

**Appendix K:
Asthma in Healthcare Survey**

Eligibility Questions

E1. Are you 18 years of age or older?

No Yes

IF 'No': Thank you for your interest in the survey. Unfortunately you are not eligible to participate.

IF 'Yes': Go to Question E2

E2. What is your *current* employment status? *Please mark the single best answer.*

Currently employed in the healthcare industry

Employed outside of the healthcare industry

Unemployed

Disabled

On family leave

On extended sick leave

Retired

Student

Other, please specify: _____

IF answer 'currently employed in the healthcare industry: Go to Question 1

IF answer 'employed outside of the healthcare industry: Go to Question E3

IF answer 'unemployed, disabled, on family leave, on extended six leave, retired, student or other: Go to Question E6

E3. Please write in the title for the job you had 5 years ago. _____

E4. What did you do at the job you had 5 years ago? _____

E5. What was the name of the company where you worked 5 years ago? _____

E6. Are you not working in the healthcare industry due to respiratory problems related to work? No Yes

IF 'Yes' or 'No': Thank you for your interest in the survey. Unfortunately you are not eligible to participate.

Respiratory Symptoms

1 Have you had wheezing or whistling in your chest at any time in the last **12 months**? No Yes

IF 'No': Go to Question 2

IF 'Yes':

1.1 Have you been at all breathless when the wheezing noise was present? No Yes

1.2 Have you had this wheezing or whistling when you did **not** have a cold? No Yes

2 Have you woken up with a feeling of tightness in your chest at any time in the last **12 months**? No Yes

3 Have you had an attack of shortness of breath at any time in the last **12 months**? No Yes

4 Have you had an attack of shortness of breath that came on during the day when you were at rest at any time in the last **12 months**? No Yes

5 Have you had an attack of shortness of breath that came on **following** strenuous activity at any time in the last **12 months**? No Yes

6 Have you been woken by an attack of shortness of breath at any time in the last **12 months**? No Yes

7 In the last **12 months**, have you **usually** coughed during the day, or at night, in the winter? No Yes

IF 'No': Go to Question 8

IF 'Yes':

7.1 In the last **12 months**, have you coughed like this on most day for as much as 3 months? No Yes

8 Have you been woken by an attack of coughing at any time in the last **12 months**? No Yes

9 In the last **12 months**, have you **usually** brought up any phlegm (mucous) from your chest during the day, or at night, in the winter? No Yes

IF 'No': Go to Question 10

IF 'Yes':

9.1 In the last **12 months**, have you brought up phlegm (mucous) like this on most days for as much as 3 months? No Yes

10 When you are near animals, such as cats, dogs or horses, do you **ever**:
Get itchy or watery eyes? No Yes

Get a feeling of tightness in your chest? No Yes

Stuffy nose or sinus congestion or pressure? No Yes

11 When you are in a dusty part of the house, or near pillows or comforters do you **ever**:

- Get itchy or watery eyes? No Yes
 Get a feeling of tightness in your chest? No Yes
 Stuffy nose or sinus congestion or pressure? No Yes

12 When you are near trees, grass, or flowers, or when there is a lot of pollen around, do you **ever**:

- Get itchy or watery eyes? No Yes
 Get a feeling of tightness in your chest? No Yes
 Stuffy nose or sinus congestion or pressure? No Yes

Question 13 asks about trouble breathing EVER IN YOUR LIFE

13 Have you **ever** had trouble with your breathing? No Yes

IF 'No': Go to Question 15

IF 'Yes':

13.1 What kind of trouble did you have? *Mark single best answer.*

- Continuously, as if breathing is not quite right.
Repeatedly, however gets completely better
Only rarely

13.2 Was this trouble with your breathing brought on by your work environment? No Yes

IF 'No': Go to Question 15

IF 'Yes': Go to Question 14

14 Which exposures at work cause or trigger trouble breathing or respiratory symptoms like wheezing, chest tightness, shortness of breath, cough, or phlegm?
Please mark as many of the triggers as apply to you.

