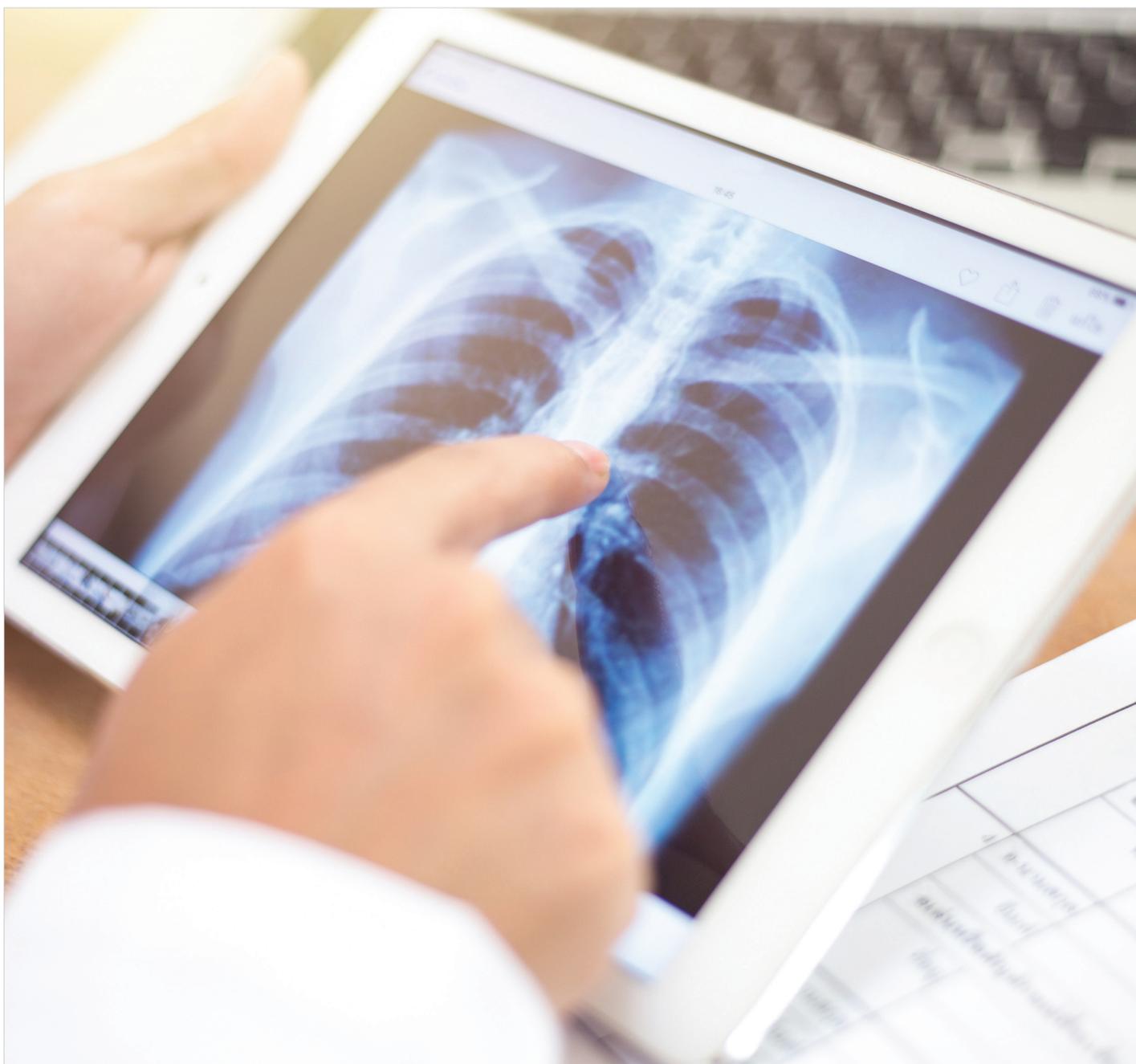


NEW STUDY



# National Brand Cleaners *Significantly & Irreversibly* Damage Lung Tissue



*New study confirms that household cleaners are even more dangerous than anyone imagined.*

