Public Experience Submission to the U.S. Department of Health and Human Services

Response to HHS Request for Information: Electromagnetic Fields (EMFs), Radiofrequency (RF) Radiation, and Wireless Radiation Exposure — Docket HHS-OASH-2026-0397

Recurrent location-associated acute symptoms during travel between Strömstad, Sweden and Moss, Norway, with contemporaneous mobile-network modernization and subsequent thyroid dysfunction

Purpose of this submission

This document presents a chronology of reported acute events, objective medical data that followed, and verified public information concerning mobile-network changes along parts of the travel corridor. It is submitted as a request for independent investigation. It does not assume that 5G or other radiofrequency electromagnetic fields (RF-EMF) caused the reported symptoms, skin injury, or thyroid disease. The purpose is to identify a testable temporal and geographic pattern and to specify the records and measurements required to confirm or refute an exposure-related hypothesis.

1. Key background: approximately ten years on the same route before onset

For approximately ten years before the events described below, I regularly drove essentially the same route between my home in Strömstad, Sweden and my workplace in Moss, Norway. I was therefore highly familiar with the road, the locations, and the ordinary conditions along the route. During those years I had not experienced the later pattern of sudden, severe, location-associated illness described below.

This long pre-event period is important. It provides a practical within-person reference period and makes it relevant to determine what changed before the onset in early 2022 - medically, occupationally, environmentally, and technically.

2. Chronology of the acute events

Date / interval	Reported event
4 January 2022, approximately 06:00	While driving to work, approximately five kilometers north of Strömstad in the Hogdal/Högdal area, I suddenly experienced intense pressure across the chest and the sensation that my heart and lungs were not functioning normally. I reduced speed because I felt at risk of losing consciousness. After approximately two kilometers the most acute sensation gradually diminished, although rapid heart rate and breathing difficulty persisted.
5 January 2022	According to my contemporaneous notes, a very similar episode occurred at the same geographic location.
6 January 2022	During a further passage I began paying particular attention to telecommunications installations along the route. At a later antenna/mast passage I experienced another marked reaction with palpitations, breathing difficulty and an intense sensation of heat. I also experienced what I described and recorded as burn injuries/burn-like skin

	injury involving my face, hands and neck following this passage. This skin finding should be treated as a reported clinical observation unless contemporaneous photographs or medical documentation are available to characterize it objectively.
7 January-8 March 2022	During this entire interval I did not experience the sudden sensation of acute, severe illness that had occurred during the earlier episodes. After the Hogdal/Högdal events, I deliberately changed my commute and drove an approximately 30 km longer detour through a forested area in order to avoid Hogdal/Högdal and the route where I had experienced the earlier episodes. According to my observations at the time, there were no telecommunications antenna sites along this forest detour. While using this alternative route, I experienced no symptoms at all. This exposure-reduction/avoidance period is a central observation in my account and should be evaluated against historical antenna-location and network-configuration records rather than assumed to establish causation.
9 March 2022	This was the most severe event in the entire sequence. During the journey to work, I experienced exceptionally severe negative reactions in connection with every telecommunications antenna site I passed along the route. I experienced an extreme cardiovascular reaction and report that my pulse reached approximately 250 beats per minute. By arrival at work I was acutely unwell, with marked cardiovascular and respiratory symptoms. Following this event, I continued to experience an abnormally elevated heart rate, which had not been normal for me before this illness. The approximately 250 bpm figure is my reported value and should be checked against any available ECG, monitor, ambulance, emergency-department, or other contemporaneous medical record.
12-13 March 2022	Further palpitations and breathing difficulty led to emergency contact and medical evaluation, including ECG, blood pressure, oxygen saturation, blood tests and lung investigations as described in my records.
26 March 2022	While driving in Denmark I recorded nausea near power lines and a more severe episode when passing a large telecommunications mast, including high heart rate and abnormal breathing.
31 March-2 April 2022	I received and began using RF/EMF-shielding clothing during this period. Before using this clothing, I had repeatedly experienced what I describe as a sudden sensation of acute, severe illness when travelling by car past certain telecommunications antenna sites. After putting on the shielding clothing, I was able to travel in the same car past antenna sites that had previously been associated

	with those sudden episodes without experiencing the sudden severe illness sensation or other illness symptoms during those passages. I regarded this as a major change in my ability to travel. This is an important within-person observation because the reported symptom change followed a deliberate attempt to reduce perceived RF/EMF exposure while travelling through locations that had previously triggered symptoms. It should be evaluated objectively rather than treated as proof of causation. Any scientific assessment should identify the clothing material and shielding effectiveness by frequency, reconstruct the relevant historical RF environment, and consider blinded/sham testing where medically appropriate.

Primary chronology source: the four contemporaneous event summaries supplied with this submission.

