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Privacy Impact Assessment Form

v 1.21

Status | Form Number | Form Date 04/06/26

	Question	Answer
1	OPDIV:	CDC
2	PIA Unique Identifier:	TBD
2a	Name:	Occupational exposures to waste anesthetic gases in healthcare
3	The subject of this PIA is which of the following?	○ General Support System (GSS) ○ Major Application ○ Minor Application (stand-alone) ○ Minor Application (child) ◉ Electronic Information Collection ○ Unknown
3a	Identify the Enterprise Performance Lifecycle Phase of the system.	Initiation
3b	Is this a FISMA-Reportable system?	○ Yes ◉ No
4	Does the system include a Website or online application available to and for the use of the general public?	○ Yes ◉ No
5	Identify the operator.	◉ Agency ○ Contractor
6	Point of Contact (POC):	POC Title: Research Industrial Hygienist POC Name: Eun Gyung Lee POC Organization: CDC/NIOSH POC Email: DTQ5@CDC.GOV POC Phone: 304 285 6146
7	Is this a new or existing system?	◉ New ○ Existing
8	Does the system have Security Authorization (SA)?	○ Yes ◉ No
8b	Planned Date of Security Authorization	☒ Not Applicable

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8c	Briefly explain why security authorization is not required	This is not a system
10	Describe in further detail any changes to the system that have occurred since the last PIA.	No previous PIA was prepared
11	Describe the purpose of the system.	To assess occupational exposures and adverse acute health effects of waste anesthetic gases (WAGs) and recommend control measures to reduce WAG exposures for healthcare workers in postanesthetic care units (PACUs) and veterinary hospitals.
12	Describe the type of information the system will collect, maintain (store), or share. (Subsequent questions will identify if this information is PII and ask about the specific data elements.)	1) Exposure assessment: During the consent process, each participant's name (PII) will be collected prior to obtaining their signature. If a participant elects to receive individual results, additional contact information (PII), including name, email address, and mailing address, will also be collected. 2) Health assessment: a. During the consent process, each participant's name (PII) will be collected prior to obtaining their signature. b. Administration of post-shift questionnaire: The following information will be collected: • Interviewer name (NIOSH staff administering the questionnaire) (PII); • Participant unique ID (participant name is initially collected on the consent form and later replaced with a de-identified unique ID on the questionnaire) (PII); • Participant demographic information (including date of birth, race/ethnicity, sex, education level) (PII to the extent it can identify an individual); • Participant employment information (including job title, years of experience, hours worked per week, work location, training status) (PII to the extent it can identify an individual); • Participant health information (including acute symptoms, reproductive history, and other medical history) (sensitive health information); and • Participant Information on tobacco and electronic cigarette use.

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13	Provide an overview of the system and describe the information it will collect, maintain (store), or share, either permanently or temporarily.	1) Exposure assessment: We will collect paper consent forms before beginning industrial hygiene sampling. While on-site, completed forms will be kept in a locked box, which will be removed from the facility at the end of each day. 2) Health assessment: We will collect paper consent forms before administering post-shift questionnaires. NIOSH staff will conduct interviewes using a CDC laptop, where all survey questions will be input into an application called EQuestionnaire, which is installed on the device. On the first day of participation, a full version of the questionnaire will be administered, followed by a shorter version from the second day that will focus solely on post-shift acute health symptoms. If any unexpected issues occur with the CDC laptop, such as a login failure, a paper version of the questionnaire will be utilized instead. The EQuestionnaire application, which is part of the Field Data and Reporting System (FDCRS) (ESC ID: 2366), was developed using Microsoft Visual Studio. All responses will be stored in a local database on the same computer. During the process, NIOSH staff will read each question to the participants and directly record their responses on the laptop. Wi-Fi connectivity is not required to use this tool. The CDC computer will be password-protected and kept in the possession of staff, stored in a locked box between questionnaire administration periods. In cases where a paper questionnaire is used, completed forms will be secured in a locked box while at the facility, and both the CDC laptop and the locked box containing paper questionnaires will be removed from the facility at the end of each day. Furthermore, we will securely erase the link between workers' names and unique identifiers from the field computer after study personnel return to the secured CDC offices and transfer all data to the secure system
14	Does the system collect, maintain, use or share **PII**?	(•) Yes ( ) No