NEW INDEPENDENT STUDY CONFIRMS:

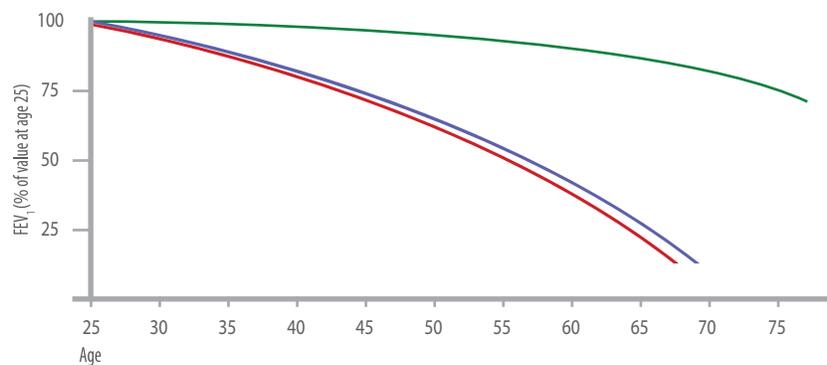
## Numerous toxic chemicals in national brand home cleaners are as damaging to lungs as smoking a pack of cigarettes a day for 20 years.



A new, independent study<sup>1</sup> based on 20 years of research and published in the American Thoracic Society's *American Journal of Respiratory and Critical Care Medicine* reveals a sobering fact: cleaning your home with national brand cleaners as little as once per week significantly and permanently damages lung tissue. Almost all of the cleaning products you buy at the grocery store contain a number of harmful chemicals.

The study specifically named ammonia, chlorine bleach, and quaternary disinfectant compounds as some of the likely culprits. But there are also many other dangerous compounds that name brand cleaners commonly use.

The study also showed cleaning with products that contain dangerous chemicals as little as once per week was as damaging over time to respiratory health as smoking a pack of cigarettes a day for 20 years!



- Never smoked and does not use national brand cleaners
- Smokes 1 pack per day
- Does not smoke, but uses national brand cleaners as little as once per week

Lung capacity naturally decreases with age. Smoking cigarettes is known to accelerate that decrease rapidly<sup>2</sup>. Shockingly, women who used national brand cleaners as little as once per week saw the same decrease in lung capacity as smokers.

# 7 KEY FINDINGS FROM THE STUDY



► **Cleaning your home once a week could damage your lungs as much as smoking 7 packs of cigarettes a week.**

## STUDY DETAILS

- 20-year longitudinal study
- Completely independent
- 6,235 male and female subjects
- Average age 34 at beginning of study; 54 at conclusion
- Use of spray and liquid home cleaning products monitored
- Lung capacity tested regularly
- Results compiled by 28 top researchers from 9 countries
- Peer reviewed and published in the American Thoracic Society's *American Journal of Respiratory and Critical Care Medicine*

### FINDING 1

**Weekly use of national brand home cleaning products is as damaging to lung health as smoking 20 cigarettes per day.**

By now, just about everyone knows the dangers of smoking cigarettes. Among their many hazards is depleted lung capacity—the result of damage to the tender internal tissues of the respiratory system. Shockingly, the study concluded that women who used home cleaning products as little as once per week saw the same reduction in lung capacity as those who smoked a pack a day over the same period.

### FINDING 2

**Women are affected far more than men.**

Though there was a clear correlation between women who cleaned at home or for work and respiratory illness, there was less correlation for men. While not completely unaffected, male lungs have been proven to endure greater exposure to environmental pollutants before experiencing a similar drop in lung capacity. This finding is particularly concerning considering women engage with cleaning products more frequently than men.

