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## Memorandum

PHD-C 8-2025

Subject: Warning System Use at Niagara EMS
Date: July 8, 2025
To: Public Health & Social Services Committee
From: Michael Franklin, Commander, Quality Management and Performance Standards, Niagara EMS

This memo provides an update on the progress made by Niagara Emergency Medical Services (EMS) to enhance safety and improve resource utilization by reducing the use of EMS warning systems. Warning systems refers to the use of lights and sirens during emergency responses and patient transports.

Historically, frequent use of these systems was believed to improve patient outcomes by reducing response and transport times. However, research has since shown that limiting their use to only critically necessary situations significantly decreases the risk of ambulance collisions and improves overall outcomes. In response to this evidence, Niagara EMS has adopted an evidence-informed approach to safely reduce the use of warning systems both when responding to emergency calls and when transporting patients. These efforts are designed to protect the safety of staff, patients, and the public, while also improving operational efficiency and reducing costs.

To provide context, earlier EMS models placed a strong emphasis on response times, leading to widespread use of warning systems under the assumption that speed was critical in all cases. In contrast, current research shows:

- A 50% higher risk of collision when lights and sirens are used during responses.
- Nearly triple the risk of collision during patient transport with warning systems.
- Minimal time savings, with an average reduction of only 90 seconds in response or transport time.
- A very small percentage of calls actually requiring time-critical interventions either on-scene or at the hospital.

Over the past six years, Niagara EMS has made meaningful progress in reducing unnecessary warning system use and limiting use to times of critical need. This work will continue through ongoing staff training, system monitoring, and updates to response protocols that further limit unnecessary use.

We remain committed to evidence-based practice and continuous improvement to ensure the highest standard of EMS care for Niagara residents.

Respectfully submitted and signed by

Michael Franklin Commander, Quality Management and Performance Standards, Niagara EMS