Jeffrey M. Zirger

Information Collection Review Office

Centers for Disease Control and Prevention

1600 Clifton Road NE, MS H21-8

Atlanta, GA 30329

July 29, 2025

RE: Docket No. CDC-2025-0022

Dear Dr. Zirger,

I am writing to express my full support for the Centers for Disease Control and Prevention (CDC) and the Department of Health and Human Services (HHS) in their initiative to investigate waste anesthetic gas exposure in post-anesthesia care units (PACUs), particularly its impact on healthcare professionals such as PACU nurses. However, I believe it is imperative that Source Control measures be implemented concurrently with this study. PACU nurses are currently exposed to the same risks for which the CDC has already established guidelines for operating rooms (ORs). It is illogical to consider this exposure any less hazardous simply because it occurs in a different setting.

Delivery of anesthesia involves inhalation agents administered via a closed system. Typically, 2–3% sevoflurane is used, corresponding to concentrations of 20,000–30,000 ppm. As the patient nears spontaneous respiration, the concentration is around 0.6% or 6,000 ppm. Extubation usually occurs at 0.2%, or approximately 2,000 ppm, before the patient is transferred to the PACU. At this point, the patient's lungs still contain substantial amounts of unmetabolized gas. Over the next 30 minutes, PACU nurses are exposed to these exhaled gases in the breathing zone, often at levels above the CDC's recommended safety threshold of 2 ppm—standard for operating rooms.

Extensive research, including multiple peer-reviewed publications, the AHIA/ASPAN white paper, and the NIOSH 2022 bulletin, have already documented these risks. Mitigating exposure through Source Control or enhanced airflow designs is the only effective method. No other intervention offers adequate protection.

While documenting the health impacts of waste anesthetic gases on PACU nurses is necessary and commendable, conducting such research without concurrently implementing protective measures poses a clear and unnecessary risk. For more than 25 years, operating rooms have maintained strict standards to reduce exposure. There is no valid rationale for excluding PACUs from the same level of oversight and protection.

Therefore, I strongly support the CDC's commitment to further research. But to safeguard the health of PACU nurses in the interim, Source Control must be mandated and implemented immediately—ensuring consistent safety standards across all perioperative environments.

Having researched this subject for over 20 years, I offer my unlimited assistance in any way possible.

Sincerely,

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References

1. McGlothlin et al, Journal of PeriAnesthesia Nursing, 2014

2. Hiller et al, Anesthesiology Research and Practice, 2015

3. Tallent et al, Anasthesia, 2018

4. AIHA/ASPAN White Paper: Recognition, Evaluation and Control of Waste Anesthetic Gases in the Post-Anesthesia Care Unit, 2021

5. ASPAN adapts a new Position Statement: Waste Anesthetic gases outside of the OR, 2022

6. NIOSH EPHB Report No. 2022-DFSE-822 March 2022: Engineering Controls for Post-Operatory Waste Anesthetic Gases- This report documents Wags are present in the PACU and above NIOSH RELs, 2022

7. Optimization of Ventilation Design for the Hospital PACU: ASHRAE Journal- Increasing room air exchanges will not remove WAGs from the breathing Zone, October 2024

8. CDC 1999 OSHA Anesthetic gases: guidelines for workplace exposures