Milestone Towers

RF SAFETY SERIES
ISSUE 01 · 2026

BUILT ON EVIDENCE

The Case for RF Safety

How Milestone Towers approaches radiofrequency safety — and answers the questions that matter to partners, landowners, and communities.

EXECUTIVE SUMMARY

The question behind every site

Milestone Towers has developed wireless infrastructure across the country for over two decades. In that time, one question has come up more consistently than almost any other: are cell towers and radiofrequency emissions safe?

What partners, landowners, and communities need is a clear, evidence-based explanation of what RF energy is, what the science shows, and how Milestone's own sites measure against the standards built to protect them.

> **The goal isn't to win arguments. It's to make the evidence accessible.**

ABOUT MILESTONE

A partner to the communities it builds in

Milestone Towers partners with landowners, municipalities, and carriers to develop cell tower sites across the country — school districts, county governments, churches, industrial owners, and private landowners. That range is exactly why Milestone treats RF safety as a core operational priority, not an afterthought.

THE STANDARD WE HOLD

Milestone and the carriers must always comply with the FCC threshold for RF safety.

Third-party studies show real-world impact averages just 0.1%–5% of that limit.

> **When people understand how a conclusion was reached, they are far more likely to trust it — and to defend it when challenged.**

20+ yrs

developing wireless infrastructure nationwide

0.1–5%

of the FCC limit at Milestone sites (third-party tested)

1,200×

below the FCC standard at Fairfax County school sites

THE CHALLENGE

When safety concerns stall what communities need

Wireless infrastructure is becoming a critical utility — it powers 911 response, connects rural households, and enables the economic activity communities depend on. The places that lack coverage feel the absence every day.

Opposition is organized and experienced, building polished materials designed to raise doubt in rooms full of people who are not scientists. Milestone made a different decision: we built a framework for answering them.

MILESTONE'S APPROACH — THREE PRINCIPLES

01

Lead with the science

We show the work — what RF energy is, how it differs from ionizing radiation, why FCC limits sit where they do, and what real exposure data looks like.

02

Acknowledge uncertainty

The consensus is strong, but we don't claim every question is resolved forever. Saying so openly is more credible than projecting total certainty.

03

Equip partners

Guides, FAQs, one-pagers, and a resource hub that translate authoritative sources into language partners can actually use.

> **Rather than treating safety questions as obstacles to manage, we built a framework for answering them — thoroughly, transparently, and in language partners can use.**

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WHAT THE SCIENCE SHOWS

Not a talking point — a documented consensus

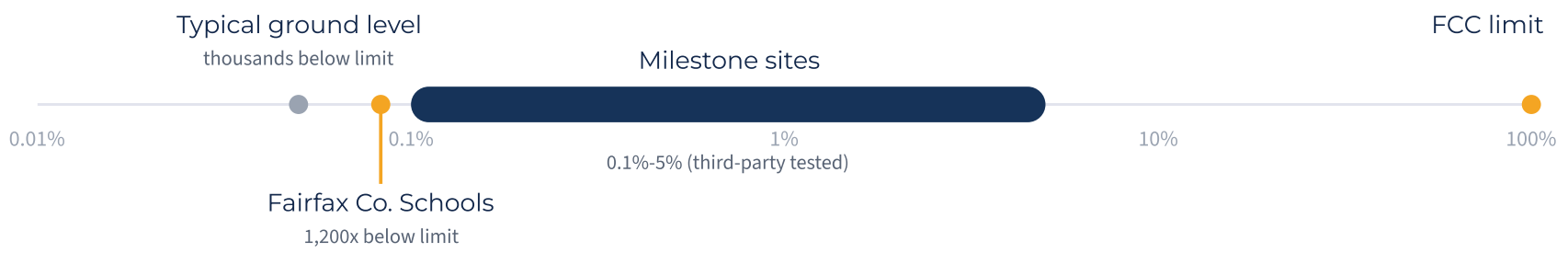
Our position is the documented consensus of independent scientific and government bodies that have each reviewed decades of peer-reviewed research.

How Milestone sites measure against the FCC limit

Radiofrequency exposure as a share of the FCC limit (MPE).

THE FULL PICTURE

THE PRECISE VIEW



FCC

RF Safety FAQ

Ground-level emissions are "typically thousands of times below safety limits," with no reason to believe towers pose a health hazard.

World Health Organization

Fact Sheet 304

"No convincing scientific evidence that weak RF signals from base stations and wireless networks cause adverse health effects."

ICNIRP

RF Guidelines 2020

"The only substantiated effect relevant to human health and safety is heating of exposed tissue" — and the 2020 guidelines prevent it.

Fairfax County Schools

Independent RF study

An independent study found power density near towers was "1,200 times lower than the FCC standard."

THE CLAIMS, EXAMINED

Honest answers to the questions that come up

CLAIM 01 Cell towers cause cancer

> WHAT THE OPPOSITION SAYS
> Studies show elevated cancer rates near towers; the IARC classifies RF as a carcinogen.

