

A CHILD’S EXPERIENCE OF CLASSROOM WIRELESS INFRASTRUCTURE

Documented Wi-Fi symptoms, educational disruption, practical accommodation and questions for independent investigation

Public submission to the U.S. Department of Health and Human Services | Docket HHS-OASH-2026-0397

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THE CHILD	THE PATTERN	THE REQUEST
High-achieving pupil, athlete and elected class prefect	Severe symptoms in specific classrooms; marked changes after interventions	Investigate children’s reported symptoms and create a workable school accommodation pathway

Executive summary

My daughter was an engaged, academically capable child when she began experiencing severe symptoms in her Primary school classroom (5th grade) after changes to the school’s Wi-Fi infrastructure. She reported headaches, stabbing eye pain, brain fog, tingling and exhaustion, finding it difficult to concentrate or complete ordinary schoolwork. The symptoms appeared to vary in the school with location and time spent in affected rooms.

We kept a symptom journal, tried a custom EMF shielding hoodie and made informal observations at home. Her teachers first checked familiar environmental triggers without finding an explanation. Given her medical history, our GP requested a trial of switching off classroom access points, but the school initially declined. After a long, protracted period, when the relevant access point was eventually switched off, we observed that her symptoms disappeared. She performed perfectly in 6th grade. In 7th grade, after moving to secondary school, difficulties of headaches and difficulty concentrating were experienced in two secondary-school rooms where access points remained active – all her other lesson classrooms had them disabled on a schedule according to her timetable. These observations do not independently prove an RF mechanism, but they merit careful investigation.

I ask HHS to support independent research, practical guidance for assessing complaints and a school accommodation process that does not require families to establish a disputed biological mechanism before reasonable adjustments can be considered. How the US handles this is important for the rest of the world.

There is also a wider policy gap. Governments are reconsidering smartphones, social media and screen-based learning, yet the wireless equipment installed in classrooms often remains outside that debate. Reducing screen use does not necessarily change the RF environment. That distinction deserves attention.

Meet the pupil behind the case (RFI Questions 2, 3, 11)

My daughter is an Irish secondary-school pupil in her early teens. She enjoys athletics and team sports, field hockey and basketball, has received school awards and takes part in pupil leadership. She wants to be a teacher just as her mother did at her age. She is academically capable, socially engaged and comfortable using digital technology, We are not anti-technology, she is in a digital school, owns her own iPhone and is uses social media to communicate with her friends in a responsible and balanced way, without any difficulties.

This background helps explain the contrast with the period of symptoms. Academic or sporting success is not a test of whether another child’s health concerns deserve attention.



Figure 1. Family-supplied photograph showing regional and national sporting medals and trophies.

A two-school chronology: what happened and when

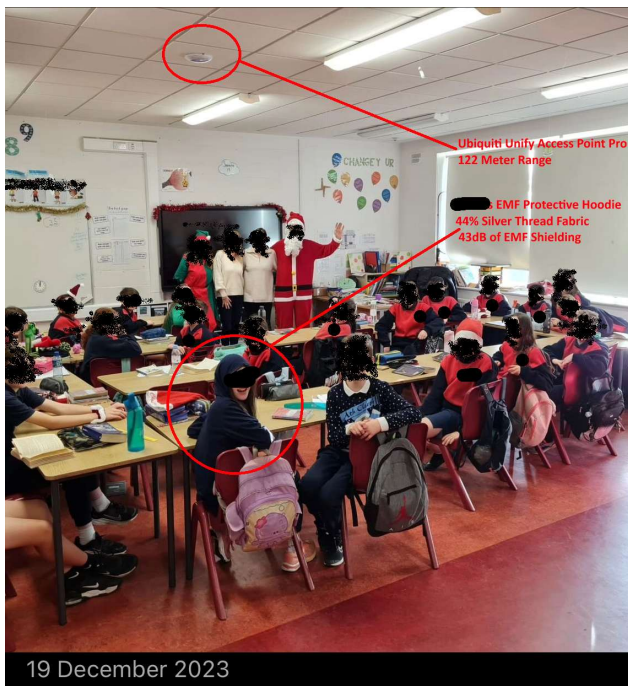
Period	Observation / action	Why it matters
Summer–autumn 2023	<p>Primary school installed new enterprise grade Wi-Fi access points in classrooms.</p> <p>Previously access points had been in hallways. The family reports severe symptoms beginning during fifth class.</p>	Infrastructure change preceded the reported pattern; other changes must also be considered.

Autumn 2023 – Sept, Oct, Nov	<p>Headaches, brain fog, eye pain, tingling, fatigue and difficulty concentrating accumulated during class. She was often better in corridors, outdoors, during breaks and in her mother’s SEN classroom which had no access point.</p> <p>Teachers investigated allergens, fragrances and cleaning products without identifying an explanation. The family GP requested a trial of switching off classroom access points, which the school initially declined.</p>	Repeated spatial and temporal contrast.
5–7 Dec 2023	Child completed contemporaneous 0–10 symptom journal repeatedly during the school day.	Record made before later advocacy documents.
8 Dec 2023	Custom-made EMF-shielding hoodie in school colours introduced; journal marked “Hood started”.	Practical intervention intended to preserve attendance and reduce stigma.
11–14 Dec 2023	Later journal pages substantially less marked than pre-hoodie pages.	Strong observational contrast, not a blinded test.
Following months	<p>Further school discussions and legal correspondence followed.</p> <p>Relevant in-class access point eventually switched off/removed; family reports that classroom symptoms disappeared promptly, with sustained recovery in participation and academic functioning.</p>	<p>Obvious alternatives were considered first; a medically supported, reversible trial was initially declined.</p> <p>Marked before-and-after observation; not a controlled RF causation test.</p>
Secondary School 2025–26	Most classroom access points disabled or adjusted while connectivity remained available from other rooms. Two rooms retained in-room APs during lessons; headaches were reported there.	A more selective room-by-room pattern. Excellent cooperation with this private school.
Summer 2026	<p>Five Distinctions (A-Grades);</p> <p>Irish Language 40% and Business 53% were the conspicuous outliers.</p>	Symptoms in those rooms were reported through the year before exam results, but grades alone cannot identify cause.
Autumn 2026	Family reports she is now thriving in all subjects without the earlier symptoms after further classroom AP disabling; Recently elected class prefect.	Current functioning and practical feasibility of accommodation.

