

# Symptoms of EMF-Overexposure *With Focus on Residential 'Smart' Meters*

Nearly everyone is overexposed to man-made Electromagnetic Fields (EMFs) today, especially wireless communication signals. Many have reported ill-health onset soon after a utility 'smart meter upgrade' to their home. Whether such devices are inherently injurious, are the straw that breaks the camel's back, or are only acutely injurious to some people and not others, both anecdotal and published evidence suggests it may be all three, as well as having chronic effect on everyone. Below, a per-person symptom checklist may help alert you to early signs of health decline in your household. Such symptoms occur at other times, too, but their sudden arrival within weeks after installation of a 'smart' meter is suggestive.

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Symptom (New Onset or Worsening) 'P' – Pre-existing, 'N' – New, 'W' – Worsening, 'I' – Improving	Very Common	Category	Person 1	Person 2	Person 3	Person 4	Pets
Blood Pressure (Elevated or Low)	✓	ca					
Heart Palpitations	✓	ca					
Heart Racing	✓	ca					
Ear Ringing, Buzzing, Tinnitus	✓	ea					
Eye Pain, Vision, Cataracts	✓	ey					
Nausea, Vomiting	✓	ga					
Fatigue, Exhaustion, Stress	✓	me					
Anxiety, Agitation	✓	mh					
Irritability, Bickering, Arguing	✓	mh					
Insomnia, Sleeplessness	✓	mi					
Involuntary Muscle Contractions	✓	mu					
Leg Cramps, esp. In Bed	✓	mu					
Brain Fog, Lack of Concentration	✓	ne					
Dizziness, Disorientation, Vertigo	✓	ne					
Head Pressure, Heat, Piercing Pain	✓	ne					
Headache, Migraine	✓	ne					
Nerve Damage, Shooting Pain	✓	ne					
Numbness, esp. in Hands/Feet	✓	ne					
Short Term Memory Loss	✓	ne					
Respiratory Problems	✓	re					
Tingling, Burning, Itching Skin	✓	sk					
Nosebleeds		bl					
Condition: Cancer/Tumors		c					
Condition: Heart Attack/Stroke		ca					
Dehydration, Thirst, Sore Throat		ga					
Digestive Problems, Acid Reflux		ga					
Condition: Lupus/MS/Autoimmune		im					
Condition: MCAS, Mast Cell		im					
Flu-like Symptoms, Fevers		im					
Flu, Cold, Bug Susceptibility		im					
Recurrent Infections		im					
Lifestyle: Can No Longer Drive Car		LS					
Lifestyle: Divorce, Job Loss		LS					
Lifestyle: Loss of Agency		LS					
Lifestyle: Too Ill to Work		LS					
Lifestyle: Wish to Abandon Home		LS					
Blood Sugar (Elevated or Low)		me					
Condition: Diabetes		me					
Infant Failure to Thrive		me					
Organ Stress/Burnout/Failure		me					
Temperature Dysregulation		me					
Weight Gain/Loss, Appetite Issues		me					
Condition: ADHD/ADD/Autism		mh					
Condition: Mental Health		mh					
Despondency, Desire to 'Give Up'		mh					
Lose Desire/Will To Live		mh					
Mood Swings		mh					
Nightmares		mh					
Paranoia		mh					
Physical Aggression		mh					
Self-Harm Ideation		mh					
Self-Harm, Suicide Attempt		mh					
Sudden Crying, Weeping		mh					
Targeted Individual Feeling		mh					
Condition: EHS, Electrical Sens.		mi					
Condition: Fibromyalgia/ME/CFS		mi					
Condition: MCS, Chemical Sens.		mi					
Emergency Room Visits		mi					
Hair Loss, Sudden Whitening		mi					
Sensitivity to Electrical Devices		mi					
Signs of 'Sudden Aging'		mi					
Sudden Wake-up in Early AM		mi					
Body Vibrating, Trembling		mu					
Muscle Weakness		mu					
Tightness In Chest		mu					
Condition: Alzheimer's/Dementia		ne					
Condition: Parkinson's		ne					
Condition: Seizure/Epilepsy		ne					
Hearing Electricity/Devices		ne					
Long Term Memory, Recall Issues		ne					
Loss of Consciousness		ne					
Loss of Motor Skills		ne					
Restless, Pacing, Nervous Energy		ne					
Tingling, Burning (Internal)		ne					
Word Substitution in Speech		ne					
Sinus Infections, Breathing Issues		re					
Infertility, Low Libido		rh					
Pregnancy Issues, Miscarriage		rh					
Urinary Issues		ri					
Skin Outbreaks, Dry, Discolored		sk					
Swollen Face, Joints, Extremities		sk					