THE ACCURATE ANSWER

The IARC classifies RF as Group 2B — its lowest-confidence classification, used "when there is limited evidence of carcinogenicity in humans." Other Group 2B substances include aloe vera whole-leaf extract and pickled vegetables.

The studies most cited (Eger 2004, Dode 2011) are ecological — they map cases near towers without measuring individual exposure or controlling for confounders. The WHO 2024 review of 74 studies found "moderate-certainty evidence of no or only a small effect" for cancers such as glioma and lymphoma.

Sources: IARC Monographs Q&A · Karipidis et al. (2024)

CLAIM 02 Children are especially vulnerable

> WHAT THE OPPOSITION SAYS
> Children’s developing brains absorb more RF energy; schools near towers put them at risk.

THE ACCURATE ANSWER

Children’s heads absorb somewhat more RF during direct phone use — relevant to device guidance, not tower exposure, which is low-level, far-field, and not concentrated near the body. The FCC notes ground-level densities are "hundreds to thousands of times less than the limits."

The WHO 2024 review found RF "likely does not increase the risk" of pediatric brain tumors, and base stations "do not increase childhood leukemia risk."

Sources: FCC RF Safety FAQ · Karipidis et al. (2024)

CLAIM 03 Regulators aren’t monitoring long-term safety

> WHAT THE OPPOSITION SAYS
> No agency tracks long-term RF safety. The FCC’s limits are outdated and industry-influenced.

THE ACCURATE ANSWER

The FCC’s guidelines were developed with the NCRP and IEEE; before adopting them the FCC consulted the FDA, EPA, OSHA, and NIOSH, and reaffirmed them in 2020. The WHO has run the International EMF Project since 1996; ICNIRP updated its RF guidelines in 2020 with 5G in scope. The claim that no agency is monitoring RF safety is not accurate.

Sources: FCC RF Safety FAQ · FCC 2024

CLAIM 04 Insurers won’t cover wireless, like asbestos

> WHAT THE OPPOSITION SAYS
> EMF exclusions in insurance prove the industry knows it’s dangerous.

THE ACCURATE ANSWER

EMF exclusions are standard precautionary clauses common across industries with long-tail litigation risk — legal risk management, not scientific findings. The asbestos comparison fails: asbestos has a clear, replicated causal mechanism. RF at real-world tower levels has no equivalent evidentiary record.

CLAIM 05 Hundreds of scientists oppose the standards

> WHAT THE OPPOSITION SAYS
> The EMF Scientist Appeal has hundreds of signatories calling on the UN to act.

THE ACCURATE ANSWER

Petitions are not systematic evidence reviews. Regulatory decisions rest on methodology, replication across independent groups, exposure magnitude relative to thresholds, and dose-response consistency. The majority position — WHO, ICNIRP, FCC, FDA, and national agencies — is that real-world RF exposure poses no demonstrated health risk.

Source: ICNIRP RF EMF Guidelines 2020

WHAT THE REST OF THE WORLD IS SAYING

Independent regulators, the same conclusion

Agencies worldwide — each reviewing the evidence separately — reach the same place: at the exposure levels produced by cell towers and wireless networks, no adverse health effects have been established.

Canada

Health Canada

"No health risks from exposure to the low levels of RF EMF from cell phones, towers, antennas and 5G devices."

Australia

ARPANSA

"No established evidence for health effects from radio waves used in mobile telecommunications… 5G is safe."

Germany

Bundesamt f. Strahlenschutz

"No evidence of a carcinogenic effect of high-frequency fields from mobile communications."

Norway

Inst. of Public Health

"No clear health effects identified from EMF exposure below the exposure limits."

Sweden

Radiation Safety Authority

"No new established causal relationships between EMF exposure and health risk."

European Union

SCENIHR

"No adverse effects on reproduction and development; recent data does not change this."

Ireland

EPA

"No health effects proven at levels below the ICNIRP guidelines for the public."

Spain

CCARS

"No link demonstrated between mobile phone use and the development of malignant tumors."

When regulators on three continents — who answer to different governments — independently reach the same conclusion, that convergence is far stronger evidence than any single agency acting alone.

CLOSING

The evidence supports this infrastructure

Opposition to wireless infrastructure is organized, and it isn’t going away. The communities that need coverage most are often where misinformation finds the most traction.

Milestone’s commitment is to change that — not by winning arguments, but by ensuring that everyone who wants to understand the science can actually access it, clearly, honestly, and completely.

REFERENCES

Sources

FCC RF Safety FAQ
fcc.gov/.../faq/rf-safety

FCC — Current RF Exposure Safety Standards (2024)

WHO / ITU EMF Guide
Fact Sheet 304

ICNIRP RF EMF Guidelines 2020

Karipidis et al. (2024)
Environment International — commissioned by WHO

IARC Monographs Q&A
Group 2B classifications

Fairfax County Public Schools
independent RF study

National agencies
Health Canada · ARPANSA · BfS · FHI · SSM · SCENIHR · EPA · CCARS

> **The evidence supports this infrastructure. Milestone has built the resources to make sure that shows.**