

Winter Maintenance and Road Safety

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This report aims to provide a basis for winter maintenance policy. It consists of three parts:

(1) Analysis of fatal crashes in Norway, 2017-2020 with main focus on 39 crashes with snow/ice as contributing factors: Such crashes are typically head-on collisions on rural two-lane roads, often in curves, and they often involve heavy vehicles. Typical contributing factors are related to tires, inappropriate speed (but not above the speed limit), and lack of experience. Driving under the influence of alcohol and health problems are seldom in such crashes.

(2) Significance of winter maintenance standards: An analysis of nine fatal crashes where snow/ice has been a contributing factor although standard requirements to winter maintenance were met, show that the most critical factors in snow-/ice-related crashes are cycle times and appropriate choice of methods.

(3) Knowledge requirements for developing optimal winter maintenance standards from a socioeconomic perspective: More research is needed about the relationships between winter maintenance, crashes, and speed on Norwegian roads.