Workplace Symptom Triggers

- Cleaning products
Floor strippers or waxes
Disinfecting or sterilizing solutions
Hand sanitizers, liquid
Adhesives, glues, or removers
Aerosolized medications
Gases or vapors
Latex products
Very cold or very hot temperatures
If other triggers at work not listed, please specify:
 a) _____
 b) _____
 c) _____
 d) _____
Don't know

Asthma

15 Have you **EVER** had asthma? No Yes

16. Have you **EVER** had an episode of asthmatic symptoms? No Yes

IF 'YES' to BOTH questions 15 and 16: Continue with Question 17
IF 'NO' to ONE OR BOTH of questions 15 and 16: Go to Question 27

17 How old were you when you had your first episode of asthma symptoms? ___ ___ years

18 Were you employed when you had your first episode of asthma symptoms? No Yes

IF 'No': Go to Question 19

IF 'Yes': When you had your first episode of asthmatic symptoms:

18.1 What type of job did you have?

Job title: _____

18.2. What did you do in this job?

18.3 What type of company did you work for?

19 Has your asthma been confirmed by a doctor? No Yes

IF 'No': Go to Question 20

IF 'Yes':

19.1 At what age was your asthma confirmed by a doctor? ___ ___ years old

20 After onset of asthma, did you ever have a period when you did not have asthma symptoms? No Yes

IF 'No': Go to Question 21

IF 'Yes':

20.1 At what age did your asthma symptoms disappear? ___ ___ years old

20.2 Did your asthma symptoms reappear? No Yes

IF 'No': Go to Question 21

IF 'Yes':

20.2.1 At what age did your asthma symptoms reappear? ___ ___ years old

20.2.2 Were you employed when your asthma symptoms reappeared? No Yes

IF 'No': Go to Question 21

IF 'Yes':

20.2.2.1 What type of job did you have?

Job title: _____

20.2.2.2 What did you do in this job?

20.2.2.3 What type of company did you work for?

21 Have you had an attack of asthma in the last **12 months**? An asthma attack or asthma episode is when your asthma symptoms become worse than usual. No Yes

IF 'NO': 21.1 In what year did you have your last attack of asthma? _ _ _ _

IF 'YES': 21.2 How many attacks of asthma have you had in the last **12 months**?
Enter approximate number. _ _ _ attacks

22 Are you currently taking any medications for asthma including inhalers, aerosols or tablets? No Yes

IF 'No': Go to Question 23

IF 'Yes':

22.1 In the last **12 months**, did you use fast-acting (or rescue) bronchodilators for asthma? No Yes

IF 'No': Go to Question 22.2

IF 'Yes':

22.1.1 In the last **12 months**, were there times when you increased your usage of fast-acting (or rescue) bronchodilators on a short-term basis (over a period from 2 days to 2 weeks)? No Yes

22.2 In the last **12 months**, did you use inhaled steroids for asthma? No Yes

IF 'No': Go to Question 22.3

IF 'Yes':

22.2.1 In the last **12 months**, were there times when you increased your usage of inhaled steroids on a short-term basis (over a period from 2 days to 2 weeks)? No Yes

22.3 In the last **12 months**, did you use oral steroids (for example, prednisone) for asthma? No Yes

IF 'No': Go to Question 23

IF 'Yes':

22.3.1 In the last **12 months**, were there times when you increased your usage of oral steroids on a short-term basis (over a period from 2 days to 2 weeks)? No Yes

23 Have you had to miss any days of work due to asthma in the last **12 months**? No Yes

IF 'No': Go to Question 24

IF 'Yes':

23.1 How many days of work did you have to miss due to asthma in the last **12 months**?
Enter approximate number. _ _ days

24 Did you ever go to work in the last **12 months** even though your asthma symptoms were especially bad? No Yes

IF 'No': Go to Question 25

IF 'Yes':

24.1 On how many days in the last **12 months** did you go to work even though your asthma symptoms were especially bad? *Enter approximate number* _ _ days

25 Have you ever been hospitalized overnight (or longer) for asthma?

No Yes

IF 'No': Go to Question 26

IF 'Yes':

25.1 In the last **12 months**, were you hospitalized overnight for asthma?

No Yes

26 In the last **12 months**, did you get urgent treatment for an asthma attack at a doctor's office, urgent care facility, or emergency department (ER)?

Do not count routine planned appointments. (An asthma attack or asthma episode is when your asthma symptoms become worse than usual.)

No Yes

IF 'No': Go to Question 27

IF 'Yes':

26.1 In the last **12 months**, how many times did you get urgent treatment for an asthma attack at a doctor's office, urgent care facility, or emergency department (ER)?

Do not count routine planned appointments. ___ ___ times

Medical History

27 Have you **ever** had any of the following medical conditions?

Chronic obstructive pulmonary disease, or COPD

No Yes Don't Know

Emphysema

No Yes Don't Know

Nasal or sinus allergies, including hay fever

No Yes Don't Know

Eczema or any kind of skin allergy

No Yes Don't Know

Allergies to animals

No Yes Don't Know

Allergies to dust or dust mites

No Yes Don't Know

Allergies to latex or latex-containing products (ace bandages/adhesive tape/gloves)