3. Mobile-network changes relevant to the route

Hogdal / E6 north of Strömstad. Tre (Hi3G Access) published historical network-expansion information identifying a new mast in “Hogdal along E6 north of Strömstad.” The publicly identified configuration at that time was U900 and L800 (3G/4G), not a documented 5G configuration. Accordingly, this submission does not claim that the Hogdal site was transmitting 5G on 4-6 January 2022. The site's complete technical history must be obtained from the operator and relevant authorities.

Norwegian portion of the route. Telia Norway's historical 5G rollout record lists Halden, Sarpsborg and Moss among the municipalities included in its 2021 5G expansion. Telenor reported on 10 December 2021 that 5G deployment had accelerated substantially, with a weekly record of 60 5G base stations and a broader modernization of its mobile network. Thus, significant mobile-network modernization along parts of the Norwegian travel corridor immediately preceding the January-March 2022 events is independently documented.

Critical limitation. Municipality-level rollout does not establish the RF exposure at a particular road location or at a particular minute. Site-specific historical records are required before any exposure-response conclusion can be drawn.

4. Thyroid function and objective medical chronology

Pre-2022 baseline. No previously diagnosed hypothyroidism or levothyroxine treatment has been reported before this illness period.

Approximately three days after the 9 March index event, TSH was reportedly approximately 5.4 mIU/L. This is an objective laboratory parameter and should be verified directly from the original laboratory report.

By August 2022, TSH was reportedly approximately 16 mIU/L, and hypothyroidism was diagnosed on 3 August 2022. Levothyroxine treatment was subsequently initiated.

Later autoimmune marker. Thyroid peroxidase antibodies (TPO-Ab) were reportedly 480 kE/L on 15 May 2024. This is compatible with an autoimmune thyroid process such as Hashimoto thyroiditis, but it does not establish when that process began or what initiated it.

Time	Reported finding	Investigative significance
Before 2022	No known diagnosed hypothyroidism; no levothyroxine	Obtain older TSH/FT4 results to establish an objective baseline.
~12 March 2022	TSH ~5.4 mIU/L	Early objective abnormality; verify original laboratory report.

August 2022	TSH ~16 mIU/L; hypothyroidism diagnosed 3 August	Documents progression over several months.
15 May 2024	TPO-Ab 480 kE/L	Supports an autoimmune thyroid component; does not establish trigger.

5. Why the 9 March 2022 event deserves priority

The 9 March episode is the strongest index event in this history because it was described as the most severe event, occurred during the established commute, involved exceptionally severe reported reactions at every telecommunications antenna site passed along the route, and included an extreme cardiovascular reaction with a reported pulse of approximately 250 beats per minute. After this event, I continued to experience an abnormally elevated heart rate. Within days, TSH was reportedly approximately 5.4 mIU/L. These observations do not establish causation, but they define a specific time window in which original cardiac records, technical exposure records and endocrine laboratory data can be compared.

The period from 7 January through 8 March 2022 is particularly important because I report not merely a reduction in the sudden severe illness pattern, but no symptoms at all while I was using an approximately 30 km longer forest detour selected specifically to avoid Hogdal/Högdal. According to my observations, there were no telecommunications antenna sites along that detour. This is directly relevant to HHS's question concerning whether steps to reduce or eliminate perceived exposure were followed by a change in reported health effects. A rigorous investigation should reconstruct the two routes historically and compare antenna locations, technologies, sectors, power/configuration, travel frequency, and other potentially confounding factors.

6. Specific records requested for an independent investigation

Historical base-station records: For each relevant site from Strömstad/Hogdal through Svinesund, Halden, Sarpsborg and Moss: operator, site ID, coordinates, antenna sectors, azimuth, tilt, height, effective radiated power, technologies and bands, and every configuration change from 2020 through March 2022.

5G/NR activation records: Exact date and time, where available, when NR/5G was first activated at each relevant site, including NSA/SA mode, n1/n28/n78 or other bands, and whether dynamic spectrum sharing was used.

Network operational logs: Where legally and technically available: maintenance windows, commissioning, power changes, faults, optimization activity and unusual operating conditions on 4-6 January and 9 March 2022.

Exposure reconstruction: Engineering reconstruction of RF field levels along the actual road route at vehicle height, using historical site configuration rather than today's network configuration.

Medical records: Original emergency records, ECGs, blood pressure, oxygen saturation, laboratory results, thyroid tests and imaging from January-August 2022.

Dermatologic evidence: Any contemporaneous photographs, medical notes or witness observations concerning the reported face, hand and neck burn/burn-like skin injury on 6 January.

Pre-event thyroid baseline: All available TSH, FT4, FT3, TPO-Ab and Tg-Ab results from before 2022 to determine whether thyroid dysfunction was already developing.

