

# Hearings with a Buzz:

## Sparking a Conversation about Electromagnetic Hypersensitivity and Civil Commitment

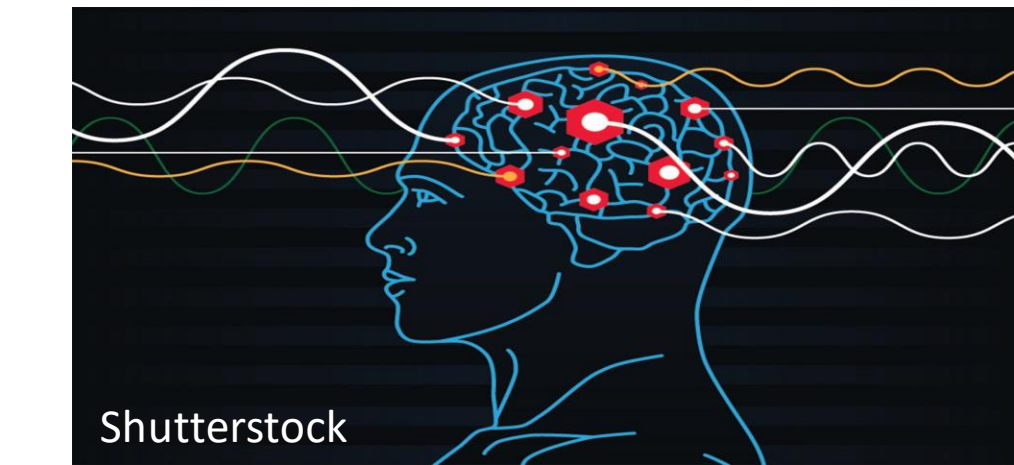
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### Case

- Patient is a 37-year-old man with bipolar disorder who was brought to the emergency room by police after father reported social withdrawal, odd behavior, and concern for patient's safety.
- Patient had reportedly locked himself in his house for several weeks in the winter, had minimal food left in the house, and had shut off his electricity.
- On interview, patient denied symptoms of low or elevated mood, suicidal thoughts, AVH, poor appetite, and sleep disturbance.
- Patient reported significant concerns that he was harmed by electromagnetic fields emitted from his household appliances.
- He experienced symptoms of cognitive slowing, skin irritation, and headache, with some anxiety surrounding exposure to appliances.
- Patient reported suffering from "electromagnetic hypersensitivity," not mental illness, and shared various research articles supporting this.
- His symptoms did not change with surreptitious use of cell phone in his presence.
- His father described the patient as having long-standing concerns about electricity and a poor response to previous psychotropic medications.
- Given concern for underlying primary psychotic illness, patient was committed to the psychiatric hospital.

### Legal Implications

- For civil commitment, "mental illness" means a substantial disorder of thought, mood, perception, orientation, or memory that grossly impairs judgment, behavior, capacity to recognize reality, or ability to meet the ordinary demands of life (O.R.C. 5122.01).
- A mentally ill person can be committed in Ohio if, because of their mental illness, he or she:
  - 1) represents a substantial risk of physical harm to self
  - 2) represents a substantial risk of physical harm to others
  - 3) represents a substantial and immediate risk of serious physical impairment or injury to self and is unable to provide for his or her basic physical needs
- Meeting commitment criteria hinges on whether patients with EHS have a "substantial disorder," as defined above, that causes harm to self, others, or grave disability where they are unable to care for themselves.
- If EHS is considered a physiologic condition, it may warrant medical admission and workup.
- Within a psychological framework, EHS is a type of psychosomatic illness and may justify civil commitment if harm is sufficient.