No Yes Don't Know

28 Has your **biological mother** had the following medical conditions?

Asthma

No Yes Don't Know

Hay fever, eczema, or skin allergies

No Yes Don't Know

29 Has your **biological father** had the following medical conditions?

Asthma

No Yes Don't Know

Hay fever, eczema, or skin allergies

No Yes Don't Know

Home

30 In the last **12 months**, have you observed any of the following in your house or apartment?

- Water leakage or water damage indoors on walls, floors, or ceilings No Yes Don't Know
Visible mold growth (not on food) indoors on walls, floors, or ceilings No Yes Don't Know
Odor of mold or mildew (not from food) No Yes Don't Know

31 In the last **12 months**, have there been any renovations or construction in your house or apartment? No Yes Don't Know

32 In the last **12 months**, how often have you personally cleaned your own home?

- Never
 Less than 1 day per week
 1-2 days per week
 3-4 days per week
 5-7 days per week

IF 'NEVER': Go to Question 34

IF ANY ANSWER OTHER THAN 'NEVER': Go to Question 33

33 In the last **12 months**, how many days a week have you used each of the following cleaning products in your own home?

	Never	Less than 1 day per week	1-2 days per week	3-4 days per week	5-7 days per week
Any spray cleaning product	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bleach like Clorox®	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ammonia products, like Mr. Clean Top Job®	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Window cleaners, like Windex®	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air freshening sprays, like Febreze® or Glade®	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Accidental Chemical Spill or Release

34 Were you **ever** involved in or near an accidental chemical spill or release? No Yes Don't Know

IF 'No': Go to Question 35

IF 'Yes': Go to Question 34.1

34.1 In what year did the most recent accidental chemical spill or release occur?

— — — —

34.2 Where did this most recent accidental chemical spill or release occur? Home Work Elsewhere

34.3 What were you exposed to? *Please write in answer.*

34.4 Did you have to receive medical attention because of the most recent accidental exposure? No Yes Don't Know

34.5 In the first 24 hours following the most recent accidental exposure, did you experience any respiratory symptoms such as shortness of breath, wheezing, cough, or tightness in your chest? No Yes Don't Know

IF 'No': Go to Question 35

IF 'Yes': Go to Question 34.5.1

34.5.1 How long did these symptoms last?

- Less than 1 week
- 1 week to 1 month
- More than 1 month but less than 3 months
- 3 months or longer
- Don't know

Employment History

History of Healthcare Work

35 Please record the age when you started working in healthcare OR the age you began as a healthcare student, whichever was earlier. _____ years old

36 How many total years have you worked in healthcare? (*Include years you were a healthcare student.*) _____ years

Current Employment

If you have more than one current healthcare job, record information for the job where you work the most hours per week.

37 What is the name of hospital, nursing home or other facility where you currently work: _____

38 In which borough of New York City or nearby city is the hospital, nursing home or other facility where you currently work: _____

39 What is your *current* occupation?

- Dental assistant
- Environmental service worker, housekeeper, or cleaner
- Lab technician, lab technologist, or assistant in a medical or clinical laboratory
- Licensed practical nurse (LPN) or licensed vocational nurse (LVN)
- Medical instrument preparer, central supply worker or endoscopy technician
- Nursing assistant, nurse technician, nurse support assistant, patient care technician, patient support or orderly
- Operating room technician
- Registered nurse (RN)
- Respiratory therapist or respiratory technician
- Other, please specify _____

40 In what type of facility do you *currently* work?

- Hospital
- Nursing home
- Both hospital and nursing home
- Other, please specify _____

41 Where do you work in the facility? *Please mark the single best answer.*

- Patient care ward
- Administration
- Central supply
- Dental
- Dialysis
- Ear, nose, and throat (ENT)
- Education
- Emergency room (ER)
- Endoscopy
- Float or multiple locations
- General or internal medicine
- Intensive care
- Labor and delivery
- Laboratory, medical and clinical
- Non-patient care area
- Outpatient care
- Pediatric
- Psychiatric
- Pulmonary
- Surgery or operating room
- Other location, please specify _____

42 How many hours do you typically work per week in your *current* job? _____ hours per week

43 What year did you begin your *current* job? _____

44 In this job, are you regularly exposed to vapors, gases, dusts, or fumes? No Yes Don't Know

IF 'NO': Go to Question 45

IF 'YES': Continue with Question 44.1

44.1 To what vapors, gases, dusts, or fumes are you exposed regularly? *Please write in answer.*

45 In the last **12 months**, did you observed any of the following in the area(s) where you work?

Water leakage or water damage indoors on walls, floors, or ceilings No Yes Don't Know

Visible mold growth (not on food) indoors on walls, floors, or ceilings? No Yes Don't Know

Odor of mold or mildew (not from food)? No Yes Don't Know

46 In the last **12 months**, did you observe any of the following renovations or construction in, or next to, the area(s) where you work?