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15	Indicate the type of PII that the system will collect or maintain.	☐ Social Security Number ☒ Date of Birth ☒ Name ☐ Photographic Identifiers ☐ Driver's License Number ☐ Biometric Identifiers ☐ Mother's Maiden Name ☐ Vehicle Identifiers ☒ E-Mail Address ☒ Mailing Address ☐ Phone Numbers ☐ Medical Records Number ☐ Medical Notes ☐ Financial Account Info ☐ Certificates ☐ Legal Documents ☒ Education Records ☐ Device Identifiers ☐ Military Status ☒ Employment Status ☐ Foreign Activities ☐ Passport Number ☐ Taxpayer ID Health information: acute symptoms, reproductive history, and other medical history (e.g., asthma, chronic bronchitis, kidney problems, etc.) Demographic information: Date of birth, race/ethnicity, sex, education level Additional data on tobacco and electronic cigarette use. Employment information: Job title, years of experience, hours worked per week, work location, and training status.
16	Indicate the categories of individuals about whom PII is collected, maintained or shared.	☒ Employees ☒ Public Citizens ☒ Business Partners/Contacts (Federal, state, local agencies) ☐ Vendors/Suppliers/Contractors ☐ Patients Other: Healthcare workers in human and animal hospitals. All interviewers are CDC employees.
17	How many individuals' PII is in the system?	100-499
18	For what primary purpose is the PII used?	The PII will be used to perform stratified data analysis (e.g., by age group). The statistical analysis will quantify the prevalence and patterns of occupational exposures and associated symptoms, identify risk factors and correlations across job roles and tasks, and evaluate the effectiveness of existing controls. Findings will inform evidence-based recommendations for hazard mitigation, worker protection, and programmatic improvements at participating facilities.
19	Describe the secondary uses for which the PII will be used (e.g. testing, training or research)	N/A
20	Describe the function of the SSN.	SSN will not be collected

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20a	Cite the **legal authority** to use the SSN.	NA
21	Identify **legal authorities** governing information use and disclosure specific to the system and program.	• Public Health Service Act, Section 301, "Research and Investigation" (42 U.S.C. 241). • Occupational Safety and Health Act, Section 20, "Research and Related Activities" (29 U.S.C. 669).
22	Are records on the system retrieved by one or more PII data elements?	(•) Yes ( ) No
22a	Identify the number and title of the Privacy Act System of Records Notice (SORN) that is being used to cover the system or identify if a SORN is being developed.	Published: 09-20-0147, Occupational Health Epidemiologica Published: Published: ☐ In Progress
23	Identify the sources of PII in the system.	Directly from an individual about whom the information pertains ☒ In-Person ☒ Hard Copy: Mail/Fax ☐ Email ☐ Online ☐ Other Government Sources ☐ Within the OPDIV ☐ Other HHS OPDIV ☐ State/Local/Tribal ☐ Foreign ☐ Other Federal Entities ☐ Other Non-Government Sources ☒ Members of the Public ☐ Commercial Data Broker ☐ Public Media/Internet ☐ Private Sector ☐ Other
23a	Identify the OMB information collection approval number and expiration date.	30-day Federal Register Notice currently in progress. Approved PIA is required prior to receiving OMB approval number for this new data collection.
24	Is the PII shared with other organizations?	( ) Yes (•) No

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24a	Identify with whom the PII is shared or disclosed and for what purpose.	☐ Within HHS ☐ Other Federal Agency/Agencies ☐ State or Local Agency/Agencies ☐ Private Sector
24b	Describe any agreements in place that authorizes the information sharing or disclosure (e.g. Computer Matching Agreement, Memorandum of Understanding (MOU), or Information Sharing Agreement (ISA)).	N/A
24c	Describe the procedures for accounting for disclosures	We will share the results with participating facilities through a conference call or by providing summary tables. To protect participant anonymity, we will suppress frequency and percentage values utilizing counts less than five. Totals and subtotals will also be suppressed if they include any suppressed values to avoid unintentional disclosure of sensitive information. We will also comply with Section 301(d) of the Public Health Service Act (PHSA), which requires the Secretary of Health and Human Services to issue Certificates of Confidentiality (CoCs) to researchers conducting biomedical, behavioral, clinical, or other studies that collect identifiable, sensitive information.
25	Describe the process in place to notify individuals that their personal information will be collected. If no prior notice is given, explain the reason.	During the consent process, we will inform individuals that we will collect their personal information. We will also tell participants that the PII they provide may be used for future research. When feasible for those future studies, we will remove names and other direct identifiers from the data. Their information will remain confidential except as required by law. We will not use participants' names in any report or publication. Study data presented in reports will be aggregated with information from other participants. Only NIOSH staff working on the study will have access to identifiable information. Study results will be reported using study IDs rather than names; the file that links study IDs to participant names will be stored in a secure database on a protected computer.
26	Is the submission of PII by individuals voluntary or mandatory?	◉ Voluntary ○ Mandatory
27	Describe the method for individuals to opt-out of the collection or use of their PII. If there is no option to object to the information collection, provide a reason.	We have already stated that the provision of their information is "voluntary." We believe that "voluntary" option gives them an opt-out option at any point during the survey. They will be also told that they can skip individual questions.