The EMF protective hoodie and the symptom journal

We commissioned a custom-made hoodie in school colours because we were trying to keep our daughter in ordinary education without making her stand out. It was not a casual purchase. By that point, the symptoms were disrupting her school day and the family was looking for any practical way to help her remain in class. The supplier described the fabric as RF shielding, but we have no independent measurement of its effectiveness in the classroom or of her absorbed RF dose.

Her eight-page symptom journal recorded symptoms on a 0–10 scale in December 2023. Entries from 5–7 December describe headaches, eye pain, tingling and cognitive difficulties. On 8 December she wrote “Hood started”. Later pages contain fewer entries. This is a contemporaneous observation, not a blinded test of the garment. Supporting evidence is provided in the appendices.



The family and school response

When symptoms emerged, her teachers first investigated familiar classroom triggers, including food allergens, fragrances and cleaning products, but did not identify an explanation. Given our daughter's medical history, our GP asked the school to trial switching off the classroom Wi-Fi access points. The school initially abruptly declined and immediately closed the case without resolution. We continued to request a practical trial, and the process became prolonged and distressing, involving difficult exchanges with management, GP support, eventually requiring legal correspondence from us and a school referral to child-protection authorities, who shortly afterwards closed their case. This is our account of events, not an independent finding of wrongdoing by the school.

When the relevant classroom access point was eventually disabled, our daughter's symptoms disappeared and she returned fully to normal. The contrast was immediate and striking: the headaches, eye pain and cognitive difficulties that had disrupted her school day were no longer occurring in that classroom. Her concentration, participation and wellbeing recovered, and she returned to normal school and sporting activities. We regard the access-point change as decisive in her experience, while recognising that an uncontrolled before-and-after observation does not by itself establish an RF biological mechanism or rule out every other explanation.

Her later secondary-school experience shows that accommodation need not mean abandoning technology. The school has maintained digital learning while making room-specific changes. The practical lesson is to assess, trial an adjustment and review the outcome.

The examination contrast: a clue, not a verdict

Reported summer exam result	Context
Five Distinctions (A-Grades)	Overall strong first-year performance.
English and German: Distinctions (A-Grades)	Language attainment remained strong elsewhere.
Irish: 40%; Business: 53%	The two conspicuous outliers; headaches had been reported in these classrooms, where in-room APs remained operating.

These summer exam results from May 2026 are not a causal experiment. Their relevance is that the family had already raised symptoms in the two rooms before the results were known. The educational consequences deserve investigation rather than an assumption that the pupil simply lacked ability.

Separating the RF question from other exposures

Our daughter has separately documented sensitivities to certain foods and fragrances. When her classroom symptoms began in September 2023, her teachers investigated the obvious potential triggers first, including food allergens (peas and beans), fragrances and cleaning products, without finding an explanation. None of these environmental factors had changed from prior years. Our family also considered ventilation and lighting, and these did not explain or change symptoms. Only after those initial checks did we focus on the changed wireless infrastructure. These were practical investigations and observations, not comprehensive clinical or calibrated environmental tests, albeit that we did test signal strength at the classroom desk and in other school rooms.

We also made observations at home having purchased the exact same model wireless access-point equipment for test purposes, looking at whether symptoms varied when the equipment was operating. Those observations, while blinded, were not clinically controlled. She did not experience these symptoms at home, as our Wi-Fi router in our 2,600sqft home was positioned well away from core living and sleeping spaces with adequate service signal.

Biological research questions, without overstating conclusions (RFI 12, 16)

Mast-cell activation and inflammatory pathways

Mast cells release mediators involved in allergic and inflammatory responses. Research has proposed that mast-cell activity and neuroimmune signalling might be relevant to some reported environmental sensitivities. Dr. Laurance Afrin has stated that many of his MCAS patients have EMF sensitivities. Our daughter’s separate food and fragrance reactions make this a question of interest, but they do not establish that Wi-Fi activated mast cells or caused her classroom symptoms. HHS could support clinician-led studies using validated outcomes and carefully characterised exposures. It’s possible that different immune systems trigger dependent upon frequencies, power, and/or pulsation characteristics of Wi-Fi signals.