Painting walls and fixtures? No Yes Don't Know

Ripping out and replacing walls, woodwork, and partitions? No Yes Don't Know

Ripping out and replacing floors, carpets, and fixed furniture? No Yes Don't Know

Use of Hand Sanitizers

47 How many times on a typical day, both at home and at work, do you disinfect your hands with liquid hand sanitizers?

- Never
- 1-3 times per day
- 4-10 times per day
- More than 10 times per day

Thinking about your current job and what you have done in this job in the last 12 months:

48. Do you sterilize or high-level disinfect medical instruments, including dental instruments or ventilator parts, in central supply or other locations such as endoscopy and bronchoscopy units, hemodialysis units, operating rooms, or other clinical settings?

No Yes

IF 'YES': Generate questions 50.1 - 50.8.1

49. Do you clean or disinfect fixed surfaces, equipment, or instruments?

No Yes

Examples of fixed surfaces are: countertops, floors, beds, and bathrooms.

Examples of equipment are: IV poles, monitors, carts, and computers.

Examples of instruments are: blood pressure cuffs, and stethoscopes.

IF 'YES': Generate questions 51.1 – 51.6.1

Sterilizing Medical Instruments

50.1. Which of the following sterilants or high-level disinfectants do you use to sterilize medical instruments?

- | | | | |
|---|-----------------------------|------------------------------|-------------------------------------|
| Acetic acid..... | <input type="checkbox"/> No | <input type="checkbox"/> Yes | <input type="checkbox"/> Don't Know |
| Alcohol, such as ethanol or isopropanol..... | <input type="checkbox"/> No | <input type="checkbox"/> Yes | <input type="checkbox"/> Don't Know |
| Bleach or chlorine, such as Clorox®..... | <input type="checkbox"/> No | <input type="checkbox"/> Yes | <input type="checkbox"/> Don't Know |
| Enzymatic cleaners, such as Asepti-Zyme®, 3M Rapid Multi-Enzyme®..... | <input type="checkbox"/> No | <input type="checkbox"/> Yes | <input type="checkbox"/> Don't Know |
| Ethylene oxide in compressed-gas cylinders, single-dose cartridges or glass ampules..... | <input type="checkbox"/> No | <input type="checkbox"/> Yes | <input type="checkbox"/> Don't Know |
| Formaldehyde..... | <input type="checkbox"/> No | <input type="checkbox"/> Yes | <input type="checkbox"/> Don't Know |
| Glutaraldehydes such as Cidex®, Metricide®, Rapicide®, Wavicide®, Aldahol III®, Sporicidin®..... | <input type="checkbox"/> No | <input type="checkbox"/> Yes | <input type="checkbox"/> Don't Know |
| Hydrogen peroxides such as Accell®, Optim®, Resert XL®, Sporox®, Acecide®, EndoSpor Plus®, Metrex®, Peract®, Sterad®..... | <input type="checkbox"/> No | <input type="checkbox"/> Yes | <input type="checkbox"/> Don't Know |
| Hypochlorite or hypochlorous acids such as Sterilox®..... | <input type="checkbox"/> No | <input type="checkbox"/> Yes | <input type="checkbox"/> Don't Know |
| Ortho-phthalaldehydes such as Cidex OPA®, Opaciden®..... | <input type="checkbox"/> No | <input type="checkbox"/> Yes | <input type="checkbox"/> Don't Know |
| Peracetic acid such as Steris®..... | <input type="checkbox"/> No | <input type="checkbox"/> Yes | <input type="checkbox"/> Don't Know |

Please write any other sterilizing or high-level disinfecting chemicals or product names you use

1. _____
2. _____
3. _____
4. _____
5. _____

Please indicate how many days per week you use those products and the type of gloves used.

Chemical or Product Names	Days per week	Gloves Worn
<< Piped in answer from 50.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 50.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 50.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 50.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 50.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 50.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 50.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 50.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 50.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 50.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 50.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 50.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>

On a typical day when you use sterilants or high-level disinfectants

50.2. How many **times per day** do you use these products?

- 1-3 times per day
- 4-10 times per day
- More than 10 times per day

50.3. How many **hours per day** do you use these products?

- Less than 1 hour per day
- 1-4 hours per day
- More than 4 hours per day

50.4. In the last **12 months**, have you ever prepared medical instruments for sterilization **by manually disassembling instruments, removing gross contaminants, or flushing gross contaminants and waste?**

- No Yes Don't Know

IF 'NO': GO TO QUESTION 50.5

IF 'YES': CONTINUE WITH QUESTION 50.4.1

50.4.1. When you remove gross contaminants and waste from scopes and instruments, please indicate how many days per week, times per day, duration of task and the type of gloves used when you perform this task.