### FINDING 3

**Cleaning at home is just as harmful as being an occupational cleaner, if not more so.**

The study survey categorized participants as “not cleaning,” “cleaning at home,” and “occupational cleaning.” Surprisingly, the “cleaning at home” group saw the same decreases in lung health as “occupational cleaning.” Using cleaning products within the relaxed, comfortable confines of home may actually lend to a general complacency that ultimately leads to impaired health.

1. Øistein Svanes et al., “Cleaning at Home and at Work in Relation to Lung Function Decline and Airway Obstruction,” *American Journal of Respiratory and Critical Care Medicine*, February 16, 2018.

2. “Fletcher curve.” Adapted from Fletcher & Peto (1977): The natural history of chronic airflow obstruction.

#### FINDING 4

##### **Liquid cleaners are just as dangerous as sprays.**

Study researchers originally suspected that products delivered through a spray or mist would prove more dangerous than those applied as a liquid, gel, or wipe. The study found no significant difference between cleaner delivery types.

#### FINDING 5

##### **Dangerous chemicals including ammonia, chlorine bleach, and quaternary disinfectant compounds appear to be primary culprits.**

In their conclusions, the researchers stated, "One could hypothesize that long-term exposure to airway irritants such as ammonia and bleach used when cleaning at home could cause fibrotic or other interstitial changes in the lung tissue, thereby leading to accelerated decline of FVC [forced vital capacity]."

#### FINDING 6

##### **Women who regularly use cleaning products have increased rates of asthma.**

Researchers found increased rates of asthma within the groups who used cleaning products regularly. This echoes multiple recent studies that have clearly linked the use of dangerous chemical cleaning agents with the unfortunate onset of asthma.

#### FINDING 7

##### **Damage is cumulative over time.**

When toxic chemicals—like those found in most national brand cleaning products—are regularly inhaled into the sensitive tissues within the lungs, it makes sense that respiratory problems would result. "Exposure to cleaning chemicals," the researchers wrote, "could result in accelerated lung function decline and chronic airway obstruction; low-grade inflammation over many years could possibly lead to persistent damage to the airways."

## **Household cleaners are even more dangerous than anyone imagined.**

Most of the companies that manufacture the national cleaning brands knowingly choose to formulate with dangerous chemicals. Almost all cleaning products you'll find in the grocery store contain numerous toxic ingredients, including, but not limited to, the following:\*

### **CHLORINE BLEACH**

- 2000 Flushes® Toilet Bowl Cleaner
- Cascade® Complete with Clorox®
- Clorox® Bathroom Cleaner with Bleach
- Clorox® Bleach
- Clorox® Clean-Up® All Purpose Cleaner
- Clorox® Toilet Bowl Cleaner
- Fantastik® 5-in-1 All Purpose Cleaner
- Great Value® All Purpose Cleaner with Bleach
- Kaboom® Mold and Mildew Stain Remover
- Kaboom® Shower, Tub & Tile Cleaner
- Lysol® Mold & Mildew Bathroom Cleaner
- Redi Shine® Bathroom Cleaner
- Scrubbing Bubbles® Foaming Bleach Bathroom Cleaner
- Scrubbing Bubbles® Multi Surface Bathroom Cleaner
- Soft Scrub® with Bleach
- The Works® Toilet Bowl Cleaner with Bleach

### **AMMONIA**

- Great Value® Glass Cleaner
- Misty® Glass & Mirror Cleaner
- Spartan® Glass Cleaner
- Windex® Original

### **QUATERNARY DISINFECTANT COMPOUNDS**

- Clorox® Bathroom Disinfecting Bleach-Free Cleaner
- Clorox® Disinfecting Wipes
- Formula 409® Multi-Surface Cleaner
- Great Value® Disinfectant Spray
- Lysol® All-Purpose Cleaner
- Lysol® Disinfectant Spray
- Lysol® Disinfecting Wipes
- Spic and Span® Everyday Antibacterial Cleaner

### **AND MANY MORE....**

\* Product names are registered trademarks of their respective owners.

► *If you haven't done so already, now is the time to rid your home of the dangerous national cleaning products that contain so many harmful chemicals.*