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28	Describe the process to notify and obtain consent from the individuals whose PII is in the system when major changes occur to the system (e.g., disclosure and/or data uses have changed since the notice at the time of original collection). Alternatively, describe why they cannot be notified or have their consent obtained.	During the informed consent process, we will inform potential participants that their data may be used for future research. If we do so, we will remove names and other direct identifiers from the collected information so that the data are de-identified, and we may use or share the de-identified data with other researchers without obtaining additional consent. Participants will be told this explicitly in the consent form and given contact information for questions.
29	Describe the process in place to resolve an individual's concerns when they believe their PII has been inappropriately obtained, used, or disclosed, or that the PII is inaccurate. If no process exists, explain why not.	We will fully explain the data protection plan to the potential participants during the informed consent process. The consent form includes the following statements about PII protection: • NIOSH is authorized to collect your personal information and will protect it to the extent allowed by law. Data for this study are collected under the system of record notice (SORN) CDC Privacy Act System Notice 09-20-0147 and will be maintained in accordance with the Federal Privacy Act of 1974. • You will be given a study ID that we will use to manage your data. In the field, all PII will either be with the project officer or on an encrypted flash drive or encrypted laptop computer. The consent form will contain the study ID, which will be the only link between your name and contact information, and the data collected. During site visits, all data that can identify you will be on a secure laptop computer; any paper records will be kept in a locked box with the study researchers. When we return from the site visit, paper forms will be kept in a locked file cabinet in a secure area at the NIOSH office, and digital data will be stored in a restricted access computer folder backed up daily on the CDC network. • We will not disclose any individual interview results with management at each participating hospital. We will share the results with participating facilities through a conference call or by providing summary tables. • We will publish scientific papers based on your data. However, any published study results will not include your PII; instead, we will use aggregated data for these publications. As a result, the likelihood of reidentifying participants from the results is very low.

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30	Describe the process in place for periodic reviews of PII contained in the system to ensure the data's integrity, availability, accuracy and relevancy. If no processes are in place, explain why not.	This study will comply with the CDC Data Management and Sharing Policy. To ensure compliance, the Data Management Plan (DMP) will be documented in the STARS system and reviewed and updated at least annually. Periodic reviews of PII will be conducted by the Co-Principal Investigators (PIs) to ensure data integrity, availability, accuracy, and relevancy. These reviews include verifying that collected data remain complete, accurate, and necessary for the study purpose; conducting retention checks to ensure data are maintained in accordance with approved retention schedules; and confirming that de-identification procedures are properly applied where appropriate. Any outdated, inaccurate, or unnecessary PII will be corrected or securely removed in accordance with CDC records management policies. Access to PII will also be reviewed periodically to ensure that only authorized personnel retain access, supporting data integrity and availability. In the event of unanticipated problems involving PII, the Co-PIs will report the incidents via email to the NIOSH Respiratory Health Division Associate Director of Science, the NIOSH Human Research Protection Program, the Environmental Health and Safety Office, and the Data Security Officer (if applicable) as soon as possible, but no later than within two business days after first learning of the incident. The Co-PIs will complete the CDC Incident Report Form 0.1379 within ten days of event identification as specified by CDC Incidence Guidance. Additionally, participants will be verbally informed of any incidents that occur during or immediately following their participation in the study. As soon as feasible, the Co-PIs will contact the participant to discuss the problem, any risk that might accrue to the participant, and how the problem has been addressed and mitigated. If the incidents occur at the aggregate level, study participants will be informed via letter within two weeks of Co-PIs becoming aware of the incident.
31	Identify who will have access to the PII in the system and the reason why they require access.	☒ Users: Co-PIs and Interviewers administering post-shift questionnaires (all CDC staff) ☒ Administrators: Co-PIs, Data manager (All CDC staff) ☐ Developers ☐ Contractors ☐ Others
32	Describe the procedures in place to determine which system users (administrators, developers, contractors, etc.) may access PII.	The Co-PIs, data manager, and interviewers administering post-shift questionnaires will access PII through the EQuestionnaire system. If a paper version of the post-shift questionnaire is used, only authorized personnel with permission to access PII will enter the data.