Days per week	Times per day	Duration of Task	Gloves Worn
<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>

50.5. In the last **12 months**, have you ever prepared medical instruments for sterilization **by refilling or changing sterilization solutions?**

- No Yes Don't Know

IF 'NO': GO TO QUESTION 50.6

IF 'YES': CONTINUE WITH QUESTION 50.5.1

50.5.1 When you refill or change sterilization solutions, please indicate how many days per week, times per day, duration of task and the type of gloves used when you perform this task.

<u>Days per week</u>	<u>Times per day</u>	<u>Duration of Task</u>	<u>Gloves Worn</u>
<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>

50.6. In the last **12 months**, have you ever **manually** sterilized medical instruments? No Yes Don't Know

IF 'NO': GO TO QUESTION 50.7

IF 'YES': CONTINUE WITH QUESTION 50.6.1

50.6.1 When you **manually** sterilize medical instruments, please indicate how many days per week, times per day, duration of task and the type of gloves used when you perform this task.

<u>Days per week</u>	<u>Times per day</u>	<u>Duration of Task</u>	<u>Gloves Worn</u>
<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>

50.6.2. Do you use a sterilants immersion container when you sterilize or high-level disinfect medical instruments? No Yes Don't Know

IF 'NO': GO TO QUESTION 50.7

IF 'YES': CONTINUE WITH QUESTION 50.6.2.1

50.6.2.1. What conditions apply when using a sterilants immersion container?

Enclosed box or exhaust hood used

No Yes Don't Know

Emersion box equipped with a tight fitting lid

No Yes Don't Know

Local exhaust ventilation is used in room

No Yes Don't Know

50.7. In the last **12 months**, have you ever sterilized medical instruments using automated systems? No Yes Don't Know

IF 'NO': GO TO QUESTION 51

IF 'YES': CONTINUE WITH QUESTION 50.7.1

50.7.1. Which tasks do you perform to sterilize medical instruments using automated systems?

Please indicate if you perform these tasks listed in the following table.

Tasks	Do you perform this task?		
	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Operate Ethylene oxide sterilizer	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Operate plasma hydrogen peroxide Sterad® system	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Operate Steris® system	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Conduct maintenance on systems, such as cleaning or replacing screens and filters	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know

Please indicate how many days per week, times per day, duration of task, and the type of controls used.

Tasks	Days per week	Times per day	Duration of Task	Controls	
				Is system enclosed?	Is local exhaust ventilation used?
<< Piped in answer from 50.7.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 50.7.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 50.7.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 50.7.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>

50.8. Do you rinse or flush sterilized medical instruments with alcohol? No Yes

IF 'NO': GO TO QUESTION 51

IF 'YES': CONTINUE WITH QUESTION 50.8.1

50.8.1. After rinsing or flushing with alcohol do you use forced air to dry medical instruments? No Yes

<< Piped in answer from 51.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 51.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 51.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 51.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>

On a typical day when you use cleaners or disinfectants on fixed surfaces, equipment, or instruments:

51.2 How many **times per day** do you use these products?

- 1-3 times per day
- 4-10 times per day
- More than 10 times per day

51.3 How many **hours per day** do you use these products?

- Less than 1 hour per day
- 1-4 hours per day
- More than 4 hours per day

51.4 Do you use more sprays or more wipes, or do you use both equally often? *Select the ONE best answer.*

- Use more sprays than wipes
- Use more wipes than sprays
- Use sprays and wipes about equally
- Not sure which I use more

51.5 Which tasks do you perform when cleaning or disinfecting fixed surfaces, equipment, or instruments?

Tasks	<u>Do you perform this task?</u>		
	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Wipe down beds, furniture, counters, walls, etc.	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Cleanup spills or blood	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Manually mix, refill, or empty cleaning or disinfecting products	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Clean bathrooms including toilet, sink, shower	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Spray then wipe glass, windows, mirrors	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Polish wood furniture	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Polish stainless steel surfaces	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Spray deodorant/ disinfectant	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Mop floors	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Clean equipment such as scissors, stethoscopes, and thermometers, IV poles, carts, monitors, and computers	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Conduct terminal cleaning of patient rooms	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Clean or disinfect for MRSA, VRE or other drug resistant bacteria in patient rooms	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Conduct end of shift cleaning of operating rooms, dialysis units or other patient care areas	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know

Please indicate how many days per week, times per week, duration of task, and the type of gloves used.