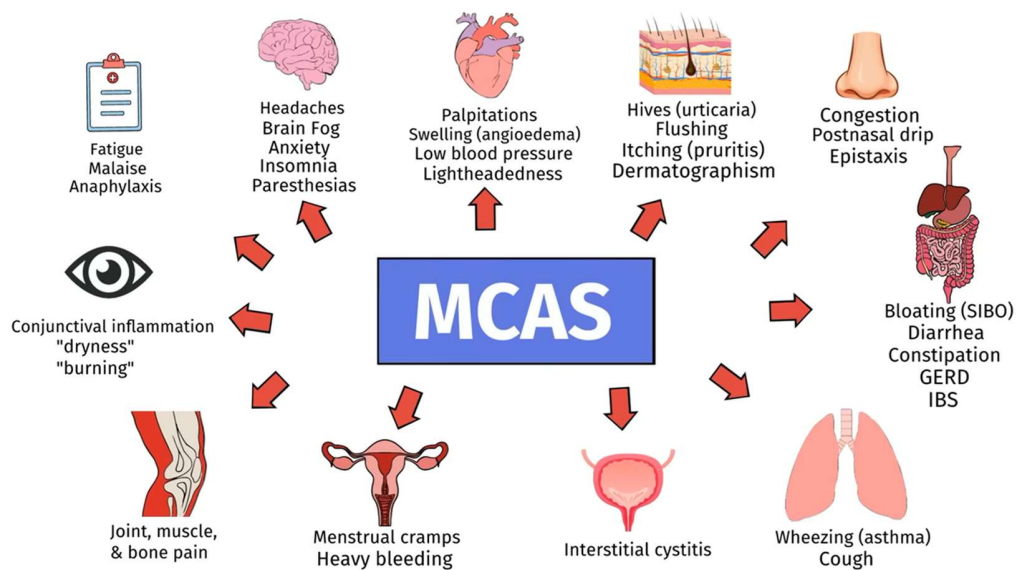


Figure 3: MCAS can affect multiple body systems. This educational slide illustrates how mast-cell activation can involve neurological, skin, respiratory, cardiovascular, gastrointestinal, eye and systemic symptoms, which helps explain why a child may present with headaches, brain fog, tingling, hives, throat irritation, fatigue and allergic-type symptoms together rather than as separate unrelated complaints. Source: MCAS explainer video, approx. 9:44.

Mast Cells Are Hyperactivated

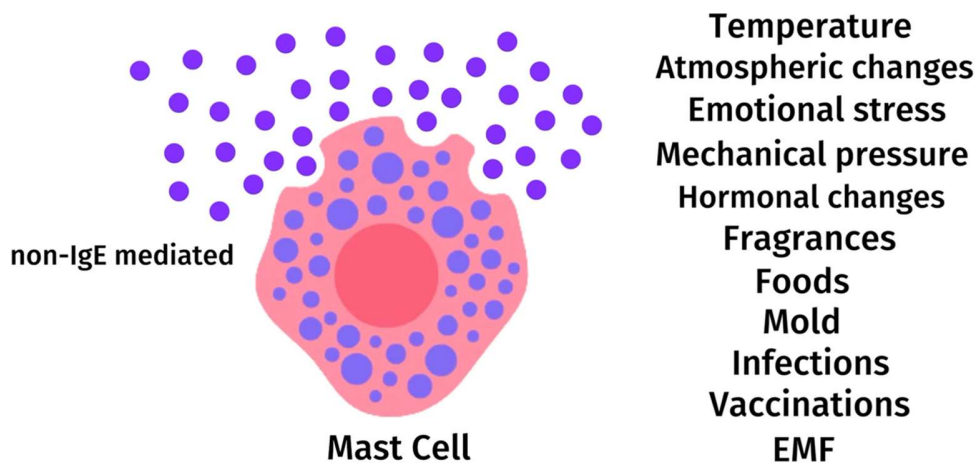


Figure 4: MCAS trigger-load illustration. This slide lists multiple possible mast-cell triggers, including fragrances, foods, mould, infections, stress, mechanical pressure and EMFs. This is relevant to this case because her symptoms appear to sit across several environmental trigger categories rather than one simple food-allergy pathway. Source: MCAS explainer video, approx. 38:00.

Oxidative stress, calcium-ion signalling & red blood cells

Laboratory studies have examined oxidative stress and changes in calcium-ion signalling following certain RF exposures. Pall (2013), for example, proposed a voltage-gated calcium-channel mechanism. These findings are not conclusively investigated and cannot simply be applied to ordinary classroom Wi-Fi or to our daughter's experience. Independent replication, realistic exposure conditions and sound measurement are essential.

Red blood cells can sometimes form coin-like stacks called rouleaux. Their formation depends on several factors, including plasma proteins and blood conditions. Some experimental and theoretical work has explored whether electromagnetic fields affect red blood cell behaviour, but there is no established evidence that ordinary classroom Wi-Fi causes clinically significant rouleaux in children. We include this only as a possible research question, not as a finding in our daughter's case. Any study would need blinded analysis, suitable controls and realistic exposure measurements.

Precautionary Measures

France's Law No. 2015-136 includes restrictions on Wi-Fi in spaces for children under three and provides for wireless equipment in primary classrooms to be switched off when not being used for digital teaching. This is a specific operational precaution, not a nationwide prohibition on school Wi-Fi or a finding of proven injury.

Cyprus also issued education guidance in 2017 concerning wireless use in younger school settings, including limiting use when it was not required. The available copy is hosted by a third party, so its exact scope and current status should not be overstated. Together with the French example, it shows that some education authorities have considered wireless infrastructure separately from screen time.

Proposed HHS school protocol (RFI 8–11, 16–18)

Receive: Record the school/pupil report without presuming either causation or fabrication.

Assess: Document functional impact and seek appropriate clinical input.

Measure: Characterise classroom RF levels and duty cycles, alongside ventilation, fragrance, light, temperature and other plausible exposures.