## **Next Steps, If a Smart Meter Seems To Be a Driver for Poor Health In Your Home:**

- **Become educated.** Several talks help one to understand the real-world biological implications of man-made EMF overexposure: Jeromy Johnson, Silicon Valley Engineer, [uTedX Talk](#); Dr. Alexia McKnight, Radiologist, [uTedX Talk](#); Dr Erica Mallery-Blythe, UK Physician 2016 [Talk](#)
- **Stop the continued health assault.** Contact each utility (Electric, Gas, Water) to ask about ‘opt-out’ meters that do not emanate any EMFs (note: the only demonstrated safe meter is a purely analog one). These often have a monthly surcharge. If no sufficiently safe opt-out is available from the Utility, inquire at your local Department of Public Works. You may find it necessary to escalate this urgent request to your state regulatory agency (DPU, in MA), Board of Health, Attorney General or other avenues where health or consumer issues are tracked (sadly, the track record is poor for such escalations). Note that the meters of near neighbors may continue to offer injury even if your own meters are quieted.
- **Lessen the impingement of man-made EMFs.** Consider EMF shielding options (for airborne EMFs), personal EMF protection (bed canopy, clothing), EMF filtering (for EMFs on the home wiring), confirming that other EMF hazards in the home are addressed (such as elimination of cordless phones; hard-wiring computers; having better cell phone and tablet e-hygiene; and so on) and increasing distance from EMF hazards that must still be borne. Working with a certified Building Biologist or EMF Consultant is one way to devise an effective game plan; engaging with local EMF-aware resources is another. Here in Massachusetts (USA), start with [Massachusetts for Safe Technology](#).
- **Consider temporarily relocating until offending smart meters are replaced and EMFs tamed.** In some cases, such as shared housing where the tenant has little control of their space, permanent relocation should be considered before health worsens beyond reach of a simple recovery. If relocating, be sure that the same (or worse) EMF situation is not present at the destination.
- **Seek medical attention.** Many health professionals are uninformed about the impact of over-exposure to man-made EMFs, such as come from smart meters, and so may treat symptoms without changing the fundamental drivers for poor health. Consider seeing a holistic or an Environmental Medicine practitioner, where the content of this symptom list will have appropriate import.

## **References**

- Robert Conrad’s extensive documentation of a [self-reporting survey about smart meters health issues](#), with several hundred participant testimonials (testimonials begin on page 65) from 2013
- Ed Halteman’s “[Wireless Utility Meter Safety Impacts Survey, Final Results Survey](#)”, 9/13/2011
- Dr. Frederica Lamech, "[Self-reporting of symptom development from exposure to radiofrequency fields of wireless smart meters in victoria, australia: a case series](#)" , 2014  
<https://pubmed.ncbi.nlm.nih.gov/25478801/>
- [Paul Harding’s backstory with Smart Meters in AZ.](#)
- Joshua Hart (Director of Stop Smart Meters!) [2011 Testimony](#), including many redacted testimonials from people harmed by smart meters.
- The [2021 EMF Medical Conference](#). All proceedings are available for free.

## An Explanation of How to Use the EMF Symptom Tracker – First, Know Thyself (and Thy Family)

The intention of this checklist is to make it much easier to track the sometimes slow change in physical symptoms that have been reported by people who attribute them to living in close proximity to smart meters, specifically, and man-made EMFs, generally.

