

Don't risk your good health.



TACT-AIR 10-8

Working in a dental practice without a Mercury Vapor Ionizer can be like playing Russian Roulette!

Protect Yourself, Your Staff & Your Patients.



Tact-Air Systems Inc.
A NUCOVE COMPANY

Tact-Air Negative Ionizers offer you, your staff and patients total peace of mind.

Consider the facts:

- Mercury is one of THE most toxic substances known to humanity.
- The US-EPA classifies Mercury as a Hazardous Substance.
- The World Health Organization states that no amount of mercury is safe in the human body.
- Yet, 50% of a Dental Amalgam Filling is MERCURY.
- Throughout the life of a filling, it is constantly off-gassing Mercury Vapor.
- When Mercury “vaporizes” and is inhaled, it stays resident throughout the body’s tissues and organs – accumulating to potentially intolerable toxic levels.
- Standard Dental procedures – cleaning, polishing, and especially drilling out fillings – cause major explosions of Mercury Vapor.
- Mercury Vapor is invisible, odorless and colorless – so its presence is very difficult to detect.
- Scientific evidence suggests that most Dental Operatories are contaminated with varying levels of highly toxic mercury vapor.
- Without proper protection, Dentists & their staffs are at the highest risk.
- Even if you no longer deal with Amalgam fillings, it is most likely that a high percentage of your patients still have them – so you may still be exposed to Mercury Vapor with each patient visit.

Know the Facts. Then Protect Yourself.

- Proven Effective.
- Approximately 250 Units Installed.
- Removes Mercury Vapor from the air in a Dental Office for the protection of Staff and Patients.

The Science behind the Tact-Air Ionizer.

Mercury Vapor

The U.S. Public Health Service Standard for ‘acute inhalation exposure to metallic mercury vapor’ for the general population is 0.02 micrograms mercury per cubic meter of air. Data from The International Academy of Oral Medicine and Toxicology (IAOMT) indicates that levels of 1000 mcg per cubic meter may be released during amalgam removal, and levels between 500 and 900 mcg may be released during amalgam polishing. Even with efficient water spray and high volume aspiration, levels in the 40 to 110 mcg range are still expected; IE - 8,000 to 22,000 times greater than the USPHS standard for non-industry workers!

Mercury vapor not carried away by water flushing and high volume aspiration is released from the patient’s mouth during amalgam removal and certain hygiene procedures such as amalgam polishing. This mercury vapor is in its highest toxic concentrations in the immediate breathing space common to the patient, dentist and assistant.

Ion Precipitation

Ion Precipitation is ubiquitous to numerous chemical, mechanical and manufacturing processes which the scientific and industrial world has utilized for decades. Ion flows generated by high-energy negative charges are utilized as transport mechanisms to deliver specific particles from a chosen site to a desired target destination. Some common examples are the electrostatic air cleaners on your heating systems which charge dust, smoke, pollen and air pollutants via high energy negative ions and collect them as precipitates on filter grids; metal hospital and laboratory furniture which are sprayed during manufacturing with negatively charged metallic powders and fired at high temperatures to produce inert ceramic coatings; automobiles painted on a production line where the spray paint is charged by an ion pump and attracted to a positive charge on the car body rather than floating through the air to coat walls, floor, and ceiling.



Mercury Vapor Ionizer > Model 10-8

The Tact-Air Ion Generator

The Model 10-8 Mercury Vapor Ionizer is based on high voltage electrostatic precipitation technology utilizing a 4.8 KV DC ion-pump generator which releases some 2 billion ions per second into a vortex air stream. When positioned to pass over the patient from head to toe through the common breathing space between dentist, patient and assistant, the mercury vapor emanating from the oral cavity is attached by the negative ion flow and carried to a positively charged collector plate on the wall near the patient's feet.

Use In the Operatory

The Mercury Vapor Ionizer, about the size of an electric toaster, is positioned on a shelf or counter top at the head of the chair where the ion flow can be directed over the patient from the head of the chair towards the foot of the chair. A stainless steel collector plate is mounted on the wall near the foot of the chair and is connected to the positive post of the ion generator by a flexible cable easily concealed in ceiling and walls.

Effectiveness of the Ionizer

On-site test assays using an Arizona Instrument Corp. "Jerome 411" Mercury Vapor Analyzer (the Industry Standard) indicate that in a typical Operatory without an Ionizer the entire volume of room air will be subject to mercury levels far exceeding Occupational Health and Safety Guidelines. This condition will last as long as 30 minutes after the procedure until the mercury has dissipated, during which time it is being ingested by all those present in the dental operatory.

With the Ionizer in use during the procedure, the Jerome Analyzer shows normal room readings result within two minutes of cessation of drilling. This indicates the vortex ion stream succeeds in capturing most of the concentrated contamination in the common breathing space on the first pass, leaving very little to permeate the room air. Not only is the common breathing space targeted but the entire Operatory and adjacent rooms are subject to reduced levels of contamination, a significant benefit to other patients and staff.

What our customers are saying ...

"I can assure you that I would not practice dentistry today without the protection I get from the Tact-Air Ionizers. The health risks associated with mercury vapor are simply more than I am willing to accept."

Dr. Patrick Bannon - Downers Grove, Illinois, USA

"The Tact-Air Unit's mercury cleansing ability addresses the #1 occupational hazard in the dental industry. Unlike other air purification systems, the Model 10-8's negative ion generation capability really does make a difference."

Dr. Oskana Sawiak - Mississauga, Ontario, Canada

"I do believe that traditional mercury based amalgams will some day be banned from dentistry. However, a large percentage of the population still have amalgam fillings so my staff and our patients, will need the ongoing protection of your Mercury Vapor Ionizer for many years to come."

Dr. Marcia Basciano - Downers Grove, Illinois, USA

"I purchased the Tact-Air Ionizer to maximize the safety of amalgam removal in my office. It sits directly behind my patients head, and it is quiet and effective. All dentists should have one!"

Dr. Blanche Grube - Scranton, Pennsylvania, USA

"I am very pleased with my Tact-Air Ionizers. We installed 5 units over 7 years ago and they are still going strong! I am so impressed with the quality and effectiveness of this product."

Dr. Dale Schisler - Oakville, Ontario, Canada



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