



# Managing Sputum Induction Procedures with SafER Portable Systems Help Medical Facilities Reduce Costs, Boost Revenues, and Improve Safety

Sputum induction is a non-invasive procedure used to collect sputum (mucus from the lungs) for diagnostic purposes. It can involve simply coughing up sputum from the lungs, or be facilitated with inhaling solutions to stimulate coughing and sputum production, especially in patients who can't produce sputum spontaneously.

This procedure is used to diagnose, assess and monitor a variety of conditions, including:

- **Tuberculosis (TB):** Especially when spontaneous sputum samples are not obtainable.
- **Pneumonia:** To identify bacterial, fungal, or viral pathogens.
- **Opportunistic Infections:** Immunocompromised patients (e.g., HIV/AIDS).
- **Assessment of Chronic Respiratory Conditions:** Asthma, Chronic Obstructive Pulmonary Disease (COPD) or Cystic Fibrosis
- **Lung Cancer:** Cytological examination for malignant cells.
- **Occupational Lung Diseases:** detecting exposure to harmful inhalants (e.g., asbestos, silica).



However, medical facilities face a number of challenges with regard to conducting sputum induction safely and cost-effectively.

For example, the CDC and OSHA classify sputum induction as a high-risk procedure when performed on a suspected or known infectious TB patient. The procedure induces coughing, resulting in likelihood of infectious droplet nuclei being expelled into the room, exposing healthcare workers as well as other patients.

The current standard for performing sputum induction involves triage of the patient and extensive training protocols, a sterile environment, and a negative pressure room to perform the procedure.

Negative pressure rooms are very expensive to build and maintain. Many hospitals, especially in rural areas, either don't have one or cannot afford one.

When sputum induction procedures are performed in a negative pressure room in a hospital, the room requires depressurization, sterilization, and pressurization between patients. This process takes time and utilizes staff resources that could be used more efficiently elsewhere in the hospital.

## SafER Medical Products has a better way.

SafER Medical has created a portable negative pressure system (PNPS) that is more effective in protecting healthcare workers and treating patients, saving time and money across healthcare settings and setting a new gold standard in procedures including sputum induction.

SafER's PNPS is portable, flexible, and a fraction of the cost of utilizing and maintaining a negative pressure room in a hospital. With minimal ongoing costs to maintain, SafER portable systems significantly reduce capital expenditures and operational costs, as well as the benefits from freeing up staff to perform more critical tasks in other areas.





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At 6.2 pounds, SafER's PNPS is easy to carry and allows healthcare workers to treat patients with airborne respiratory illness anywhere, from initial intake to ambulance, to waiting rooms in hospitals and treatment rooms.



SafER's PNPS increases space when rooms are limited, allowing many patients to be seen and treated simultaneously anywhere, not in a single dedicated room. Waiting room times are reduced, and patient and hospital workers exposure to airborne respiratory particles is greatly reduced.

SafER's nebulizer delivers 42% more medication to patients, improving the effectiveness of respiratory therapies including sputum induction.

SafER's PNPS is 7 times more effective than the standard system, 19X more effective than a normal room, and 615% more effective than a negative pressure system.

The combination of better treatment outcomes in less time makes the hospital and other medical settings more efficient overall.

Until now, masks and gloves have been the gold standard for protecting medical workers from airborne respiratory illness. Workers are exposed to potential illness daily, often resulting in missed workdays, under staffing, and poor work performance when recovering from illness.

In contrast, SafER's PNPS protects healthcare workers, optimizing performance, reducing missed workdays, and helping maintain operations. The implementation of SafER's PNPS and Respiratory kit will increase hospital capacity, productivity, and overall revenue.

SafER's systems follow CDC and OSHA guidelines while allowing sputum inductions to be conducted in any setting, safely. This reduces the need for dedicated rooms and enhancing space optimization in limited environments.



From an ROI perspective, SafER delivers long term value through cost effective infection control, reduced staff absences due to illness, enhanced and more timely patient outcomes.

At a one-time charge of \$3500 to purchase the system, plus low-cost disposable shields, hospitals can serve many patients at a small fraction of the cost for a conventional negative pressure room, thus improving sputum induction results, and better protecting staff and patients.

By creating a solution that mitigates the cost, morbidity and mortality of respiratory illness, the SafER Medical team has radically shifted the medical landscape in a way that will save billions of dollars annually.

**Optimizing sputum induction procedures is only one of the many ways that SafER portable systems are significantly improving safety, cost-effectiveness and positive outcomes for respiratory care.**

**For more information on SafER capabilities or to discuss deployment opportunities, contact Carl Baker, SafER CEO, at [cbaker@safarmedicalproducts.com](mailto:cbaker@safarmedicalproducts.com)**