It is envisioned that someone would erasably fill in the form for each of the people in the house, including a column for household pets (whose behavior/health changes might be readily apparent). This would then be the ‘baseline’ for a given date. As new symptoms arise or pre-existing symptoms change for a household member, that could be noted. It is suggested to use ‘P’ for pre-existing, ‘N’ for new onset, ‘W’ for worsening and ‘I’ for improving. Be creative for how you might express severity or the onset date, if you want that kind of historical record.

In this example household, Raoul and Terry and their dog Bowser have typical health. Raoul is managing a slight elevated blood pressure and both of them have frequent ear buzzing/ringing, but not too noticeable. There are ‘P’ markings for each of these as pre-existing conditions. Once filled out, the EMF Symptoms page is adhered to the fridge or put away in the drawer.

Over time, the household is feeling unwell. Bowser has been vomiting, a lot and has a lot of nervous energy. The ear ringing is now persistent and difficult to ignore for both Raoul and Terry.

Raoul’s blood pressure medication is not so effective and he has been to the doctor a few times to ‘adjust his meds’. Terry is feeling really dragged out and she cannot seem to catch up on her sleep.

She remembers the EMF Symptom chart and updates it, ‘N’ for new symptoms and ‘W’ for worsened ones. Seeing it plainly spelled out, she finds out that they have had a recent Utility meter ‘upgrade’ and feels its timing correlates with these symptoms.

Terry is now ready to do something about it, per the recommendations for next steps, and hopefully can address the situation before it spirals further.

Symptom (New Onset or Worsening) <i>‘P’ – Pre-existing, ‘N’ – New, ‘W’ – Worsening, ‘I’ – Improving</i>	Very Common	Category	Raoul	Terry	Person 3	Person 4	Bowser
Blood Pressure (Elevated or Low)	✓	ca	P				
Heart Palpitations	✓	ca					
Heart Racing	✓	ca					
Ear Ringing, Buzzing, Tinnitus	✓	ea	P	P			
Eye Pain, Vision, Cataracts	✓	ey					
Nausea, Vomiting	✓	ga					
Fatigue, Exhaustion, Stress	✓	me					

Figure 1: Baseline Symptoms

Symptom (New Onset or Worsening) <i>‘P’ – Pre-existing, ‘N’ – New, ‘W’ – Worsening, ‘I’ – Improving</i>	Very Common	Category	Raoul	Terry	Person 3	Person 4	Bowser
Blood Pressure (Elevated or Low)	✓	ca	W				
Heart Palpitations	✓	ca	N				
Heart Racing	✓	ca		N			
Ear Ringing, Buzzing, Tinnitus	✓	ea	W	W			
Eye Pain, Vision, Cataracts	✓	ey					
Nausea, Vomiting	✓	ga					N
Fatigue, Exhaustion, Stress	✓	me		N			

Figure 2: Succession Symptoms

Symptoms on the handout are organized with the most common ones first, then grouped by body system and alphabetized. In the section that follows, all symptoms have been strictly alphabetized and defined for easy reference.

Grouping Keys		Grouping Keys		Grouping Keys	
<b>bl</b>	Blood	<b>LS</b>	Lifestyle	<b>re</b>	Respiratory
<b>ca</b>	Cardiac	<b>me</b>	Metabolism, Endocrine	<b>rh</b>	Reproductive Health
<b>ea</b>	Ear, Nose and Throat	<b>mh</b>	Mental Health	<b>rn</b>	Kidney
<b>ey</b>	Eye	<b>mi</b>	Miscellaneous	<b>sk</b>	Skin
<b>ga</b>	Gastrointestinal	<b>mu</b>	Muscles		
<b>im</b>	Immune System	<b>ne</b>	Neurological		

