

Ionising radiation EHS and geomagnetic reversals

This also makes membranes leak, but by a different mechanism.

The radiation generates highly reactive **free radicals** that **peroxidise polyunsaturated lipid in membranes** (they go rancid), which makes more permanent holes.

The free radicals can **also damage DNA, just like mobile phones**.

In humans, ionising radiation causes **radiation sickness**.

The early symptoms resemble those of EHS and include dizziness, nausea, vomiting, fatigue and headache.

Later symptoms arise from the death of dividing cells whose DNA has been damaged leading to loss of hair, damage to gut, failure of bone marrow to make blood cells, loss of immunity etc and is **often lethal**.

(If you survive 30 days, you stand a good chance of a near full recovery, but any genetic damage may remain).

EHS may have saved many species in the past from cosmic rays

Cosmic rays are ionising radiations from outer space.

Mostly, they are **charged sub atomic particles** from the sun (the solar wind).

For most of the time we are **protected** from them because they become **trapped in outer space in the earth's magnetic field**.

However from time to time (average about a **quarter of a million years**), there are **geomagnetic reversals**, where the south and north poles swap places.

During this time, the **earth has little or no magnetic field** for about a thousand years and **most of these cosmic rays reach the surface**.

Most of the time, this radiation is **too weak** to do much damage to life, but every **11 years** or so there are periods of high sunspot activity when there are **solar flares**.

These **increase the radiation level 100-fold** and would be **lethal to any living organism caught in the open during daytime**.

This may be why many animals are nocturnal and/or live in burrows.

EHS would probably protect you against this. If you were exposed in this way, it would probably register as your most prevalent symptom and you would seek shelter.

EHS or a tendency to EHS may therefore have a selective advantage and has been maintained in the population.

Some animals may also suffer from EHS for the same reason, which may be why many of them do not like living near us any more.

Just a final thought.

In as much as **EHS makes you avoid sources of non-ionising**, but equally damaging man-made radiation, it may **protect you from the genetic damage** that the rest of the population is oblivious to.

I do not know how long it will take, but it may be your offspring that will dominate the human species.