

Appendix Tables: Surveillance of toxic inhalation for Washington workers, 2017 – 2020

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Contents

APPENDIX A: COMMON INHALATION EXPOSURES PER 2007 NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) INDUSTRY SECTOR

Table A1. Agriculture, Forestry, Fishing and Hunting Sector (N=252 cases)	4
Table A2. Mining, Quarrying, and Oil and Gas Extraction Sector (N=1 cases)	5
Table A3. Utilities Sector (N=12 cases)	6
Table A4. Construction Sector (N=252 cases)	7
Table A5. Manufacturing Sector (N=95 cases)	8
Table A6. Manufacturing Sector (N=76 cases)	9
Table A7. Manufacturing Sector (N=182 cases)	10
Table A8. Wholesale Trade Sector (N=128 cases)	11
Table A9. Retail Trade Sector (N=136 cases)	12
Table A10. Retail Trade Sector (N=59 cases)	13
Table A11. Transportation and Warehousing Sector (N=150 cases)	14
Table A12. Transportation and Warehousing Sector (N=15 cases)	15
Table A13. Information Sector (N=10 cases)	16
Table A14. Finance and Insurance Sector (N=17 cases)	17
Table A15. Real Estate and Rental and Leasing Sector (N=50 cases)	18
Table A16. Professional, Scientific, and Technical Services Sector (N=70 cases)	19
Table A17. Management of Companies and Enterprises Sector (N=1 cases)	20
Table A18. Administration and Support and Waste Management and Remediation Services Sector	21
Table A19. Educational Services Sector (N=112 cases)	22
Table A20. Health Care and Social Assistance Sector (N=252 cases)	23
Table A21. Arts, Entertainment, and Recreation Sector (N=23 cases)	24
Table A22. Accommodation and Food Services Sector (N=146 cases)	25
Table A23. Other Services (except Public Administration) Sector (N=112 cases)	26
Table A24. Public Administration Sector (N=243 cases)	27

(Continued)

APPENDIX B: COMMON INHALATION EXPOSURES PER 2002 STANDARD OCCUPATION CODE (SOC)

Table B1. Management Occupations (N=68 cases)	28
Table B2. Business and Financial Operations Occupations (N=14 cases)	29
Table B3. Computer and Mathematical Occupations (N=3 cases)	30
Table B4. Architecture and Engineering Occupations (N=18 cases)	31
Table B5. Life, Physical, and Social Science Occupations (N=49 cases)	32
Table B6. Community and Social Service Occupations (N=16 cases)	33
Table B7. Legal Occupations (N=3 cases)	34
Table B8. Education, Training, and Library Occupations (N=22 cases)	35
Table B9. Arts, Design, Entertainment, Sports, and Media Occupations (N=4 cases)	36
Table B10. Healthcare Practitioners and Technical Occupations (N=97 cases)	37
Table B11. Healthcare Support Occupations (N=68 cases)	38
Table B12. Protective Service Occupations (N=170 cases)	39
Table B13. Food Preparation and Serving Related Occupations (N=109 cases)	40
Table B14. Building and Grounds Cleaning and Maintenance Occupations (N=171 cases)	41
Table B15. Personal Care and Service Occupations (N=50 cases)	42
Table B16. Sales and Related Occupations (N=85 cases)	43
Table B17. Office and Administrative Support Occupations (N=122 cases)	44
Table B18. Farming, Fishing, and Forestry Occupations (N=212 cases)	45
Table B19. Construction and Extraction Occupations (N=244 cases)	46
Table B20. Installation, Maintenance, and Repair Occupations (N=214 cases)	47
Table B21. Production Occupations (N=385 cases)	48
Table B22. Transportation and Material Moving Occupations (N=361 cases)	49
Table B23. Non-Classifiable Occupations (N=119 cases)	50

APPENDIX A: Common Inhalation Exposures per 2007 North American Classification System (NAICS) Industry Sector

Table A1. Most common inhalation exposures in the Agriculture, Forestry, Fishing and Hunting Sector (N=252)

	Pesticides	Insecticides	Chemicals	Fertilizers	Chlorine	Carbon Monoxide	Sodium Hypochlorite	Propane	Cleaning Materials	Fungicide	Sulfur, Elemental	Plant Material	Welding Fume	Ammonium Hydroxide	Other
1111-Oilseed and Grain Farming (N=7)	4	0	0	0	1	0	0	0	0	1	0	0	0	0	1
1112-Vegetable and Melon Farming (N=13)	2	3	2	0	0	0	0	0	0	0	0	1	1	0	13
1113-Fruit and Tree Nut Farming (N=100)	42	32	15	32	8	11	5	1	2	4	2	1	0	0	29
1114-Greenhouse, Nursery, and Floriculture Prod. (N=11)	0	0	1	0	3	1	1	1	1	0	0	1	1	0	7
1119-Other Crop Farming (N=17)	3	2	1	0	2	0	1	0	0	0	0	1	1	0	17
1121-Cattle Ranching and Farming (N=16)	1	0	1	0	8	0	5	0	3	0	0	0	0	0	10
1123-Poultry and Egg Prod. (N=5)	0	0	0	0	1	3	0	0	0	0	0	0	0	0	3
1125-Aquaculture (N=3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1133-Logging (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1141-Fishing (N=2)	0	0	0	0	2	0	2	0	2	0	0	0	1	0	2
1151-Support Activ. for Crop Prod. (N=76)	17	5	18	1	6	3	1	8	1	4	5	1	1	4	22
1152-Support Activ. for Animal Prod. (N=1)	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Total	69	42	38	33	31	18	15	10	9	9	7	6	5	4	109

Table A2. Most common inhalation exposures in the Mining, Quarrying, and Oil and Gas Extraction Sector (N=1)

		Chemicals
2123-Nonmetallic Mineral Mining and Quarrying (N=1)	1	
Total	1	

Table A3. Most common inhalation exposures in the Utilities Sector (N=12)

	Chlorine	Carbon Monoxide	Sodium Hypochlorite	Bleach plus Acid (mixture)	Chemicals	Cleaning Materials	Herbicides	Hydrocarbons	Organochlorine Pesticides	Paint, Oil-Based
2211-Electric Power Generation, Transmission and Distribution (N=6)	1	3	0	0	1	0	1	0	0	0
2213-Water, Sewage and Other Systems (N=6)	3	0	2	1	0	1	0	1	1	1
Total	4	3	2	1	1	1	1	1	1	1