## Detail About Each Listed Symptom - Alphabetized

<b>Blood Pressure (Elevated or Low)</b>	<i>Measured blood pressure deviates from normal. Sometimes it normalizes when at doctor's office.</i>
<b>Anxiety, Agitation</b>	<i>Unignorable unsettled feeling; obsessing on it</i>
<b>Blood Sugar (Elevated or Low)</b>	<i>Measured blood sugar deviates from normal.</i>
<b>Body Vibrating, Trembling</b>	<i>A long duration internal thrumming of the whole body, can be confused with a vibrating building (say due to a motor running nearby). Trembling is more readily observed, say in hands, and is rhythmic shaking.</i>
<b>Brain Fog, Lack of Concentration</b>	<i>Cannot remember stuff. Where did I put my keys? What were we just talking about? Cannot stay focused on a task.</i>
<b>Condition: ADHD/ADD/Autism</b>	<i>Having the diagnosis for any of these conditions</i>
<b>Condition: Alzheimer's/Dementia</b>	<i>Having the diagnosis for any of these conditions</i>
<b>Condition: Cancer/Tumors</b>	<i>Having the diagnosis for any of these conditions</i>
<b>Condition: Diabetes</b>	<i>Having the diagnosis for this condition</i>
<b>Condition: EHS, Electrical Sens.</b>	<i>Having Electromagnetic Hypersensitivity, an over-reactivity to EMFs that might be typical in modern life. Now also referred to as EMR-S.</i>
<b>Condition: Fibromyalgia/ME/CFS</b>	<i>Having the diagnosis for any of these conditions</i>
<b>Condition: Heart Attack/Stroke</b>	<i>As determined by medical persons</i>
<b>Condition: Lupus/MS/Autoimmune</b>	<i>Having the diagnosis for any of these conditions</i>
<b>Condition: MCAS, Mast Cell</b>	<i>Mast Cell Activation Syndrome – inappropriate histamine/biochemical release, due to a trigger; can resemble allergenic response</i>
<b>Condition: MCS, Chemical Sens.</b>	<i>Multiple Chemical Sensitivity, a well-documented condition of environmental sensitivity, especially to man-made chemicals. To some degree, as many as one third of humans seem to have chemical sensitivity.</i>
<b>Condition: Mental Health</b>	<i>Having a diagnosis for mental health, not otherwise covered in this list</i>
<b>Condition: Parkinson's</b>	<i>Having a diagnosis for this condition</i>
<b>Condition: Seizure/Epilepsy</b>	<i>Having a diagnosis for this condition</i>
<b>Dehydration, Thirst, Sore Throat</b>	<i>Driven to excess thirst without being able to adequately quench it. Other throat issues.</i>
<b>Despondency, Desire to 'Give Up'</b>	<i>Either a reasoned response of low-spirits or a transient emotional situation that resolves within moments of leaving the home.</i>
<b>Digestive Problems, Acid Reflux</b>	<i>Bowel movement changes, pain in the gastrointestinal region, digestion unpleasantness</i>
<b>Dizziness, Disorientation, Vertigo</b>	<i>Loss of balance, wobbly, any kind of dizziness, lightheadedness, wooziness</i>
<b>Ear Ringing, Buzzing, Tinnitus</b>	<i>Any of the buzzing, ringing tones that may be short-lived or perpetual. Actual tinnitus too.</i>
<b>Emergency Room Visits</b>	<i>An emergency room or urgent care visit, even if the condition resolved quickly.</i>
<b>Eye Pain, Vision, Cataracts</b>	<i>Ocular problems – blurry vision, excess tears, dry eyes, pained eyes, cataracts, ocular pressure, excess floaters, detached retina, macular degeneration.</i>
<b>Fatigue, Exhaustion, Stress</b>	<i>An overall lack of energy and zest that a good night's sleep does not address. A worn-out feeling physical, mental or emotional.</i>
<b>Flu-like Symptoms, Fevers</b>	<i>Ague, chills, malaise, achiness, fevers, feeling that bed rest is needed</i>
<b>Flu, Cold, Bug Susceptibility</b>	<i>Seeming to catch every communicable bug</i>