Tasks	<u>Days per week</u>	<u>Times per day</u>	<u>Duration of Task</u>	<u>Gloves Worn</u>
<< Piped in answer from 51.5>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 51.5>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 51.5>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 51.5>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 51.5>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 51.5>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 51.5>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 51.5>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 51.5>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>

51.6 In the last **12 months**, have you cleaned and waxed floors using strippers and buffers? No Yes Don't Know

IF 'NO': GO TO QUESTION 52
IF 'YES': CONTINUE WITH QUESTION 51.6.1

51.6.1 Which tasks do you perform when cleaning and waxing floors using strippers and buffers?

Tasks	Do you perform this task?		
	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Strip floors	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Scrape floors	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Buff floors	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Wax floors	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know

Please indicate how many days per week, times per day, duration of task, and the type of gloves used.

Tasks	Days per week	Times per day	Duration of Task	Gloves Worn
<< Piped in answer from 51.6.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 51.6.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 51.6.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 51.6.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>

Exposure to Chemicals Used in Medical or Clinical Laboratories

Thinking about your current job and what you have done in this job in the last **12 months**:

52. Have you worked in a clinical or medical laboratory?

No Yes

IF 'NO': GO TO QUESTION 53

IF 'YES': CONTINUE WITH QUESTION 52.1

52.1 Which tasks do you perform or use when you work in the clinical or medical laboratory?

Tasks	<u>Do you perform this task?</u>		
Use formalin to fix gross tissue and autopsy specimens	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Use stains and dyes such as hematoxylin and eosin stains	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Use solvents such as xylene and toluene to fix tissue specimens and rinse stains	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know

Please indicate how many days per week, times per day, duration of task, and the type of controls present.

Tasks	<u>Days per week</u>	<u>Times per day</u>	<u>Duration of Task</u>	<u>Controls</u>	
				Tasks performed in a fume hood	Task performed using bench-top local exhaust ventilation?
<< Piped in answer from 52.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 52.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 52.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>

Exposure to Products Used on Patients

Thinking about your current job and what you have done in this job in the last **12 months**:

53. Do you use chemicals, adhesives, antiseptics, alcohols, or solvents, such as solutions to remove adhesives, iodine, hydrogen peroxide, super glue, bone cement, alcohols, alcohol preps, mineral spirits, or toluene, on patients? No Yes

IF 'NO': GO TO QUESTION 54

IF 'YES': CONTINUE WITH QUESTION 53.1

53.1 Which tasks do you perform when you apply or use chemicals, antiseptics, adhesives, alcohols, or solvents on patients?

Tasks and Chemical	Do you perform this task?		
Disinfect skin areas on patients prior to procedure using wipes, gauze or swabs with antiseptics such as alcohols, iodine, acetic acid to	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Clean and disinfect wounds using antiseptics such as, silver compounds, chlorhexidine, povidone iodine or cadexomer iodine	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Apply wound dressing such as polyurethane based hydrogel, hydrocolloid, or hydrocellular foam	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Use adhesives such as glues, acrylates, bone cements, benzoin tincture such as 3M® Steri-Strip® for surgery, skin closure, bone repair, ostomy bags, and other applications	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Use adhesive removing solvents such as alcohols, acetone with wipes, gauze or swabs	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Apply synthetic fiberglass casts	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know

Please indicate how many days per week, times per day, duration of task, and the type of gloves used.

Tasks and Chemical	Days per week	Times per day	Duration of Task	Gloves Worn
<< Piped in answer from 53.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 53.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 53.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 53.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 53.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 53.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>

Exposure to Aerosolized Medicines Used with Patients

54. Do you administer aerosolized medications that might include antibiotics such as Tobramycin, Amikacin, and Colistin, or other medications like pentamidine, ribavirin, bronchodilators, anesthetics, and antitrypsin? No Yes

IF 'NO': GO TO QUESTION 55

IF 'YES': CONTINUE WITH QUESTION 54.1

54.1 Which tasks do you perform when you administer aerosolized medications?

Tasks	<u>Do you perform this task?</u>		
Administer aerosolized medications with a small volume nebulizer (SVN)	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Use continuous aerosol delivery system for bronchodilators and other medicines	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Administer aerosolized medications with a metered-dose inhaler (MDI)	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Administer aerosolized medications with a dry powder inhaler (DPI)	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know

Please indicate how many days per week, times per week, duration of task, and the type of gloves used when you administer aerosolized medications.

Tasks and Tool Use	<u>Days per week</u>	<u>Times per day</u>	<u>Duration of Task or Tool Use</u>	<u>Gloves Worn</u>
<< Piped in answer from 54.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 54.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 54.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 54.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>

54.2. What percent of the time do you use any respirator, other than a surgical mask, when administering aerosolized medication?