Table A4. Most common inhalation exposures in the Construction Sector (N=252)

	Dust	Carbon Monoxide	Paint	Lead-based Paint	Welding Fume	Chemicals	Polyurethane	Cement Dust	Silica, Crystalline	Chlorine	Solvents	Fiberglass	Wildfire smoke	Mold	Other
2361-Resd. Bldg. Constr. (N=42)	12	8	7	5	2	1	0	2	1	0	2	2	0	3	27
2362-Nonresidential Bldg. Constr. (N=20)	6	2	1	0	1	2	0	3	1	1	0	0	0	1	15
2371-Utility System Constr. (N=3)	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
2373-Highway, Street, and Bridge Constr. (N=8)	1	3	1	0	0	1	0	0	0	0	0	0	0	0	3
2379-Other Heavy and Civil Engineering Constr. (N=2)	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0
2381-Foundation, Structure, and Bldg. Exterior Contr. (N=24)	3	2	4	2	4	1	0	0	0	1	1	0	1	1	13
2382-Bldg. Equip. Contr. (N=80)	17	15	4	7	8	7	12	1	5	2	2	4	6	1	32
2383-Bldg. Finishing Contr. (N=48)	10	3	10	5	0	1	1	0	3	3	4	1	0	0	35
2389-Other Spec. Trade Contr. (N=25)	1	6	2	0	4	1	0	2	0	3	0	0	1	0	8
Total	52	40	29	19	19	14	13	10	10	9	9	8	7	6	136

Table A5. Most common inhalation exposures in the Manufacturing Sector (N=95)

	Chlorine	Anhydrous Ammonia	Cleaning Materials	Chemicals	Cleaners, Disinfectant	Other Cleaning Mixtures	Glacial Acetic Acid	Hydrogen Peroxide	Peracetic Acid	Peroxyacetic Acid	Sodium Hypochlorite	Dust	Sulfuric Acid	Other	
3111-Animal Food Mfg. (N=3)	1	0	0	0	0	0	0	0	0	1	0	0	0	2	
3112-Grain and Oilseed Milling (N=2)	1	0	0	0	0	0	0	0	0	1	0	0	0	2	
3114-Fruit and Vegetable Preserving and Spec. Food Mfg. (N=57)	10	19	12	2	6	0	6	5	4	4	2	4	2	0	20
3115-Dairy Product Mfg. (N=11)	8	0	2	2	1	7	0	1	1	1	0	0	1	3	4
3116-Animal Slaughtering and Proc. (N=4)	0	0	0	3	0	0	0	0	0	0	0	0	1	0	1
3117-Seafood Product Prep. and Packaging (N=7)	1	1	2	1	0	0	0	0	0	0	1	0	0	0	4
3119-Other Food Mfg. (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3121-Beverage Mfg. (N=7)	0	0	0	1	0	0	0	0	0	0	0	0	0	1	6
3132-Fabric Mills (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3149-Other Textile Product Mills (N=2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	21	20	16	9	7	7	6	6	5	5	5	4	4	4	44

Table A6. Most common inhalation exposures in the Manufacturing Sector (N=77)

	Chemicals	Carbon Monoxide	Wood Dust	Dust	Chlorine	Silica, Crystalline	Solvents	Western Red Cedar	Hazard Not On File	Paint	Welding Fume	Acids, Bases, Oxidizers	Ammonium Hydroxide	Cement Dust	Other
3211-Sawmills and Wood Preservation (N=11)	1	2	6	0	0	0	0	3	0	1	0	1	0	0	2
3219-Other Wood Product Mfg. (N=5)	0	0	1	0	1	0	2	1	0	0	0	0	0	0	3
3221-Pulp, Paper, and Paperboard Mills (N=8)	1	1	0	0	2	0	0	0	0	0	1	0	0	0	3
3222-Converted Paper Product Mfg. (N=3)	0	1	0	1	0	0	0	0	0	0	1	0	0	0	1
3231-Printing and Related Support Activ. (N=4)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	11
3241-Petroleum and Coal Products Mfg. (N=5)	1	0	0	0	0	0	1	0	1	0	1	0	0	0	3
3251-Basic Chem. Mfg. (N=7)	1	1	0	0	0	0	0	0	0	0	0	1	2	0	6
3253-Pesticide, Fertilizer, and Other Agricultural Chem. Mfg. (N=3)	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1
3254-Pharmaceutical and Medicine Mfg. (N=5)	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
3256-Soap, Cleaning Compound, and Toilet Prep. Mfg. (N=1)	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3259-Other Chem. Product and Prep. Mfg. (N=4)	0	0	0	1	0	1	0	0	0	0	0	0	0	0	3
3261-Plastics Product Mfg. (N=9)	1	0	0	0	1	0	1	0	0	1	0	0	0	0	15
3272-Glass and Glass Product Mfg. (N=3)	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3273-Cement and Concrete Product Mfg. (N=5)	0	1	0	3	0	2	0	0	1	0	0	0	0	2	0
3274-Lime and Gypsum Product Mfg. (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3279-Other Nonmetallic Mineral Product Mfg. (N=3)	0	0	0	1	0	1	0	0	1	0	0	0	0	0	3
Total	11	8	7	6	5	4	4	4	3	3	3	2	2	2	60

Table A7. Most common inhalation exposures in the Manufacturing Sector (N=182)

