

## FROST QUAKE

### A Boom in the Night

*"It sounded like a gunshot!" "I thought there was an explosion!"*

If you've ever heard what sounds like gunshots or fireworks on a cold, winter night, you might have witnessed a phenomenon known as a frost quake. Frost quakes, formally known as cryoseisms, occur when water in the ground freezes and expands, causing the ground to shift suddenly and "crack." This winter, days with temperatures above freezing and nights below zero caused frost quakes throughout Canada and the Midwestern United States. Melting snow from the daytime temperatures froze at night and caused the booms and popping sounds.

While cryoseism is considered seismic activity, it is not deep enough in the earth's crust to register on a Richter scale and typically will not cause structural damage. Although alarming at first, frost

quakes are a rare, natural event few people will experience. Most of the reported frost quake damage tends to be cracks in driveways and sidewalks.



*Photo credit: Charlotte MacPherson-Levesque*

Unfortunately, the cold temperatures that induce frost quakes can also cause frost loading. As the ground freezes, more pressure is put on water mains, which can lead to breaks. Though not as noticeable as the loud frost quakes, frost loading can wreak havoc, especially on fragile, aging water mains. Be prepared for whatever winter sends your way with Ford Meter Box repair clamps. For more information, contact Customer Service or your local Ford distributor.