<b>Hair Loss, Sudden Whitening</b>	<i>A sudden change in hair loss, either through everyday combing or falling out in clumps, sudden and widespread gray/white hair</i>
<b>Head Pressure, Heat, Piercing Pain</b>	<i>Some people have transient piercing pain (ice pick) or a dull, steady skull pressure or warmth.</i>
<b>Headache, Migraine</b>	<i>Any kind of headache</i>
<b>Hearing Electricity/Devices</b>	<i>The ability to 'hear' or 'feel' specific electrical or electronic equipment</i>
<b>Heart Palpitations</b>	<i>Fluttering, pounding, or irregular heartbeats</i>
<b>Heart Racing</b>	<i>A rapid heart rate, even when resting</i>
<b>Infant Failure to Thrive</b>	<i>A newborn that is listless, not gaining weight, constantly complaining, or cannot be settled.</i>
<b>Infertility, Low Libido</b>	<i>These are two distinct situations, observed on two different time scales, for adults</i>
<b>Insomnia, Sleeplessness</b>	<i>Difficulty getting to sleep, staying asleep or achieving the depths of sleep necessary to feel rested.</i>
<b>Involuntary Muscle Contractions</b>	<i>Spasms of muscles have been reported, eyelid fluttering, facial scrunching, tics</i>
<b>Irritability, Bickering, Arguing</b>	<i>Emotional flareups and general irritability are hallmark reactions to EMFs and can flare up in seconds, and disappear as quickly when EMFs are absent. (Caged birds pecking each other.)</i>
<b>Leg Cramps, esp. In Bed</b>	<i>Muscle cramps in feet or legs are common during the middle of the night, cramps of other muscles could be marked here or 'Involuntary Muscle Contractions'.</i>
<b>Lifestyle: Can No Longer Drive Car</b>	<i>The person used to be able to drive a car, but they do not feel confident, perhaps because of vision problems, concentration problems, tremors or similar.</i>
<b>Lifestyle: Divorce, Job Loss</b>	<i>When there is continued ill health, irritability, sleep troubles (and others), then unpleasant life events may result and huge financial stresses.</i>
<b>Lifestyle: Loss of Agency</b>	<i>'Agency' refers to the ability to care for oneself and perform all the normal activities of life without assistance. Often, as ill health becomes a health collapse, the person can do fewer life tasks by themselves, so need help or do without.</i>
<b>Lifestyle: Too Ill to Work</b>	<i>Ill health progresses such that holding a steady job is challenging, and life might be prioritized to hold onto that job, pushing oneself to 'muscle through' continued injurious exposure to EMFs.</i>
<b>Lifestyle: Wish to Abandon Home</b>	<i>The home may feel terribly offensive and the prospects of a quick or affordable workaround is not forthcoming. People often find relief living in their vehicle, rather than the home.</i>
<b>Long Term Memory, Recall Issues</b>	<i>Having difficulty remembering things from the past, that were once quite familiar and easily recalled (names of one's children, first job)</i>
<b>Lose Desire/Will To Live</b>	<i>This is an emotional state, often after a very long life or after struggling with long debilitating or painful illness.</i>
<b>Loss of Consciousness</b>	<i>Fainting, falling into a coma</i>
<b>Loss of Motor Skills</b>	<i>Lacking ability to coordinate several simultaneous activities – typing, feeding oneself</i>
<b>Mood Swings</b>	<i>Within a short time period, experience of sudden or contradictory emotions</i>
<b>Muscle Weakness</b>	<i>Energy or contraction issues, can also include lacking 'strength' to lift items, open jars, button shirt, get up off a chair</i>
<b>Nausea, Vomiting</b>	<i>Sick to stomach feeling or actual evacuation</i>
<b>Nerve Damage, Shooting Pain</b>	<i>A stabbing sharp pain or electric shock feeling that radiates along the length of nerves, neuropathy</i>