Cardiovascular verification: Obtain all available ECGs, telemetry, pulse recordings, ambulance records and emergency-department records from 9 March 2022 and the following period to determine whether the reported approximately 250 bpm heart rate was instrument-recorded, its rhythm classification, duration, and the extent and duration of the subsequent abnormally elevated heart rate.

7. Recommended scientific protocol

Independent engineering team: The RF assessment should be conducted independently of the treating physicians and should document uncertainty and assumptions.

Calibrated RF measurements: Use traceable calibrated equipment, including spectrum-resolved measurements capable of distinguishing relevant cellular bands and technologies.

Blinded provocation testing: If medically appropriate and approved, use randomized double-blind active/sham RF exposure under controlled conditions. Neither the participant nor the person recording outcomes should know exposure status during each trial.

Objective physiologic endpoints: Continuous ECG/heart rate, blood pressure, oxygen saturation and standardized symptom recording; consider additional endpoints only if clinically justified.

Pre-registered analysis: Define primary endpoints, exposure windows and statistical analysis before examining trial outcomes.

Endocrinology review: An endocrinologist should independently reconstruct the thyroid timeline and evaluate common alternative explanations for the TSH progression and autoimmune findings.

8. Evidentiary interpretation

The present material establishes a reported temporal and geographic pattern that can be investigated. It includes two particularly relevant within-person observations: first, a symptom-free period while using an approximately 30 km forest detour selected to avoid Hogdal/Högdal and, according to my observations, telecommunications antenna sites; second, the reported disappearance of passage-associated illness symptoms after I began wearing RF/EMF-shielding clothing on 31 March-2 April 2022, even when travelling past antenna sites that had previously been associated with sudden illness. It also establishes that major mobile-network modernization was occurring in the region during the relevant period and that thyroid laboratory abnormalities were subsequently reported. These observations do not, by themselves, establish that RF-EMF or 5G caused the acute symptoms, reported skin injury, cardiovascular findings, or hypothyroidism.

The strongest way to resolve the question is not to infer exposure from the presence of a mast or from a modern coverage map. It is to obtain the historical configuration of each relevant base station, reconstruct exposure for the precise dates and locations, verify the medical chronology from original records, and, where medically appropriate, test reproducibility under blinded conditions.

9. Public technical sources

Tre / Hi3G Access, historical network-expansion archive: Historical operator posts document network construction and upgrades in and around Strömstad. The Hogdal site was publicly described with U900/L800 at the identified stage; this is not proof of 5G at that site in January 2022.

Telia Norway, 5G rollout history: Lists Halden, Moss and Sarpsborg under 2021 5G deployment.

Telenor Norway, 10 December 2021: Reported that 2021 was the year 5G gained a foothold in Norway and that the company was preparing 50-60 base stations per week for the new technology.

10. Relevance to the HHS Request for Information

This submission is offered from the perspective of an individual reporting a potential adverse health experience. It is particularly responsive to HHS Question 3, including the requested information on the suspected RF/EMF sources, timing and frequency of exposure, reported health effects, timing of symptom onset, medical evaluation, and what occurred after steps were taken to reduce or avoid perceived exposure. The 7 January-8 March 2022 detour period is therefore included prominently: I report that I deliberately avoided Hogdal/Högdal by taking an approximately 30 km longer forest route, observed no telecommunications antenna sites along that route, and experienced no symptoms during that interval. I request that this pattern be treated as a testable observation and evaluated with historical network data and medical records.

Second exposure-reduction observation - shielding clothing (31 March-2 April 2022): I report that after receiving and wearing RF/EMF-shielding clothing, I could again travel by car past telecommunications antenna sites that had previously been associated with sudden severe illness, without experiencing that illness sensation or other symptoms during the passages. Together with the earlier 30 km forest detour period, this provides two reported exposure-avoidance/reduction observations that can be tested against historical network data and, if appropriate, controlled blinded exposure conditions.

11. Closing request

I respectfully request that the chronology be evaluated as an investigable case rather than accepted or rejected on assumption alone. The central questions are technically testable: what RF environment existed at the exact locations and dates, whether the reported acute responses corresponded reproducibly with exposure, and how the objective medical findings developed over time. A credible assessment should preserve both possibilities - that an exposure relationship may be demonstrated, or that careful reconstruction and blinded testing may fail to support it.

Verification note: The acute-event chronology and the 6 January skin-injury description are based on the submitter's records and statements. The TSH, diagnosis and TPO-Ab values should be checked against original laboratory and medical records before formal evidentiary use. Public network-rollout information establishes regional/site-development facts only to the extent stated; site-specific 5G status and historical RF exposure remain to be obtained.

Important submission note: The HHS RFI states that comments become public. Before filing, remove personal identifiers and protected health information that you do not want publicly disclosed. Supporting medical records should be redacted accordingly.