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33	Describe the methods in place to allow those with access to PII to only access the minimum amount of information necessary to perform their job.	Role-Based Access Control (RBAC) is implemented to enforce the principle of least privilege, ensuring that users only have access to the minimum amount of PII necessary to perform their assigned duties. Access to PII is restricted based on defined user roles, and information displayed is limited to a "need-to-know" basis according to job responsibilities. Access to the system and to PII requires a documented request and approval process. Requests for access are submitted by the Co-PIs via email to a data manager. The data manager reviews each request and grants access only after verifying that the requested level of access is appropriate for the user's role and consistent with the principle of least privilege. The system maintains documented records of access requests and approvals. In addition, periodic access recertification is conducted at least annually by the Co-PIs to ensure that users continue to require access and that access levels remain appropriate. Access may also be reviewed on an ad hoc basis when staff roles change or when no longer required. Any unnecessary or outdated access privileges are promptly revoked.
34	Identify training and awareness provided to personnel (system owners, managers, operators, contractors and/or program managers) using the system to make them aware of their responsibilities for protecting the information being collected and maintained.	We will ensure that all personnel associated with this project have received human subjects research protection training through CITI. All personnel collecting and working with data will receive confidentiality training, annually.
35	Describe training system users receive (above and beyond general security and privacy awareness training).	In addition to general security and privacy awareness, system users will receive verbal training specific to this project. This training covers, but is not limited to, the following areas of concern: restrictions on use of information, enhanced protection of computerized files as part of study implementation, dissemination of results, data sharing with other study partners, analytic data access policies and procedures, instructions concerning confidentiality procedures, procedures for traveling with confidential study materials, loss of study materials containing confidential data. In addition, personnel in specific roles receive training and awareness related to those roles as needed, e.g., computer system administrators and other IT personnel receive training on computer system security, annually.
36	Do contracts include Federal Acquisition Regulation and other appropriate clauses ensuring adherence to privacy provisions and practices?	○ Yes ◉ No
37	Describe the process and guidelines in place with regard to the retention and destruction of PII. Cite specific records retention schedules.	Records of the data collected are retained and disposed in accordance with the CDC Scientific and Research Projects Records control schedule (NARA job number: N1-442-09-001). Records will be retained for at least 11 years and not more than 20 years following the end of the study period. The end of the study period will be considered 1 year after the final manuscript from this data collection is submitted for publication.

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38	Describe, briefly but with specificity, how the PII will be secured in the system using administrative, technical, and physical controls.	Administrative Controls: Role-based access governance and mandatory security/privacy training to ensure compliance with established policies. Access to PII is granted based on least privilege, requires administrator approval, and is subject to periodic review/re-certification. Technical Controls: Use RBAC with approved user provisioning; require multi factor authentication where feasible. Encrypt credentials at the database level; apply in-transit and at-rest encryption for PII and study data. Implement file backup, audit logging, and least privilege access. Physical Controls: Restricted access managed by ID badges for servers and storage areas. Computers are password protected, and if paper documents are collected, the documents will be stored in a secure/locked storage cabinets with controlled access.

REVIEWER QUESTIONS: The following section contains Reviewer Questions which are not to be filled out unless the user is an OPDIV Senior Officer for Privacy.

	Reviewer Questions	Answer
1	Are the questions on the PIA answered correctly, accurately, and completely?	◯ Yes ◯ No
Reviewer Notes		
2	Does the PIA appropriately communicate the purpose of PII in the system and is the purpose justified by appropriate legal authorities?	◯ Yes ◯ No
Reviewer Notes		
3	Do system owners demonstrate appropriate understanding of the impact of the PII in the system and provide sufficient oversight to employees and contractors?	◯ Yes ◯ No
Reviewer Notes		
4	Does the PIA appropriately describe the PII quality and integrity of the data?	◯ Yes ◯ No
Reviewer Notes		
5	Is this a candidate for PII minimization?	◯ Yes ◯ No
Reviewer Notes		
6	Does the PIA accurately identify data retention procedures and records retention schedules?	◯ Yes ◯ No
Reviewer Notes		

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	Reviewer Questions	Answer
7	Are the individuals whose PII is in the system provided appropriate participation?	◯ Yes ◯ No
Reviewer Notes		
8	Does the PIA raise any concerns about the security of the PII?	◯ Yes ◯ No
Reviewer Notes		
9	Is applicability of the Privacy Act captured correctly and is a SORN published or does it need to be?	◯ Yes ◯ No
Reviewer Notes		
10	Is the PII appropriately limited for use internally and with third parties?	◯ Yes ◯ No
Reviewer Notes		
11	Does the PIA demonstrate compliance with all Web privacy requirements?	◯ Yes ◯ No
Reviewer Notes		
12	Were any changes made to the system because of the completion of this PIA?	◯ Yes ◯ No
Reviewer Notes		

General Comments	

OPDIV Senior Official for Privacy Signature	JARELL OSHODI -S Digitally signed by JARELL OSHODI -S Date: 2026.04.28 14:56:55 -04'00'	HHS Senior Agency Official for Privacy	