<b>Nightmares</b>	<i>Recurring, intense during sleep, nighttime</i>
<b>Nosebleeds</b>	<i>Nosebleeds from other than injury</i>
<b>Numbness, esp. in Hands/Feet</b>	<i>Numbness of fingers, toes, hands, feet and progressively larger areas. Dull feeling, like someone is wearing an oven mitt.</i>
<b>Organ Stress/Burnout/Failure</b>	<i>This is to cover thyroid or adrenal burnout, overworked liver or toxin handling organs</i>
<b>Paranoia</b>	<i>Suspicion and mistrust, usually unjustified (to an outside observer), sometimes considered delusional. 'Targeted Individual' checks here.</i>
<b>Physical Aggression</b>	<i>Actually harming someone else, or threatening</i>
<b>Pregnancy Issues, Miscarriage</b>	<i>Some EMFs are known to lead to prenatal problems, including miscarriage</i>
<b>Recurrent Infections</b>	<i>Some people seem to catch every cold as their immune system is sluggish or overwrought.</i>
<b>Respiratory Problems</b>	<i>Many people report breathing issues, and may have apnea or find themselves in need of Oxygen in the day or a CPAP machine at night. This symptom is about the lungs.</i>
<b>Restless, Pacing, Nervous Energy</b>	<i>An excess of energy, sometimes this a pleasant sensation of anticipation, but usually it is more like having too much caffeine.</i>
<b>Self-Harm Ideation</b>	<i>Thinking of harming oneself, not doing it</i>
<b>Self-Harm, Suicide Attempt</b>	<i>Actual attempts at self-harm, overly reckless behavior, or even suicide</i>
<b>Sensitivity to Electrical Devices</b>	<i>Most electronics and power devices can be explicitly sensed, usually unpleasant</i>
<b>Short Term Memory Loss</b>	<i>Inability to hold information from minutes ago, such as a phone number or topic of conversation</i>
<b>Signs of 'Sudden Aging'</b>	<i>Sometimes microwave signal overexposure is referred to as 'Rapid Aging Syndrome'.</i>
<b>Sinus Infections, Breathing Issues</b>	<i>Many people report breathing issues – this one is for primarily nasal breathing</i>
<b>Skin Outbreaks, Dry, Discolored</b>	<i>This can include hives, as well as skin that seems weathered, aged, dry, discolored or even</i>

	<i>burnt.</i>
<b>Sudden Crying, Weeping</b>	<i>Some people have reported that they will suddenly be weepy over something trivial.</i>
<b>Sudden Wake-up in Early AM</b>	<i>Some people find that they are forced awake suddenly at the same time(s) every evening, as opposed to the more usually disturbed sleep wake-up at 2-3AM. These sudden wake-ups have correlated with known smart meter bulk data broadcasting.</i>
<b>Swollen Face, Joints, Extremities</b>	<i>Fluid swelling (edema) in legs is common, but any unexpected swelling is covered by this. Joint issues that are arthritic are covered too.</i>
<b>Targeted Individual Feeling</b>	<i>Having a firm impression that s/he is the target of a campaign of external control or influence – hearing voices, feeling a malevolent source of environmental distress, not merely the result of man-made EMF tech devices.</i>
<b>Temperature Dysregulation</b>	<i>Feeling too cold or too warm, without being able to properly regulate body temperature</i>
<b>Tightness In Chest</b>	<i>This may feel like chest muscles squeezing</i>
<b>Tingling, Burning (Internal)</b>	<i>Tingling, pins-and-needles, burning feelings may be nerve oriented, muscles, viscera</i>
<b>Tingling, Burning, Itching Skin</b>	<i>Sensation of tingling, burning, prickling, crawling or itching on the skin surface</i>
<b>Urinary Issues</b>	<i>Incontinence, first just at night and then in daytime as well, or when passing by an EMF. Neurological.</i>
<b>Weight Gain/Loss, Appetite Issues</b>	<i>Loss of appetite is common, but unexpected weight gain or loss are observed.</i>
<b>Word Substitution in Speech</b>	<i>A speaking aberration where a coherent sentence is marred by the replacement of a word with another word with speaker unaware this was done. This is not a 'word salad', but is a noteworthy neurological glitch Example, replacing 'umbrella' with 'sweater'.</i>

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LD 878

Committee:

I am submitting two files in SUPPORT of LD878

\* (this second one) Is a list of symptoms/conditions reported from people claiming harm from broadcasting utility meters.

Please vote Ought to Pass on LD 878.

Thank you