- Never
- About 25% of the time
- About 50% of the time
- About 75% of the time
- 100% of the time

IF 'Never': CONTINUE WITH QUESTION 53

IF any other answers: GO TO QUESTION 52.2.1

54.2.1. Do you use the following types of respirators when administering aerosolized medication?

- | | |
|---------------------------------------|--|
| Particulate respirator such as an N95 | <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Don't Know |
| Air purifying half mask | <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Don't Know |
| Air purifying full face piece | <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Don't Know |
| Powered air purifying | <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Don't Know |

Exposure to Chemicals used by Dental Assistants

Thinking about your current job and what you have done in this job in the last **12 months**:

55. Have you worked as a dental assistant?

No Yes

IF 'NO': GO TO QUESTION 56

IF 'YES': CONTINUE WITH QUESTION 55.1

55.1 Which tasks do you perform as a dental assistant?

Tasks	<u>Do you perform this task?</u>		
Adjust, polish or repair dentures or use compounds such as methyl methacrylates, other acrylates, and epoxys	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Prepare amalgams such as Vertex Soft [®] , Villacryl Soft [®] , Molloplast B [®] , and Mollosil [®]	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Develop x-rays using film developing solutions	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know
Use adhesives to place dentures or attach braces	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Don't Know

Please indicate how many days per week, times per day, duration of task, and the type of gloves used.

Tasks	<u>Days per week</u>	<u>Times per day</u>	<u>Duration of Task</u>	<u>Gloves Worn</u>
<< Piped in answer from 55.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 55.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 55.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>
<< Piped in answer from 55.1>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>	<<Select from Dropdown>>

Employment 5 Years Ago

If you had more than one job 5 years ago, record information for job where you worked the most hours per week.

56. Please check the ONE box that best describes your employment status 5 years ago.

- Employed in the healthcare industry
- Employed outside of the healthcare industry
- Disabled
- On family leave
- On extended sick leave
- Retired
- Student
- Other, please specify: _____

IF YOU CHECKED “Employed in the healthcare industry” CONTINUE TO QUESTION 57.

IF YOU CHECKED “Employed outside of the healthcare industry” CONTINUE TO QUESTION 56.1.

OTHERWISE GO TO QUESTION 73

56.1. Please check the ONE box that best describes the type of industry your job was in 5 years ago.

If you had more than one job 5 years ago, record information for the job where you worked the most hours per week.

- Agriculture, forestry, and fishing
- Construction trades
- Health care and social assistance
- Manufacturing
- Mining
- Oil and gas extraction
- Public safety
- Services, such as finance, real estate, education, hospitality, repair, or human resources
- Transportation, warehousing, and utilities
- Wholesale and retail trade
- Other, please specify: _____

56.2. Please write in the title for the job you had 5 years ago. _____

56.3. What did you do at the job you had 5 years ago? _____

56.4. What was the name of the company where you worked 5 years ago? _____

CONTINUE TO QUESTION 67

Healthcare Employment 5 Years Ago

If you had more than one healthcare job 5 years ago, record information for job where you worked the most hours per week.

57. What was your occupation 5 years ago?

- Dental assistant
- Environmental service worker, housekeeper, or cleaner
- Lab technician, lab technologist, or assistant in a medical or clinical laboratory
- Licensed practical nurse (LPN) or licensed vocational nurse (LVN)
- Medical instrument preparers, central supply worker or endoscopy technician
- Nursing assistant, nurse technician, nurse support assistant, patient care technician, patient support or orderly
- Operating room technician
- Registered nurse (RN)
- Respiratory therapist or respiratory technician
- Other, please specify _____

58. In what type of facility did you work 5 years ago?

- Hospital
- Nursing home
- Both hospital and nursing home
- Other, please specify _____

59. Where did you work in the facility 5 years ago?

- Patient care ward
- Administration
- Central supply

- Dental
- Dialysis
- Ear, nose, and throat (ENT)
- Education
- Emergency room (ER)
- Endoscopy
- Float or multiple locations
- General or internal medicine
- Intensive care
- Labor and delivery
- Laboratory, medical or clinical
- Non-patient care area
- Outpatient care
- Pediatric
- Psychiatric
- Pulmonary
- Surgery or operating room
- Other location, please specify _____

Thinking about the job you had 5 years ago.

60. Did you sterilize or high-level disinfect medical instruments, including dental instruments and ventilator parts, in central supply or other locations such as endoscopy and bronchoscopy units, hemodialysis units, operating rooms, or other clinical settings? No Yes Don't Know

61. Did you clean or disinfect fixed surfaces, equipment, or instruments? No Yes Don't Know

Examples of fixed surfaces are: countertops, floors, beds, and bathrooms.

Examples of equipment are: IV poles, monitors, carts, and computers.