	Welding Fume	Paint	Chemicals	Cleaning Materials	Dust	Metal Dust	Solvents	Carbon Monoxide	Methyl Propyl Ketone	Fiberglass	Lubricants	Aluminum	Chromium Compounds	Acetone	Other
3313-Alumina and Aluminum Prod. and Proc. (N=5)	0	0	2	1	0	0	0	0	0	0	0	0	0	0	5
3315-Foundries (N=14)	4	2	1	0	4	1	0	0	0	1	0	0	0	0	12
3323-Architectural and Structural Metals Mfg. (N=17)	7	2	0	0	0	2	1	1	0	0	0	0	0	0	15
3324-Boiler, Tank, and Shipping Container Mfg. (N=4)	2	0	0	0	0	0	0	1	0	0	0	0	0	0	3
3326-Spring and Wire Product Mfg. (N=2)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3327-Machine Shops; Turned Product; and Screw, Nut, and Bolt Mfg. (N=8)	1	1	1	1	0	0	0	1	0	0	1	0	0	1	4
3329-Other Fabricated Metal Product Mfg. (N=11)	3	0	1	1	0	0	1	0	0	1	0	0	0	0	6
3332-Indust. Mach. Mfg. (N=5)	4	0	0	0	0	0	0	2	0	0	0	0	0	0	1
3344-Semiconductor and Other Electr. Component Mfg. (N=6)	0	0	3	0	0	0	1	0	0	0	0	0	0	1	3
3353-Electr. Equip. Mfg. (N=3)	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4
3363-Motor Vehicle Parts Mfg. (N=3)	2	0	1	0	0	0	0	0	0	0	1	0	0	0	0
3364-Aerospace Product and Parts Mfg. (N=55)	5	9	8	5	3	4	3	0	8	1	5	2	4	3	51
3366-Ship and Boat Bldg. (N=12)	3	2	0	1	2	1	0	0	0	3	0	2	0	0	5
3371-Household and Institutional Furniture and Kitchen Cabinet Mfg. (N=7)	0	1	1	0	0	0	2	0	0	0	0	0	0	0	7
3372-Office Furniture (including Fixtures) Mfg. (N=3)	1	0	0	0	0	0	1	1	0	0	0	1	0	0	1
3399-Other Misc. Mfg. (N=12)	1	3	1	0	1	2	0	0	0	1	0	0	1	0	9
Other (N=15)	3	3	0	1	0	0	1	1	0	0	0	1	1	0	17
Total	37	23	19	10	10	10	10	8	8	7	7	6	6	5	144

Table A8. Most common inhalation exposures in the Wholesale Trade Sector (N=128)

	Chemicals	Chlorine	Anhydrous Ammonia	Carbon Monoxide	Cleaning Materials	Sodium Hypochlorite	Ammonium Hydroxide	Dust	Gasoline	Sulfur Dioxide	Welding Fume	Sulfuric Acid	Acids, Bases, Oxidizers	Chlorine Dioxide	Other
4231-Motor Vehicle and Motor Vehicle Parts and Supp. Merchant Wholeslr. (N=7)	1	0	0	1	0	0	0	1	0	0	0	0	0	0	8
4233-Lumber and Other Constr. Materials Merchant Wholeslr. (N=5)	0	0	0	1	0	0	0	2	0	0	0	0	0	0	4
4234-Proff. and Comm. Equip. and Supp. Merch. Wholeslr. (N=6)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10
4235-Metal and Mineral (except Petroleum) Merchant Wholeslr. (N=2)	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
4236-Electr. and Electr. Goods Merchant Wholeslr. (N=3)	1	0	0	0	0	0	1	0	0	0	0	0	0	0	3
4237-Hardware, and Plumbing and Heating Equip. and Supp. Merchant Wholeslr. (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4238-Mach., Equip., and Supp. Merchant Wholeslr. (N=15)	5	1	0	1	0	0	0	0	0	1	2	1	0	0	12
4239-Misc. Durable Goods Merchant Wholeslr. (N=6)	5	1	0	0	1	1	0	0	0	0	0	0	0	0	2
4241-Paper and Paper Product Merchant Wholeslr. (N=1)	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
4242-Drugs and Druggists' Sundries Merch. Wholeslr. (N=2)	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1
4244-Grocery and Related Prod. Merch. Wholeslr. (N=33)	4	8	4	7	2	5	1	0	0	1	1	0	2	2	16
4245-Farm Product Raw Material Merch. Wholeslr. (N=1)	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
4246-Chem. and Allied Products Merchant Wholeslr. (N=3)	0	1	0	0	0	0	0	0	0	0	0	0	1	0	5
4247-Petroleum and Petroleum Prod. Merch. Wholeslr. (N=9)	0	1	0	0	0	0	0	0	5	0	0	0	0	1	3
4249-Misc. Nondurable Goods Merchant Wholeslr. (N=23)	1	2	9	0	1	0	4	2	0	3	0	0	0	0	9
4251-Whsale. Electr. Markets and Agents (N=10)	1	2	0	0	1	1	0	0	0	0	0	3	0	0	4
4248-Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholeslr. (N=1)	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Total	21	16	13	10	8	7	6	6	5	5	5	4	3	3	81

Table A9. Most common inhalation exposures in the Retail Trade Sector (N=136)

	Carbon Monoxide	Cleaning Materials	Chlorine	Chemicals	Sodium Hypochlorite	Dust	Cleaners, Disinfectant	Mace	Hazard Not On File	Anhydrous Ammonia	Indoor Air Poll. from Renov.	Natural Gas	Sewer Water	Solvents	Other
4411-Automobile Dealers (N=20)	3	5	0	1	0	0	0	1	2	0	2	0	0	2	12
4412-Other Motor Vehicle Dealers (N=10)	9	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4413-Auto. Parts, Accessories, and Tire Stores (N=17)	2	1	0	2	0	3	0	0	0	0	0	0	0	1	13
4421-Furniture Stores (N=2)	0	1	0	0	0	0	1	0	0	0	0	0	0	0	5
4422-Home Furnishings Stores (N=2)	0	0	0	0	0	1	0	0	0	0	0	0	0	0	4
4431-Electr.s and Appliance Stores (N=3)	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
4441-Bldg. Material and Supp. Dealers (N=8)	2	0	0	1	0	1	1	0	1	0	0	0	0	1	6
4442-Lawn and Garden Equip. and Supp. Stores (N=7)	0	0	3	1	0	0	0	0	0	0	0	0	0	0	7
4451-Grocery Stores (N=24)	1	6	6	4	6	1	1	2	0	0	1	0	0	0	14
4452-Spec. Food Stores (N=9)	1	2	1	0	0	0	0	0	0	3	0	1	0	0	3
4453-Beer, Wine, and Liquor Stores (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4461-Health and Pers. Care Stores (N=11)	1	0	1	0	1	0	0	1	2	0	0	3	0	0	3
4471-Gasoline Stations (N=11)	1	2	1	0	1	0	0	1	0	1	0	0	0	0	5
4481-Clothing Stores (N=10)	0	3	0	0	0	0	3	1	0	0	1	0	4	0	4
4483-Jewelry, Luggage, and Leather Goods Stores (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	20	20	12	9	8	7	6	6	5	4	4	4	4	4	84