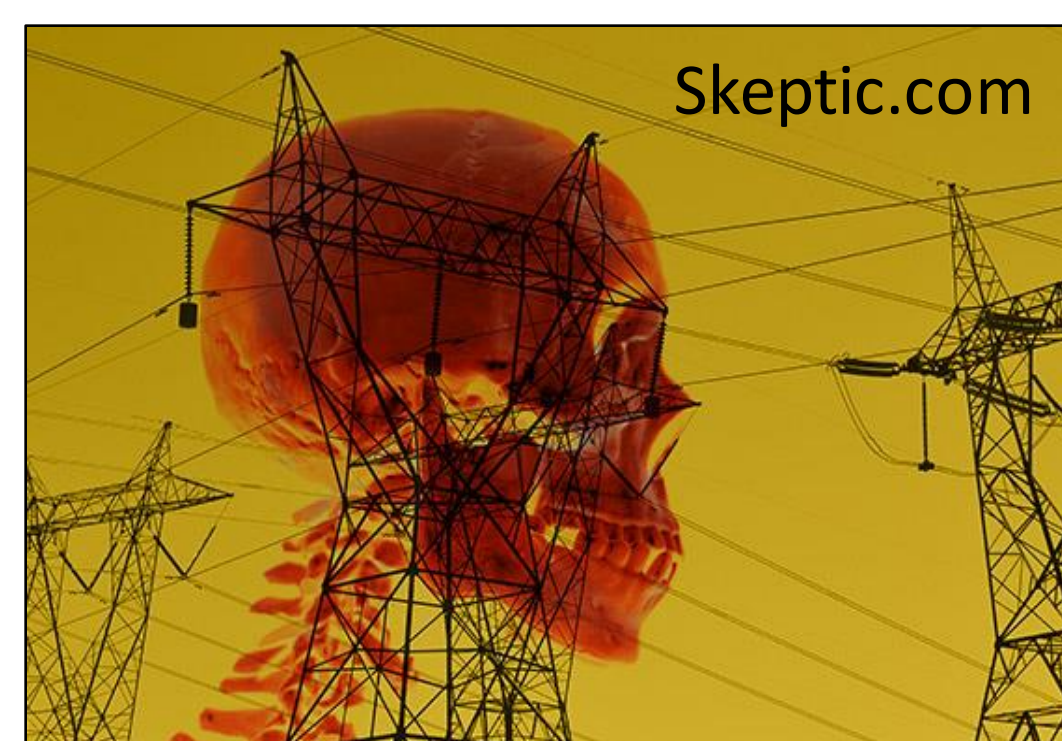


### Summary

- EHS is a controversial syndrome of physical and mental symptoms triggered by real or perceived harm from exposure to EMF.
- The debate over terminology, etiology, and treatment continues.
- Those with symptoms of EHS may take drastic measures to avoid exposure to electromagnetic radiation.
- It remains unclear whether EHS qualifies legally as a mental illness, or is better understood as "medical" condition
- This may complicate civil commitment proceedings as justification often depends on classification of symptoms as a mental disorder
- Similar issues arise in the areas of guardianship, tort cases, and disability

### Electromagnetic Hypersensitivity (EHS)

- Idiopathic environmental intolerance (IEI) refers to a group of syndromes of unclear etiology.
- EHS or IEI due to electromagnetic fields falls under the umbrella of IEI.
- EHS is a syndrome of non-specific physical and cognitive symptoms attributed to electromagnetic field exposure.
- Common symptoms include fatigue, muscle and joint pain, headaches, balance problems, and cognitive deficits.
- The etiology of EHS is unknown.
- Primary theories include toxigenic and psychogenic causes.
- Some provocation studies suggest causal physiologic effects from electromagnetic fields, including low grade inflammation and characteristic biomarkers.
- Many of these studies are methodologically flawed.
- Evidence favors psychological explanations for this phenomenon.
- These involve nocebo response, attribution bias, or both.
- Some evidence exists that EHS responds to cognitive behavioral therapy (CBT)<sup>4</sup>



### References

- 1) Dieudonné M. Electromagnetic hypersensitivity: a critical review of explanatory hypotheses. *Environmental Health* 2020; 19:48.
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- 3) Boehmert, C., Witthöft, M. & Van den Bergh, O. Causal perception is central in electromagnetic hypersensitivity - a commentary on "Electromagnetic hypersensitivity: a critical review of explanatory hypotheses". *Environ Health* 19, 122 (2020).
- 4) Rubin GJ, Das Munshi J, Wessely S. A systematic review of treatments for electromagnetic hypersensitivity. *Psychother Psychosom.* 2006;75(1):12-8.