.F.R. § 571.218(S5.5).

The final indicator of compliance is the chinstrap used to hold the helmet on the head. The "retention system" must be able to handle certain loads without separating from the helmet. The fastening system must be easy to engage, but must also stand up to certain loads, as specified in the regulation. 49 C.F.R. § 571.218(S5.3). Retention systems that comply with the standards will have secure rivets that are firmly attached to the helmet. Novelty helmets will have rivets that are loose and do not appear to be secure.

The above stated guidelines, however, only allow troopers and riders to make a preliminary assessment of the helmets. To determine with certainty whether a helmet complies with federal and state safety standards, one must contact the manufacturer of the helmet listed on the sticker inside the helmet and the National Highway Transportation Safety Administration.

The current state of the law makes enforcement and compliance somewhat confusing. Therefore, we suggest that a change to Nevada law be requested to include the following provisions:

A rider wearing a helmet that does not conform to the law will be subject to a small fine.

A rider cited a second time for wearing a non-conforming helmet will be subject to a higher fine.

A rider cited a third time for wearing a non-conforming helmet will be subject to misdemeanor charges.

Establish a presumption of non-conformance if a helmet lacks either of the two stickers required by 49 C.F.R. § 571.218, which may be rebutted by a showing that the helmet conforms to the standards.

Establish a presumption of non-conformance if the helmet lacks impact-absorbing material between the shell and the comfort lining of the helmet as required by 49 C.F.R. § 571.218, which may be rebutted by a showing that the helmet conforms to the standards.

These provisions would provide financial incentives to motorcyclists to ensure that their helmets are in compliance with the laws of this State. They will also put the burden of purchasing a legitimate helmet on the rider, where it belongs. In conjunction with the change in the law, the Nevada Highway patrol could sponsor some sort of advertising of the requirements of safe helmets as outlined in the pamphlets issued by the NHTSA.

CONCLUSION

Helmets that comply with the National Highway Traffic Safety Administration standards can be identified through examination of the mandatory stickers and the construction of the helmet. Furthermore, as more fully explained above, the best way to differentiate between a helmet that complies and one that does not is the presence, or absence, of the material used to attenuate impact in the event of a crash, including a chinstrap. However, the Office of the Attorney General recommends that a change be made to the current statutes through a graduated system of fines and education of the motorcycle riding public, which would also serve to make enforcement easier. These changes will provide the motorcycle riding public with incentives to ensure that they purchase helmets that conform to the safety standards set forth in Nevada and Federal law.

1 "How to Identify Unsafe Motorcycle Helmets" published by the U.S. Department of Transportation, National Highway Transportation Safety Administration, DOT HA 807 880 (reprinted February 2001).

2 Position Statement of the American Academy of Orthopedic Surgeons, December 1985.

3 The standards listed in this opinion come from a variety of sources, but are summarized in "How to Identify Unsafe Motorcycle Helmets" published by the U.S. Department of Transportation, National Highway Transportation Safety Administration, DOT HA 807 880 (reprinted February 2001).