Table A10. Most common inhalation exposures in the Retail Trade Sector (N=59)

	Cleaning Materials	Chemicals	Chlorine	Cleaners, Disinfectant	Dust	Fiberglass	Mace	Sodium Hypochlorite	Acetone	Air Freshener	Ethanol	Gasoline	Hazard Not On File	Hydrogen Peroxide	Other
4511-Sporting Goods, Hobby, and Musical Instrument Stores (N=6)	1	0	1	1	1	0	0	1	0	0	0	0	0	0	7
4521-Department Stores (N=2)	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1
4529-Other General Merchandise Stores (N=9)	2	1	1	1	1	0	1	1	0	0	0	0	1	0	5
4531-Florists (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4532-Office Supp., Stationery, and Gift Stores (N=2)	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
4533-Used Merchandise Stores (N=7)	1	1	0	0	1	0	2	0	0	1	0	0	1	0	3
4539-Other Misc. Store Retailers (N=11)	1	2	3	0	0	2	0	0	2	1	0	0	0	0	6
4541-Electr. Shopping and Mail-Order Houses (N=14)	2	3	2	2	1	0	0	1	0	0	2	0	0	1	6
4542-Vending Machine Operators (N=3)	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2
4543-Direct Selling Establishments (N=4)	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4
Total	9	7	7	5	5	3	3	3	2	2	2	2	2	2	37

Table A11. Most common inhalation exposures in the Transportation and Warehousing Sector (N=150)

	Carbon Monoxide	Chemicals	Cleaners, Disinfectant	Cleaning Materials	Diesel Exhaust	Hazard Not On File	Jet Exhaust	Paint	Smoke	Acetates	Chlorine	Jet Fuel	Sodium Hypochlorite	Ammonium Hydroxide	Other
4811-Scheduled Air Transp. (N=48)	16	20	0	0	0	5	4	0	3	3	0	1	0	0	8
4812-Nonscheduled Air Transp. (N=2)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4831-Deep Sea, Coastal, and Great Lakes Water Transp. (N=2)	0	0	0	1	0	0	0	0	0	0	1	0	1	1	2
4841-General Freight Trucking (N=28)	15	1	0	0	2	1	0	1	0	0	0	0	0	1	11
4842-Specialized Freight Trucking (N=13)	9	1	0	0	1	0	0	0	0	0	0	0	0	0	6
4851-Urban Transit Systems (N=17)	10	1	2	2	2	0	0	0	0	0	0	0	0	0	6
4853-Taxi and Limousine Service (N=1)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4854-School and Employee Bus Transp. (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
4855-Charter Bus Industry (N=12)	3	0	7	2	0	0	0	0	1	0	0	0	0	0	4
4859-Other Transit and Ground Passenger Transp. (N=4)	1	1	0	1	1	0	0	0	0	0	0	0	0	0	2
4881-Support Activ. for Air Transp. (N=13)	1	0	1	1	0	0	0	4	0	0	2	2	2	0	10
4882-Support Activ. for Rail Transp. (N=2)	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4883-Support Activ. for Water Transp. (N=3)	0	0	0	0	1	0	1	0	0	0	0	0	0	0	6
4884-Support Activ. for Road Transp. (N=4)	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	63	24	10	7	7	6	5	5	4	3	3	3	3	2	61

Table A12. Most common inhalation exposures in the Transportation and Warehousing Sector (N=15)

	Carbon Monoxide	Chemicals	Pesticides	Ammonium Hydroxide	Anhydrous Ammonia	Carbamate Pesticides	Chlorine	Diesel Exhaust	Exhaust	Inorganic Compounds	Propane	Sodium Hypochlorite	Sodium Metabisulfite
4921-Couriers and Express Delivery Serv. (N=4)	3	0	1	0	0	0	0	0	0	0	0	0	0
4922-Local Messengers and Local Delivery (N=2)	1	1	0	0	0	0	0	1	0	0	0	0	0
4931-Warehousing and Storage (N=9)	1	1	1	1	1	1	1	0	1	1	1	1	1
Total	5	2	2	1	1	1	1	1	1	1	1	1	1

Table A13. Most common inhalation exposures in the Information Sector (N=10)

	Indoor Air Poll. from Renov.	Asphalt	Chemicals	Cleaning Materials	Dust	Ozone	Paint	Propane
5112-Software Publishers (N=1)	0	0	1	1	0	1	0	0
5171-Wired Telecommunications Carriers (N=3)	0	0	1	0	1	0	1	1
5172-Wireless Telecommunications Carriers (except Satellite) (N=5)	5	3	0	0	0	0	0	0
5182-Data Proc., Hosting, and Related Serv. (N=1)	0	0	1	0	0	0	0	0
Total	5	3	3	1	1	1	1	1

Table A14. Most common inhalation exposures in the Finance and Insurance Sector (N=17)

	Carbon Monoxide	Chemicals	Dust	Air Pollutants, Indoor	Cleaning Materials	Glues	Indoor Air Poll. from Renov.	Natural Gas	Cleaners, Disinfectant	Latex, Natural Rubber	Paint	Propane
5221-Depository Credit Intermediation (N=5)	0	2	0	0	2	0	0	1	1	0	0	0
5222-Nondepository Credit Intermediation (N=4)	0	1	1	1	0	1	1	1	0	0	1	0
5223-Activ. Related to Credit Intermediation (N=1)	0	0	0	0	0	0	0	0	0	0	0	1
5231-Securities and Commodity Contracts Intermediation and Brokerage (N=1)	0	0	0	1	0	0	0	0	0	0	0	0
5241-Insurance Carriers (N=3)	3	0	0	0	0	0	0	0	0	0	0	0
5242-Agencies, Brokerages, and Other Insurance Related Activ. (N=3)	0	0	2	0	0	1	1	0	0	1	0	0
Total	3	3	3	2	2	2	2	2	1	1	1	1

Table A15. Most common inhalation exposures in the Real Estate and Rental and Leasing Sector (N=51)