Trial: Where feasible, consider AP relocation/scheduling, wired connections or seating changes without treating accommodation as an admission of causation.

Review: Track symptoms and attendance against interventions; protect confidentiality and avoid retaliation.

Research: Offer properly consented, ethically reviewed blinded RF/sham protocols for suitable volunteers; do not expose children to harmful conditions merely to prove a point.

Specific requests to HHS

- Publish a model protocol for school environmental-health complaints, coordinated with education/disability agencies.
- Fund rigorous, preregistered RF/sham studies with calibrated dosimetry, appropriate controls and independent replication, including carefully characterised symptomatic volunteers.
- Improve measurement of actual multi-source exposure in modern classrooms and document feasible exposure-reduction strategies.
- Commission balanced reviews of candidate biological mechanisms, including calcium signalling, oxidative stress, autonomic and immune pathways, with explicit grading of study quality.
- Clarify that practical accommodation can be considered without a school or family first proving RF causation; consider Section 504 procedures as one U.S. route where disability criteria apply.

The infrastructure change: Wi-Fi was already present

Before the summer 2023 upgrade, the school provided classroom connectivity through access points in corridors, and our daughter had not experienced comparable symptoms. During the summer, enterprise Wi-Fi access points were installed inside classrooms, including a ceiling-mounted unit near where pupils spent most of the day. This equipment has a 122m range, placed 3 to 6 meters away from the heads of students. Her symptoms began after the change and were most pronounced in certain rooms where the access points were directly above their heads or in very close proximity. The family reports improvement after the relevant classroom unit was disabled.

The installation was not formally communicated to parents or teaching staff, to our knowledge, and many teachers did not recognise the ceiling devices as Wi-Fi access points. We learned of the change because my wife worked in the school and heard about it informally from a concerned colleague. I had a science degree and extensive director level IT experience, including early systems administration experience. Families should not need this combination of access and expertise to identify changes to a classroom or request an investigation when symptoms arise.

At secondary school, Wi-Fi remains available from nearby areas and digital learning continues. The family reports sustained relief when in-room access points were switched off during her lessons. This arrangement suggests that a practical adjustment can preserve both connectivity and participation.



Figure 5. Family-supplied classroom photograph dated 19 December 2023. The annotation identifies a ceiling-mounted access point and the pupil wearing a protective hoodie. Faces obscured.

Wi-Fi uses intermittent packets rather than a constant, unchanging signal. The timing and intensity of transmissions vary with network traffic, equipment settings and connected devices. HHS should examine whether real classroom assessments adequately capture duty cycle, brief peaks, channel occupancy, frequency band and simultaneous sources, alongside average exposure. A phone Wi-Fi analyser's received-signal reading (RSSI) is not a measurement of absorbed dose, and neither an observed signal level nor a temporal association establishes a health threshold or individual biological nuances.

The family reports that symptoms were more likely in settings where a consumer Wi-Fi analyser displayed received signal strengths of approximately -35dBm to -60 dBm, with better tolerance reported at weaker received levels. These are rounded observations, not a calibrated absorbed-dose measurement, a controlled exposure-response curve or a clinical threshold. Signal readings depend on receiver, position, band, orientation and traffic. They should be treated as leads for professional dosimetry.

Wi-Fi uses packets and time-varying radiofrequency transmissions. Research should characterise not only average field strength but also peak levels, modulation, duty cycle, channel occupancy, frequency band, multiple simultaneous sources, and duration. "Pulsed RF" is a useful description of temporal emissions; it is not, by itself, evidence that pulsing causes the reported symptoms.

Individual susceptibility: dose and response

A foundational principle of toxicology is that "the dose makes the poison," but RF is a physical exposure, not a chemical poison, and received Wi-Fi signal strength is not equivalent to absorbed dose. Responses to environmental exposures can vary between individuals. Whether reproducible RF-specific susceptibility exists at ordinary school exposure levels remains unresolved and requires controlled investigation.

The fact that most pupils in a room report no reported symptoms should not automatically invalidate a child's documented functional difficulties. Our son who is currently in the same primary school experiences none of the same difficulties as our daughter, despite being exposed to the exact same equipment in the classroom.

Equally, an apparent improvement after an intervention cannot, on its own, determine mechanism. HHS should investigate potential individual differences through blinded RF/sham studies, calibrated dosimetry, prespecified endpoints, objective measurements and appropriate assessment of other exposures, medical history and immune thresholds.

An additional consideration in research involving people who report electromagnetic hypersensitivity or other environmental intolerances is the possibility of **volunteer selection bias, underreporting and social stigma**. Individuals who have previously experienced severe or distressing symptoms may understandably be reluctant to participate in studies requiring deliberate exposure to a suspected trigger. This is also familiar in food-allergy research, where some patients are unwilling to repeat an oral food challenge following an unpleasant experience.

Equally important is the stigma surrounding electromagnetic hypersensitivity. Individuals may fear being dismissed as irrational, labelled conspiracy theorists or ridiculed as wearing a "tin-foil hat" and the "it's all in their head" claim. During our efforts to address our daughter's difficulties in 2023, we encountered numerous individuals who privately described their own experiences of suspected electromagnetic sensitivity, including headaches during mobile phone calls, discomfort associated with electronic wearables and wrist or joint symptoms they associated with prolonged device use. Several expressed support for our efforts but were unwilling to provide testimony to the school, citing concerns about professional reputation, business relationships or potential consequences for their employment, particularly among those working in the technology sector. These were personal accounts, not independently verified evidence of electromagnetic causation, but the reluctance to speak publicly was striking. It raises an important question about how many people experiencing unexplained symptoms remain invisible to

researchers because they fear ridicule, professional repercussions or deliberate re-exposure. **Studies relying on self-identification or voluntary participation may therefore underrepresent certain affected populations,** particularly those reporting severe symptoms or concerned about disclosure. The extent of this potential bias remains uncertain, but it deserves explicit consideration in research design, recruitment and interpretation.