Examples of instruments are: blood pressure cuffs, and stethoscopes.

62. Did you clean and wax floors using strippers and buffers? No Yes Don't Know

63. Did you work in a medical or clinical laboratory? No Yes Don't Know

64. Did you use chemicals, adhesives, antiseptics, alcohols, or solvents, such as solutions to remove adhesives, iodine, hydrogen peroxide, super glue, bone cement, alcohols, alcohol preps, mineral spirits, or toluene, **on patients**? No Yes Don't Know

65. Did you administer aerosolized medications that might include antibiotics such as Tobramycin, Amikacin, and Colistin, or other medications like pentamidine, ribavirin, bronchodilators, anesthetics, and antitrypsin? No Yes Don't Know

66. Did you work as a dental assistant? No Yes Don't Know

67. How many hours per week did you work in the job you had 5 years ago? __ __ hours per week

68. What year did you begin that job? _ _ _ _

69. What year did you stop working in that job? _ _ _ _

70. Were you regularly exposed to vapors, gases, dust, or fumes in that job? No Yes Don't Know

71. Thinking about the job you had 5 years ago, did you observe any of the following in the building where you worked?

Water leakage or water damage indoors on walls, floors, or ceilings No Yes Don't Know

Visible mold growth (not on food) indoors on walls, floors, or ceilings No Yes Don't Know

Odor of mold or mildew (not from food) No Yes Don't Know

72. Thinking about the job you had 5 years ago, did you observe any renovations or construction in, or next to, the area(s) where you work? No Yes Don't Know

Changing Jobs

73. Have you ever had to change or leave a job or position because it affected your breathing? This would include changing jobs or positions within the same workplace. No Yes Don't Know

IF 'NO': Go to Question 74

IF 'YES': Continue with Question 73.1

If this happened more than once, please answer the following questions about the most recent time you changed or left a job or position because it affected your breathing.

73.1. In which year did you change or leave this job or position? _____

73.2. What kind of job or position did you change or leave?

73.3. Please check the ONE box that best describes what industry the job or position you changed or left was in?

- Agriculture, forestry, and fishing
- Construction trades
- Health care and social assistance
- Manufacturing
- Mining
- Oil and gas extraction
- Public safety
- Services, such as finance, real estate, education, hospitality, repair, or human resources
- Transportation, warehousing, and utilities
- Wholesale and retail trade
- Other, *please specify* _____

73.4. What had you done in the job or position you changed or left?

73.5. What exposure or activity affected your breathing in the job or position you changed or left?

73.6. Concerning the job or position you went to: What kind of job or position did you go to?

73.7. Please check the ONE box that best describes what industry the job or position you went to was in?

- Agriculture, forestry, and fishing
- Construction trades
- Health care and social assistance
- Manufacturing
- Mining
- Oil and gas extraction
- Public safety
- Services, such as finance, real estate, education, hospitality, repair, or human resources
- Transportation, warehousing, and utilities
- Wholesale and retail trade
- Other, *please specify* _____

73.8. What did you do in this new job or position?

73.9. What was the name of the company where you worked at this new job?

Demographics

74. In what year were you born? _____

75. What is your sex?

Male Female

76. Do you consider yourself of Hispanic, Latino, or Spanish origin?

No Yes

77. *What is your race?* Mark one or more in the list below.

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific islander
- White

78. *What is the highest grade or level of education that you have completed?*

- Less than a high school diploma
- High school diploma or GED
- Some college, vocational, or technical education
- 4 year college graduate (bachelor's degree)
- Graduate or medical
- Other Pacific Islander, *please specify* _____

Smoking Status

79. Have you smoked at least 100 cigarettes in your entire life?

No Yes Don't Know

IF 'No': Go to Question 80

IF 'Yes': Go to Question 79.1

79.1. How old were you when you first started to smoke cigarettes fairly regularly?

___ __ years old

79.2. Do you now smoke cigarettes, as of one month ago?

No Yes Don't Know

IF 'No': Go to Question 79.2.1

IF 'Yes': Go to Question 79.2.3

IF 'NO':

79.2.1. How old were you when you last smoked cigarettes?

___ __ years old

79.2.2. Before you stopped smoking, how many cigarettes did you usually smoke

per day? If less than 1 cigarette per day, enter 00

__ __ cigarettes per day

IF 'YES':

79.2.3. How many cigarettes do you usually smoke per day?

If less than 1 cigarette per day, enter 00

__ __ cigarettes per day

80 **On average**, how many hours **per week** are you in close contact with people when they are smoking? For example, in your home, in a car, at work, or in other close quarters. (Enter 00 if you are not in close contact with people when they are smoking, or you are in close contact less than 1 hour per week.)

__ __ hours per week