	Carbon Monoxide	Chlorine	Cleaning Materials	Degreaser	Chemicals	Mace	Sodium Hypochlorite	Insecticides	Air Freshener	Air Pollutants, Indoor	Animal Material	Bleach plus Acid (mixture)	Calcium Chloride	Cannabis smoke (Marij. and Hem.	Other
5311-Lessors of Real Estate (N=21)	4	5	4	2	3	2	2	1	0	0	1	0	1	0	5
5312-Offices of Real Estate Agents and Brokers (N=5)	0	0	1	0	0	1	0	0	1	1	0	0	0	0	1
5313-Activ. Related to Real Estate (N=16)	4	5	2	0	0	0	1	1	0	0	0	1	0	1	5
5321-Auto. Equip. Rental and Leasing (N=4)	3	0	1	1	0	0	0	0	0	0	0	0	0	0	1
5322-Consumer Goods Rental (N=1)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5324-Comm. and Indust. Mach. and Equip. Rental and Leasing (N=4)	0	0	2	1	0	0	0	0	0	0	0	0	0	0	4
Total	12	10	10	4	3	3	3	2	1	1	1	1	1	1	16

Table A16. Most common inhalation exposures in the Professional, Scientific, and Technical Services Sector (N=70)

	Chemicals	Chlorine	Carbon Monoxide	Cleaning Materials	Sodium Hypochlorite	Cleaners, Disinfectant	Dust	Freon	Paint	Formaldehyde	Solvents	Acids, Bases, Oxidizers	Asbestos	Pharmaceuticals	Other
5411-Legal Serv. (N=1)	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
5412-Accounting, Tax Prep., Bookkeeping, and Payroll Serv. (N=8)	0	2	3	0	1	1	0	0	0	1	0	0	0	1	1
5413-Architectural, Engineering, and Related Serv. (N=25)	7	4	0	1	2	0	3	3	1	0	2	2	2	0	20
5415-Computer Systems Design and Related Serv. (N=6)	0	0	1	1	0	0	2	0	2	0	0	0	0	0	2
5416-Mgmt., Sci., and Tech. Consulting Serv. (N=4)	2	0	0	1	0	1	0	0	0	0	1	0	0	0	2
5417-Sci. Research and Development Serv. (N=10)	1	1	0	2	2	2	0	0	0	0	0	0	0	0	15
5418-Advertising, Public Relations, and Related Serv. (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5419-Other Proff., Sci., and Tech. Serv. (N=15)	1	1	3	2	1	1	0	1	0	2	0	0	0	1	5
Total	11	8	7	7	6	5	5	4	4	3	3	2	2	2	46

Table A17. Most common inhalation exposures in the Management of Companies and Enterprises Sector (N=1)

	Air Freshener	Chemicals
5511-Mgmt. of Companies and Enterprises (N=1)	1	1
Total	1	1

Table A18. Most common inhalation exposures in the Administrative and Support and Waste Management and Remediation Services Sector (N=209)

	Chemicals	Chlorine	Cleaning Materials	Carbon Monoxide	Sodium Hypochlorite	Dust	Metal Dust	Lead-based Paint	Acids, Bases, Oxidizers	Sodium Hydroxide	Anhydrous Ammonia	Hydrofluoric Acid	Waste, Hazardous	Ammonium Hydroxide	Other
5611-Office Administrative Serv. (N=28)	7	2	1	3	1	0	8	8	0	0	1	0	0	0	7
5612-Facil. Support Serv. (N=4)	0	1	0	0	0	1	0	0	0	0	0	0	1	0	2
5613-Employment Serv. (N=60)	9	8	5	3	5	4	0	0	2	2	3	0	0	2	58
5614-Business Support Serv. (N=2)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5615-Travel Arrangement and Reservation Serv. (N=1)	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
5616-Investigation and Security Serv. (N=23)	3	1	0	8	0	2	0	0	0	0	1	0	1	0	19
5617-Serv. to Bldg.s and Dwellings (N=49)	4	11	17	5	3	1	0	0	1	3	0	3	0	0	37
5619-Other Support Serv. (N=4)	1	0	0	0	0	0	0	0	0	0	0	0	0	1	3
5621-Waste Collection (N=12)	2	0	0	1	0	1	0	0	0	0	0	0	0	0	10
5622-Waste Treatment and Disposal (N=9)	2	1	0	0	0	0	0	0	0	0	0	0	2	1	14
5629-Remediation and Other Waste Mgmt. Serv. (N=17)	3	2	0	2	2	0	1	0	3	1	0	2	1	0	13
Total	32	27	23	22	12	9	9	8	6	6	5	5	5	4	166

Table A19. Most common inhalation exposures in the Educational Services Sector (N=112)

	Cleaning Materials	Chemicals	Chlorine	Carbon Monoxide	Cleaners, Disinfectant	Indoor Air Poll. from Renov.	Sodium Hypochlorite	Paint	Perfume	Dust	Solvents	Acids, Bases, Oxidizers	Engine Exhaust	Hazard Not On File	Other
6111-Elementary and Secondary Schools (N=32)	6	5	3	2	1	6	2	3	1	2	2	0	0	2	21
6112-Junior Colleges (N=5)	1	3	0	0	0	0	0	0	1	0	0	0	0	1	2
6113-Colleges, Universities, and Proff. Schools (N=70)	9	8	8	8	9	4	6	3	2	2	2	3	3	0	47
6115-Tech. and Trade Schools (N=4)	1	0	1	1	0	0	1	1	0	0	0	0	0	0	0
6116-Other Schools and Instruction (N=1)	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Total	17	16	12	11	10	10	9	7	5	4	4	3	3	3	70

Table A20. Most common inhalation exposures in the Health Care and Social Assistance Sector (N=251)