Recognising Symptoms in Children Who Cannot Easily Explain Them

Children, and many adults, do not always recognise or understand the physical symptoms they experience. This can be particularly relevant for some autistic pupils, who may have difficulties with interoception, the ability to recognise and interpret internal bodily sensations, or with communicating discomfort. For example, a person experiencing tingling or irritation after eating oranges may assume that everyone experiences the same sensation, without realising it could indicate an allergic reaction. The total cumulative immune stress load and impact of immune stressors, including fragrance chemicals from diffusers, scented candles, washing detergent scent boosters, or just poor ventilation can be overlooked, but easily fixed.

Similarly, a child experiencing headaches, fatigue, tingling or cognitive difficulties in a classroom may not recognise that something is wrong, much less identify a possible environmental trigger. Instead, their discomfort may manifest as distress, withdrawal, struggles going to school, poor concentration or behavioural difficulties. This does not establish that Wi-Fi causes such symptoms or that an immune response is involved, but it highlights why unexplained difficulties should prompt a broader environmental assessment rather than being attributed automatically to anxiety, behaviour or a child's underlying condition. A child should not have to understand or explain the cause of their symptoms before adults take steps to investigate them.

More connected environments and school procurement

Children encounter wireless equipment at home and school, including routers, tablets, phones, laptops, wearables, smart TV's, smart lighting, ovens, smart meters, and Bluetooth devices. Sources differ considerably in frequency, power, distance and operating pattern. The cumulative health effects and cumulative biological stress load of ordinary combined exposures cannot be inferred simply by counting devices; any research must measure the actual conditions and the greater strength and RF absorption rates and biological effect of more modern equipment in a modern daily world.

Schools need reliable networks, but decisions to add access points should be based on independent assessment of actual needs. Connectivity problems may result from configuration, capacity, filtering or broadband limitations. Procurement guidance should consider wired alternatives, equipment placement and switching off unused access points without implying misconduct by suppliers.

Academic results in context

In her first year of secondary school, our daughter achieved five Distinctions, including English and German. Irish (40%) and Business Studies (53%) were lower results. The family had previously reported headaches in the two classrooms concerned, where access points reportedly remained active. The marks alone cannot establish a cause, and other educational or health factors may have contributed.

Subject or group	Recorded result	U.S. reader's note
English	Distinction	A-grade
German	Distinction	A-grade
Three other subjects	Distinction (each)	A-grade
Irish Language	40%	Extreme outlier - Wi-Fi Active
Business Studies	53%	Extreme outlier - Wi-Fi Active

The international reconsideration of children's digital environments

Governments are reconsidering the place of personal devices and screens in children's lives. Sweden has invested in printed textbooks and less screen use in early education. France, Denmark and England have pursued school phone restrictions, while Australia has restricted social-media accounts for children under 16. These policies differ in purpose and do not imply that governments have concluded classroom Wi-Fi causes illness.

The debate concerns attention, learning, sleep and wellbeing. But it rarely asks what happens to the wireless infrastructure when a school puts phones away or returns to textbooks.

A phone-free classroom can still have ceiling-mounted Wi-Fi access points operating throughout the day. Screen use, online content and RF exposure are distinct questions. The last should not be overlooked merely because the first two are receiving greater attention.

Educational achievement, PISA and the limits of inference

The OECD's Programme for International Student Assessment (PISA) tests the reading, mathematics and science skills of 15-year-olds. It does not measure IQ. Between 2018 and 2022, average scores across OECD countries fell by nearly 15 points in mathematics and about 10 points in reading. The pandemic and other educational factors are relevant; these results provide no evidence that Wi-Fi exposure caused the decline, but nor did it examine Wi-Fi or EMF's at all.

In our daughter's case, a PISA test for mathematical work would have scored ridiculously low in that period in 2023, yet give a vastly improved score today – when placed in the correct environment. This is one illustration of the importance of assessing a child's ability to learn, not proof of a particular cause.

Research should distinguish digital distraction, educational practice and other influences from any measurable association with the wireless environment.

The overlooked RF architecture and the body's electrical signalling

Nerves, the heart and other body systems, including cellular activity rely on electrical and electrochemical activity. That is established physiology. It does not follow that ordinary classroom Wi-Fi disrupts these processes or caused our daughter's symptoms, but it's not a difficult leap to take. Whether specific RF exposure patterns produce

reproducible effects in susceptible individuals remains a research question, but was very reliably reproducible in this case.

At Wi-Fi frequencies, RF exposure limits are based principally on established heating-related effects, although guideline bodies also review proposed non-thermal effects. Ireland's occupational EMF rules recognise thermal and non-thermal effects and define the scope of established short-term protections, based upon international standards. They apply to workers, not pupils, and do not establish that classroom Wi-Fi causes injury.

Wi-Fi transmissions vary over time. HHS should consider whether studies with calibrated measurements, appropriate controls and blinded comparisons can clarify reported symptoms. A phone's Wi-Fi signal reading is not a measure of absorbed RF dose.

HHS should review proposed mechanisms, including calcium signalling, oxidative stress, red blood cell aggregation or rouleaux, autonomic effects, mast-cell and other immune responses, including the wide range of mast cell mediators:

- Histamine: Causes immediate blood vessel dilation, itching, and swelling.
- Proteases (Tryptase, Chymase): Break down tissue matrices and alter local proteins.
- Heparin: An anticoagulant that alters local blood flow.
- Leukotrienes (e.g., LTC4): Powerful bronchoconstrictors (tighten airways).
- Prostaglandins (e.g., PGD2): Induce pain, mucus production, and attract other immune cells.
- Platelet-Activating Factor (PAF): Aggregates platelets and amplifies inflammation.
- TNF-alpha, IL-4, IL-5, IL-13: Highly diverse signaling proteins that recruit other white blood cells, causing prolonged, systemic inflammation and tissue remodeling.

The review should distinguish experimental observations from independently replicated human findings. None is established as the explanation for our daughter's symptoms, albeit that Dr. Laurence Afrin states that the best way to resolve a mast cell episode is to remove, prevent or reduce exposure to the immune insult itself.

Evidence and policy questions for HHS

HHS should review proposed mechanisms, including calcium signalling, oxidative stress and immune or autonomic responses, with particular attention to study quality and independently replicated human findings. None has been established as the explanation for this case.

International examples may inform proportionate school practices, but the scope and current status of individual policies should be checked against official texts before drawing comparisons.

HHS should also examine how schools respond when a child reports symptoms near fixed RF infrastructure. Practical adjustments should be available for consideration while the cause is investigated, without requiring the school to accept a disputed mechanism, accept liability, or the family to establish it conclusively in advance.

Proportionate precaution, public awareness and independent assessment

HHS could provide clear guidance on how to investigate symptoms reported in particular classrooms, including when professional RF measurements may be useful and why ordinary Wi-Fi analyser readings do not measure absorbed dose. Guidance should also explain how to document and test other plausible exposures, recognising that families may already have investigated them.

Children have little choice about their classroom environment. Schools should be able to consider wired connections, access-point location and scheduling, and reversible adjustments that preserve access to learning. Staff and parents should also be informed when wireless infrastructure is materially changed.

HHS could provide clear guidance on how to investigate reports of symptoms, including when professional RF measurements may be useful and why ordinary Wi-Fi analyser readings are not a measure of absorbed dose. Other possible contributors, such as ventilation, lighting and fragrances, should be considered at the same time.

Guidance should take symptoms seriously without assuming that RF is the cause. Families should be encouraged to seek appropriate clinical advice, and schools should be supported in testing practical adjustments fairly.

Independent research requires transparent funding, disclosure of conflicts, preregistered methods and publication of results, including findings that do not support an RF effect.

Appendix A: Complete contemporaneous symptom journal — eight pages

The eight contemporaneous symptom-journal pages are reproduced in their original order. The printed name and adjacent identifying heading have been permanently redacted in the image data; the symptom entries are preserved.

Journal page 1 of 8

05/12/2023

0 to 10 Scale (0 = No Symptoms, Feel Well. 10 = Worst I've Ever Felt in School. Blank, Same as Previous Value)

Pe
De
start of
Day

	08:50	09:00	09:10	09:20	09:30	09:40	09:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	
Headache							2	4	4.5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Brain Fog							0	3	4	4.2	4.8					2	3	5	6	6.8	7	7.3	7.7	7.8	8	8.2	8.7													
Eye Pain																																								
Left Eye																																								
Right Eye																																								
Tingling																																								
Head																																								
Arms																																								
Back																																								
Legs																																								
Muscle Pain																																								
in Hand(s)																																								
Other																																								

Other Notes: Told the teacher?

Little Break: Classroom 10:10, Outdoors 10:50

Big Break: Classroom 12:41, Outdoors 1:20

Reported to Teacher: Yes/No

DIZY 12:40

Original journal page 1; printed name redacted. Handwritten content preserved.

6/12/23 AoiFe
Con lon

[Redacted Name]

Home Symptom and/or Symptom Calendar

06/12/2023

0 to 10 Scale (0 = No Symptoms, Feel Well. 10 = Worst I've Ever Felt in School. Blank, Same as Previous Value)

	08:50	09:00	09:10	09:20	09:30	09:40	09:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10		
Headache	0	1	3	1	8	2	5	3	3	4	4	7	5	5	4	exp + lunch	2	4	0	5	8			8	3	yard	2	3	play	4	8	5	3								
Brain Fog	0	1	5	2	2	8	3	4	5	5	4	5	7				2	5	5	6	2	3		8	5		2	3	4		4	7	5	2							
Eye Pain																																									
Left Eye	0	0	0	1	1	8	1	9	1	9	2	2	2				0	1	1	1	3		5	5																	
Right Eye	0	0	0	0	0	0	0	0	0	0	1						0	1	1	1	3		5	5																	
Tingling																																									
Head	0	0	1	1	8	2	2	7	2	9	2	9	3	5	3	5																									
Arms	0	0	0	1	4	1	4	1	6	1	8	1	8	2	2	7																									
Back	0	0	0	0	0	0	0	0	0	0	0	0	0																												
Legs	0	0	0	1	2	2	7	2	7	2	7	3	3	5																											
Muscle Pain																																									
in Hand(s)	0	0	0	0	1	3	2	3	3	3	3	5																													
Other	0	0	0	0	0	0	0	0	0	0	0																														

Little Break Classroom ☒ Outdoors ☒
Big Break Classroom ☒ Outdoors ☒
Reported to Teacher Yes ☒ No ☐

Other Notes

(2nd YARD was awful!!)
my hand wasn't holding it
and I was holding it
my eye would be done!