	Cleaning Materials	Chlorine	Sodium Hypochlorite	Chemicals	Carbon Monoxide	Cleaners, Disinfectant	Indoor Air Poll. from Renov.	Natural Gas	Pharmaceuticals	Paint	Perfume	Dust	Air Pollutants, Indoor	Fire Extinguisher Discharge	Other
6211-Offices of Physicians (N=48)	7	2	3	3	5	2	5	3	3	3	2	2	2	0	36
6212-Offices of Dentists (N=2)	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
6213-Offices of Other Health Practitioners (N=10)	1	2	2	1	0	2	3	0	0	0	0	1	1	0	4
6214-Outpatient Care Centers (N=32)	5	4	4	8	3	2	0	5	1	0	1	0	0	1	10
6215-Medical and Diagnostic Laboratories (N=15)	1	1	1	5	2	0	1	0	0	1	0	0	0	0	10
6216-Home Health Care Serv. (N=4)	1	1	1	0	1	0	1	0	1	0	0	0	0	0	3
6219-Other Ambulatory Health Care Serv. (N=7)	1	2	1	0	1	0	0	0	1	0	1	0	1	0	3
6221-General Medical and Surgical Hospitals (N=35)	8	3	2	4	0	6	1	0	3	1	3	1	1	0	27
6222-Psychiatric and Substance Abuse Hospitals (N=4)	1	1	1	0	0	0	0	0	0	0	0	1	0	1	2
6231-Nursing Care Facil. (N=25)	3	9	9	2	7	2	0	1	0	1	0	0	0	0	10
6232-Resd. Mental Retardation, Mental Health and Substance Abuse Facil. (N=4)	1	0	0	2	0	1	0	0	0	0	0	0	0	1	5
6233-Community Care Facil. for the Elderly (N=18)	4	6	7	2	3	0	1	0	0	1	0	1	0	1	10
6241-Individual and Family Serv. (N=24)	5	5	4	4	3	3	2	1	1	2	1	1	0	0	14
6242-Community Food and Housing, and Emergency and Other Relief Serv. (N=5)	2	1	0	0	0	0	0	0	0	0	0	0	0	0	5
6243-Vocational Rehabilitation Serv. (N=8)	2	2	2	0	0	1	0	0	0	0	0	0	0	1	7
6244-Child Day Care Serv. (N=9)	2	4	4	0	0	0	0	3	0	0	0	0	0	0	1
6239-Other Resd. Care Facil. (N=1)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	45	44	42	32	25	19	14	13	10	9	8	7	5	5	147

Table A21. Most common inhalation exposures in the Arts, Entertainment, and Recreation Sector (N=23)

	Chlorine	Cleaning Materials	Sodium Hypochlorite	Bleach plus Acid (mixture)	Wildfire smoke	Animal Material	Carbon Monoxide	Cement Dust	Chemicals	Citric Acid	Cleaners, Disinfectant	Cleaners, Drain	Dust	Ethanol	Other
7113-Promoters of Performing Arts, Sports, and Similar Events (N=1)	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
7131-Amusement Parks and Arcades (N=1)	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
7132-Gambling Industries (N=1)	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
7139-Other Amusement and Recreation Industries (N=20)	8	4	3	2	1	0	0	1	1	1	1	1	1	1	15
Total	8	4	3	2	2	1	1	1	1	1	1	1	1	1	16

Table A22. Most common inhalation exposures in the Accommodation and Food Services Sector (N=146)

	Chlorine	Cleaning Materials	Sodium Hypochlorite	Carbon Monoxide	Chemicals	Degreaser	Freon	Mace	Dust	Fire Extinguisher Discharge	Indoor Air Poll. from Renov.	Bleach plus Acid (mixture)	Cleaners, Disinfectant	Other Cleaning Mixtures	Other
7211-Traveler Accommodation (N=51)	17	8	7	5	10	0	1	1	5	2	3	1	2	0	23
7212-RV (Recreational Vehicle) Parks and Recreational Camps (N=4)	0	1	0	0	0	0	0	0	0	0	0	0	1	0	4
7213-Rooming and Boarding Houses (N=2)	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0
7221-Full-Service Restaurants (N=30)	8	13	7	2	1	2	5	0	0	2	0	2	1	1	14
7222-Limited-Service Eating Places (N=48)	15	12	14	13	3	3	1	5	0	1	1	1	0	3	12
7223-Special Food Serv. (N=7)	1	2	1	0	1	1	0	0	0	0	1	0	0	0	2
7224-Drinking Places (Alcoholic Beverages) (N=4)	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1
Total	41	37	29	24	15	7	7	6	5	5	5	4	4	4	56

Table A23. Most common inhalation exposures in the Other Services (except Public Administration) Sector (N=112)

	Chlorine	Carbon Monoxide	Cleaning Materials	Chemicals	Sodium Hypochlorite	Paint	Acids, Bases, Oxidizers	Fiberglass	Dust	Hydrofluoric Acid	Pharmaceuticals	Thinner	Acetone	Ammonium Hydroxide	Other
8111-Auto. Repair and Maint. (N=33)	4	3	3	3	1	5	1	1	1	1	1	3	1	0	27
8112-Electr. and Precision Equip. Repair and Maint. (N=1)	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8113-Comm. and Indust. Mach. and Equip. (except Auto. and Electr.) Repair and Maint. (N=11)	0	2	1	0	0	2	2	0	1	2	0	0	0	0	6
8114-Pers. and Household Goods Repair and Maint. (N=5)	0	0	0	0	0	0	0	3	1	0	0	0	1	0	5
8121-Pers. Care Serv. (N=8)	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8
8122-Death Care Serv. (N=2)	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
8123-Drycleaning and Laundry Serv. (N=9)	1	5	1	2	1	0	0	0	0	0	0	0	0	0	4
8129-Other Pers. Serv. (N=9)	3	1	1	1	2	0	0	0	0	0	0	0	0	0	4
8131-Religious Org. (N=3)	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1
8133-Social Advocacy Org. (N=5)	1	1	1	0	1	0	0	0	0	0	0	0	0	0	3
8134-Civic and Social Org. (N=12)	10	0	4	0	2	0	0	0	0	0	0	0	0	1	4
8139-Business, Proff., Labor, Political, and Similar Org. (N=12)	2	2	1	2	0	1	1	0	0	0	2	0	0	0	7
8141-Private Households (N=2)	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	23	20	13	9	9	8	4	4	3	3	3	3	2	2	74

Table A24. Most common inhalation exposures in the Public Administration Sector (N=243)