Journal page 3 of 8

07/12/2023

0 to 10 Scale (0 = No Symptoms, Feel Well. 10 = Worst I've Ever Felt in School. Blank, Same as Previous Value)

	08:50	09:00	09:10	09:20	09:30	09:40	09:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10				
Headache	0	1					1.8	2	2.7	3.4																																	
Brain Fog	0	1.3					2	2.5	2.8	3.7																																	
Eye Pain																																											
Left Eye	0	0					0	1	1.3	1.3																																	
Right Eye	0	0					0	1	1.3	1.3																																	
Tingling																																											
Head	0	1					1.7	2	2.3	2.7																																	
Arms	0	0					0	1	1.3	1.5																																	
Back	0	0					0	0	0	0																																	
Legs	0	0					0	1	1.6	1.6																																	
Muscle Pain in Hand(s)	0	1					1.7	2	2.3	2.7																																	
Other	0	0					0	0	0	0																																	
Activity																																											
Little Break		Classroom																																									
Big Break		Classroom																																									
Reported to Teacher		Yes																																									
Other Notes																																											

Library/Boat Maths

9:00 Rguring who in library + chairs

9:20 Moving to 300 chairs

Original journal page 3; printed name redacted. Handwritten content preserved.

08/12/2023

0 to 10 Scale (0 = No Symptoms, Feel Well. 10 = Worst I've Ever Felt in School. Blank, Same as Previous Value)

	08:50	09:00	09:10	09:20	09:30	09:40	09:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10			
Headache			1	0.5	0	0.5	0	0.3	0																																	
Brain Fog			0.5	0.2	0	0	0	0.2	0																																	
Eye Pain																																										
Left Eye			0	0	0	0	0	0	0																																	
Right Eye			0	0	0	0	0	0	0																																	
Tingling																																										
Head			0	0	0	0	0	0	0																																	
Arms			0	0	0	0	0	0	0																																	
Back			0	0	0	0	0	0	0																																	
Legs			0	0	0	0	0	0	0																																	
Muscle Pain																																										
in Hand(s)			0	0	0	0	0	0	0																																	
Other			0	0	0	0	0	0	0																																	
Little Break																																										
Big Break																																										
Reported to Teacher																																										

Move chairs

Homework

Other Notes

as start when high my hood wasn't on right

Original journal page 4; printed name redacted. Handwritten content preserved.

11/12/2023

0 to 10 Scale (0 = No Symptoms, Feel Well. 10 = Worst I've Ever Felt in School. Blank, Same as Previous Value)

	08:50	09:00	09:10	09:20	09:30	09:40	09:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	
Headache	0																																							
Brain Fog	0																																							
Eye Pain																																								
Left Eye	0																																							
Right Eye	0																																							
Tingling																																								
Head	0																																							
Arms	0																																							
Back	0																																							
Legs	0																																							
Muscle Pain in Hand(s)	0																																							
Other	0																																							

Activity

Little Break

Classroom

Outdoors

Big Break

Classroom

Outdoors

Reported to Teacher

Yes

No

Other Notes

12/12/2023

0 to 10 Scale (0 = No Symptoms, Feel Well. 10 = Worst I've Ever Felt in School. Blank, Same as Previous Value)

	08:50	09:00	09:10	09:20	09:30	09:40	09:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10		
Headache	☐																																								
Brain Fog	☐																																								
Eye Pain																																									
Left Eye	☐																																								
Right Eye	☐																																								
Tingling																																									
Head	☐																																								
Arms	☐																																								
Back	☐																																								
Legs	☐																																								
Muscle Pain in Hand(s)	☐																																								
Other	☐																																								

Activity

Little Break

Classroom

Outdoors

Big Break

Classroom

Outdoors

Reported to Teacher

Yes

No

Other Notes

13/12/2023

0 to 10 Scale (0 = No Symptoms, Feel Well. 10 = Worst I've Ever Felt in School. Blank, Same as Previous Value)

	08:50	09:00	09:10	09:20	09:30	09:40	09:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	
Headache	0	0																																						
Brain Fog	0	0																																						
Eye Pain																																								
Left Eye	0	0																																						
Right Eye	0	0																																						
Tingling																																								
Head	0	0																																						
Arms	0	0																																						
Back	0	0																																						
Legs	0	0																																						
Muscle Pain in Hand(s)	0	0																																						
Other	0	0																																						

Activity

Little Break

Classroom

Outdoors

✓

Big Break

Classroom

Outdoors

✓

Reported to Teacher

Yes

No

Other Notes

14/12/2023

0 to 10 Scale (0 = No Symptoms, Feel Well. 10 = Worst I've Ever Felt in School. Blank, Same as Previous Value)

	08:50	09:00	09:10	09:20	09:30	09:40	09:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	
Headache	0																																							
Brain Fog	0																																							
Eye Pain																																								
Left Eye	0																																							
Right Eye	0																																							
Tingling																																								
Head	0																																							
Arms	0																																							
Back	0																																							
Legs	0																																							
Muscle Pain in Hand(s)	0																																							
Other	0																																							

Activity

	Classroom	Outdoors
Little Break		
Big Break		
Reported to Teacher	Yes	No

Other Notes

get pain in eye (Right) so paled hood down
more in new desk before 1st Yard

Original journal page 8; printed name redacted. Handwritten content preserved.