	Carbon Monoxide	Chemicals	Pharmaceuticals	Chlorine	Wildfire smoke	Cleaning Materials	Indoor Air Poll. from Renov.	Sodium Hypochlorite	Inorganic Compounds	Insecticides	Ammonia Solution (10%)	Cleaners, Disinfectant	Dust	Other	
9211-Executive, Legislative, and Other General Government Support (N=93)	41	6	7	11	0	5	4	3	3	0	0	2	0	2	49
9221-Justice, Public Order, and Safety Activ. (N=86)	43	5	4	1	8	1	0	2	1	6	0	1	0	0	30
9231-Admin. of Human Resource Programs (N=20)	1	5	0	0	1	2	3	1	0	0	0	1	0	0	15
9241-Admin. of Environmental Quality Programs (N=9)	4	2	0	0	3	0	0	0	1	0	0	0	0	0	2
9251-Admin. of Housing Programs, Urban Planning, and Community Development (N=6)	0	0	3	0	0	1	0	0	0	0	0	0	0	1	7
9261-Admin. of Economic Program (N=28)	1	5	0	1	0	2	3	1	1	0	5	1	5	1	26
9281-National Security and International Affairs (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	90	23	14	13	12	11	10	7	6	6	5	5	5	5	130

APPENDIX B: Common Inhalation Exposures per 2002 Standard Occupational Classification (SOC)

Table B1. Most common inhalation exposures in the Management Occupations (N=68)

	Carbon Monoxide	Chlorine	Chemicals	Cleaners, Disinfectant	Cleaning Materials	Dust	Indoor Air Poll. from Renov.	Pharmaceuticals	Sodium Hypochlorite	Air Pollutants, Indoor	Carpet Dust	Mace	Metal Dust	Mold	Other
11-1011 Chief Executives (N=2)	0	1	0	0	1	0	0	0	1	0	0	0	0	0	2
11-1021 General and Operations Managers (N=6)	0	1	1	0	0	1	0	0	0	0	0	0	0	0	5
11-2021 Marketing Managers (N=4)	0	0	1	1	1	0	0	0	0	0	0	0	0	0	3
11-2022 Sales Managers (N=2)	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-3011 Administrative Services Managers (N=3)	0	0	0	0	0	1	1	0	0	1	0	0	0	0	1
11-3031 Financial Managers (N=1)	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
11-3051 Industrial Production Managers (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11-3071 Transportation, Storage, and Distribution Managers (N=3)	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0
11-9021 Construction Managers (N=3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11-9039 Education Administrators, All Other (N=2)	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0
11-9051 Food Service Managers (N=3)	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
11-9081 Lodging Managers (N=3)	0	1	0	0	0	1	1	0	0	0	1	0	0	0	1
11-9111 Medical and Health Services Managers (N=7)	2	1	0	2	0	1	0	0	1	0	0	0	0	0	5
11-9141 Property, Real Estate, and Community Association Managers (N=8)	3	0	1	0	0	0	0	2	0	0	0	1	0	0	4
11-9151 Social and Community Service Managers (N=10)	2	2	1	1	1	0	1	1	0	0	1	0	1	0	4
11-9199 Managers, All Other (N=8)	1	2	1	0	0	0	0	0	0	0	0	1	0	1	4
Other (N=2)	0	1	0	1	0	0	0	0	1	0	0	0	1	0	1
Total	13	10	6	6	4	4	3	3	3	2	2	2	2	2	37

Table B2. Most common inhalation exposures in the Business and Financial Operations Occupations (N=14)

	Paint	Carbon Monoxide	Indoor Air Poll. from Renov.	Chemicals	Chlorine	Engine Exhaust	Acetone	Inks	Metal Dust	Methyl Ethyl Ketone	Plastic Smoke	Sodium Hypochlorite	Toluene	Triethanolamine	Wildfire smoke
13-1022 Wholesale and Retail Buyers, Except Farm Products (N=1)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-1023 Purchasing Agents, Except Wholesale, Retail, and Farm Products (N=3)	1	1	1	0	0	1	1	0	1	1	0	0	1	1	0
13-1051 Cost Estimators (N=2)	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
13-1071 Human Resources Specialists (N=1)	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
13-1081 Logisticians (N=1)	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
13-1199 Business Operations Specialists, All Other (N=1)	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
13-2011 Accountants and Auditors (N=2)	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0
13-2021 Appraisers and Assessors of Real Estate (N=1)	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
13-2072 Loan Officers (N=1)	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
13-2081 Tax Examiners and Collectors, and Revenue Agents (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	4	3	3	2	2	2	1	1	1	1	1	1	1	1	1

Table B3. Most common inhalation exposures in the Computer and Mathematical Occupations (N=3)

	Chemicals	Chlorine	Dust
15-1131 Computer Programmers (N=3)	1	1	1
Total	1	1	1

Table B4. Most common inhalation exposures in the Architecture and Engineering Occupations (N=18)

	Chemicals	Chlorine	Carbon Monoxide	Welding Fume	Anhydrous Ammonia	Arsine	Beryllium	Chlorine Dioxide	Chromium Dioxide	Chromium Compounds	Cleaning, Hexavalent	Glues	Indoor Air Poll. from Renov.	Irritant Gases	Other
17-2041 Chemical Engineers (N=1)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-2051 Civil Engineers (N=4)	0	1	0	0	1	0	0	0	0	1	1	1	0	2	
17-2081 Environmental Engineers (N=1)	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
17-2112 Industrial Engineers (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17-2141 Mechanical Engineers (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17-2199 Engineers, All Other (N=9)	2	1	2	2	0	1	1	1	1	0	0	0	1	4	
17-3021 Aerospace Engineering and Operations Technicians (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	3	3	2	2	1	1	1	1	1	1	1	1	1	1	9

Table B5. Most common inhalation exposures in the Life, Physical, and Social Science Occupations (N=49)

	Chemicals	Acids, Bases, Oxidizers	Chlorine	Sodium Hypochlorite	Ammonium Hydroxide	Cleaning Materials	Freon	Hydrochloric Acid	Solvents	Acetonitrile	Cyanides	Glacial Acetic Acid	Sulfuric Acid	Aldehydes	Other
19-1011 Animal Scientists (N=1)	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
19-1013 Soil and Plant Scientists (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19-1021 Biochemists and Biophysicists (N=3)	2	0	0	0	1	0	0	0	1	0	0	0	0	0	3
19-1022 Microbiologists (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
19-1029 Biological Scientists, All Other (N=2)	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1
19-1042 Medical Scientists, Except Epidemiologists (N=2)	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0
19-2021 Atmospheric and Space Scientists (N=1)	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
19-2031 Chemists (N=1)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19-2041 Environmental Scientists and Specialists, Including Health (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19-2099 Physical Scientists, All Other (N=1)	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
19-4011 Agricultural and Food Science Technicians (N=1)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19-4031 Chemical Technicians (N=7)	0	0	2	1	2	0	0	1	1	0	0	0	0	0	2
19-4051 Nuclear Technicians (N=4)	0	1	1	0	0	0	0	1	0	0	1	0	1	0	9
19-4061 Social Science Research Assistants (N=6)	1	1	1	0	0	0	0	0	1	1	1	0	0	0	3
19-4091 Environmental Science and Protection Technicians, Including Health (N=1)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-4099 Life, Physical, and Social Science Technicians, All Other (N=15)	5	4	1	2	0	2	2	1	0	0	0	1	1	1	11
19-4092 Forensic Science Technicians (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	12	7	7	4	3	3	3	3	3	2	2	2	2	1	37