Appendix B: Additional research and policy topics

- French Law No. 2015-136 (official text)
<https://www.legifrance.gouv.fr/loda/id/JORFTEXT000030212642>
- French Ministry of Education: Wi-Fi use in schools
<https://eduscol.education.fr/document/20998/download>
- Cyprus Ministry of Education 2017 school Wi-Fi letter (third-party hosted copy)
<https://ehtrust.org/wp-content/uploads/CYPRUSPDF-Wireless-in-School-Letter.pdf>
- Council of Europe Resolution 1815
<https://pace.coe.int/en/files/17994/html>
- Irish primary-school wireless guidance (2017)
<https://www.oidetechnologyineducation.ie/app/uploads/2021/06/Wifi-Guidance-Document-in-Primary-Schools-Jan2017-compressed.pdf>
- Oide WiFi Network Guide for Schools (August 2025)
<https://www.oidetechnologyineducation.ie/app/uploads/2025/08/WiFi-Network-Guide-Aug2025.pdf>
- ANSES (2018), electromagnetic hypersensitivity: research and care
<https://www.anses.fr/en/content/hypersensitivity-electromagnetic-waves-research-efforts-should-be-scaled-and-suitable-care>

Appendix C: Population survey and interpretation

McCredden, J. E., McLean, L., and Steinemann, A. (2026). “Wireless sensitivity and co-morbidities: A prevalence study in Australia, Canada, and the United States.” *Next Research*, 8, 101577.

<https://doi.org/10.1016/j.nexres.2026.101577>

The authors reported that 12.6% of surveyed adults identified as wireless sensitive, and 14.0% reported wireless sensitivity, medically diagnosed electromagnetic hypersensitivity, or both. Country-specific wireless sensitivity was reported as 17.4% in Australia, 12.8% in the United States, and 7.5% in Canada. The surveys were conducted in 2022 and published in 2026. These figures describe self-reported experiences; they do not establish RF causation, a trend over time, or prevalence among children.

The family has spoken with others who report symptoms they associate with wireless devices and infrastructure. These conversations are anecdotal, and neither the conversations nor the population survey demonstrate that RF caused any individual symptoms. They do establish a legitimate question for investigation: whether there are reproducible responses in identifiable subgroups under well-characterised real-world exposure conditions.

The report should be considered alongside blinded human provocation studies and systematic reviews, which have generally not established that acute exposure below applicable limits causes self-reported symptoms. Future studies should evaluate exposure characterisation, duration, sham conditions, objective outcomes, alternative explanations and potential heterogeneity between participants.

Appendix D: Research and policy source links

Research, policy and technical references. Community discussions are included only as examples of public questions about equipment and its operation, not as scientific evidence.

- McCredden, McLean & Steinemann (2026), wireless-sensitivity prevalence survey
<https://doi.org/10.1016/j.nexres.2026.101577>
- Systematic review of experimental RF exposure and symptoms (2024)
<https://pubmed.ncbi.nlm.nih.gov/38640611/>
- Pall (2013), voltage-gated calcium-channel hypothesis
<https://doi.org/10.1111/jcmm.12088>
- ANSES (2018), electromagnetic hypersensitivity review
<https://www.anses.fr/en/content/hypersensitivity-electromagnetic-waves-research-efforts-should-be-scaled-and-suitable-care>
- Ubiquiti UniFi AC Pro technical specifications
<https://techspecs.ui.com/unifi/wifi/uap-ac-pro>
- Ubiquiti Community (2021): “Anyone else been having headaches when around Unifi APs?”
<https://community.ui.com/questions/Anyone-else-been-having-headaches-when-around-Unifi-APs/824265da-1af8-44b8-9082-14b036545a42>
- Ubiquiti Community (2023): “Trying to turn APs off at night and when I’m not home” — operational discussion, not a health study
<https://community.ui.com/questions/Trying-to-turn-APs-off-at-night-and-when-lm-not-home/5b6276eb-b9da-430e-add9-f44fc4a4e47e>
- Irish school Wi-Fi guidance (2017)
<https://www.oidetechnologyineducation.ie/app/uploads/2021/06/Wifi-Guidance-Document-in-Primary-Schools-Jan2017-compressed.pdf>
- Oide WiFi Network Guide (2025)
<https://www.oidetechnologyineducation.ie/app/uploads/2025/08/WiFi-Network-Guide-Aug2025.pdf>

- Cyprus 2017 Wi-Fi guidance (third-party copy)
<https://ehtrust.org/wp-content/uploads/CYPRUSPDF-Wireless-in-School-Letter.pdf>
- France Law No. 2015-136
<https://www.legifrance.gouv.fr/loda/id/JORFTEXT000030212642>
- Afrin LB, Characterization of Mast Cell Activation Syndrome, 2016.
<https://pmc.ncbi.nlm.nih.gov/articles/PMC5341697/>
- Afrin LB et al., Diagnosis of mast cell activation syndrome: a global consensus-2, 2020/2021.
https://www.mastcellaction.org/assets/_/2021/05/26/3fe9e463-1058-4c0f-863a-f2524839949d/2020-afrin-diagnosis-of-mast-cell-activation-syndrome-a-global-consensus-2-final.pdf?v=1
- Ozdemir O., Mast cell activation syndrome: An up-to-date review of literature, 2024.
<https://pmc.ncbi.nlm.nih.gov/articles/PMC11212760/>
- Animated MCAS explainer, YouTube. Screenshots used as educational visual summaries at approx. 9:44 and 38:00. <https://www.youtube.com/watch?app=desktop&v=uZXmKFOwxK8>