Table B6. Most common inhalation exposures in the Community and Social Service Occupations (N=16)

	Cleaning Materials	Chemicals	Chlorine	Cleaners, Disinfectant	Fire Extinguisher	Fungicide	Natural Gas	Pesticides	Sodium Hypochlorite	Bleach plus Acid (mixture)	Carbon Monoxide	Cinnamom	Hydrogen Peroxide	Indoor Air Poll. from Renov.	Other
21-1011 Substance Abuse and Behavioral Disorder Counselors (N=4)	4	0	2	1	1	0	0	0	2	1	0	0	0	0	1
21-1014 Mental Health Counselors (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
21-1015 Rehabilitation Counselors (N=1)	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1
21-1019 Counselors, All Other (N=4)	0	1	0	0	1	0	1	0	0	0	1	1	0	0	0
21-1022 Healthcare Social Workers (N=3)	0	1	0	0	0	1	0	1	0	0	0	0	0	0	1
21-1023 Mental Health and Substance Abuse Social Workers (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21-1091 Health Educators (N=1)	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
21-1099 Community and Social Service Specialists, All Other (N=1)	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Total	4	2	2	2	2	2	2	2	2	1	1	1	1	1	4

Table B7. Most common inhalation exposures in the Legal Occupations (N=3)

	Cleaners, Disinfectant	Cleaning Materials	Dust	Glues	Indoor Air Poll. from Renov.	Paint
23-2011 Paralegals and Legal Assistants (N=3)	1	1	1	1	1	1
Total	1	1	1	1	1	1

Table B8. Most common inhalation exposures in the Education, Training, and Library Occupations (N=22)

	Chlorine	Sodium Hypochlorite	Carbon Monoxide	Cleaning Materials	Hazard Not On File	Indoor Air Poll. from Renov.	Mineral Oil	Paint	Animal Material	Barium Compounds	Cleaners, Carpet	Hydrocarbons	Inorganic Compounds	Mace	Other
25-1081 Education Teachers, Postsecondary (N=2)	0	0	0	0	0	0	0	0	1	1	0	0	1	0	1
25-1191 Graduate Teaching Assistants (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
25-2011 Preschool Teachers, Except Special Education (N=4)	3	3	0	1	0	0	0	0	0	0	0	0	0	0	0
25-2021 Elementary School Teachers, Except Special Education (N=5)	0	0	1	0	0	2	0	2	0	0	0	1	0	0	1
25-2031 Secondary School Teachers, Except Special and Career/Technical Education (N=1)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-3021 Self-Enrichment Education Teachers (N=2)	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
25-3099 Teachers and Instructors, All Other (N=2)	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0
25-9041 Teacher Assistants (N=2)	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0
25-9099 Education, Training, and Library Workers, All Other (N=3)	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0
Total	5	4	3	2	2	2	2	2	1	1	1	1	1	1	3

Table B9. Most common inhalation exposures in the Arts, Design, Entertainment, Sports, and Media Occupations (N=4)

	Chemicals	Chlorine	Dust	Floor Wax	Indoor Air Poll. from Renov.	Polymers	Urethane
27-1023 Floral Designers (N=1)	1	0	0	0	0	0	0
27-1026 Merchandise Displayers and Window Trimmers (N=1)	0	0	1	1	1	0	0
27-1029 Designers, All Other (N=1)	0	0	0	0	0	1	1
27-2022 Coaches and Scouts (N=1)	0	1	0	0	0	0	0
Total	1	1	1	1	1	1	1

Table B10. Most common inhalation exposures in the Healthcare Practitioners and Technical Occupations (N=97)

	Cleaning Materials	Chemicals	Cleaners, Disinfectant	Chlorine	Sodium Hypochlorite	Pharmaceuticals	Carbon Monoxide	Perfume	Paint	Hazard Not On File	Indoor Air Poll. from Renov.	Mold	Natural Gas	Air Pollutants, Indoor	Other
29-1021 Dentists, General (N=1)	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
29-1069 Physicians and Surgeons, All Other (N=5)	0	1	0	0	0	1	0	0	0	0	0	0	0	0	3
29-1071 Physician Assistants (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
29-1123 Physical Therapists (N=1)	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
29-1126 Respiratory Therapists (N=1)	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
29-1131 Veterinarians (N=1)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-1141 Registered Nurses (N=43)	8	5	7	2	2	4	5	5	3	2	2	0	1	1	20
29-1199 Health Diagnosing and Treating Practitioners, All Other (N=1)	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
29-2011 Medical and Clinical Lab. Technologists (N=6)	0	4	0	1	1	0	0	0	0	0	0	0	0	0	1
29-2012 Medical and Clinical Laboratory Technicians (N=9)	3	1	0	1	1	0	0	0	1	0	1	0	0	0	6
29-2032 Diagnostic Medical Sonographers (N=2)	2	0	1	0	0	0	0	0	0	0	0	1	0	0	3
29-2034 Radiologic Technologists (N=1)	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
29-2041 Emergency Medical Technicians and Paramedics (N=6)	1	0	0	2	1	1	0	1	0	0	0	0	0	1	4
29-2052 Pharmacy Technicians (N=6)	2	0	2	0	0	1	1	0	0	0	0	0	2	0	4
29-2061 Licensed Practical and Licensed Vocational Nurses (N=3)	0	1	0	1	1	0	0	0	0	0	0	0	0	0	3
29-9099 Healthcare Practitioners and Technical Workers, All Other (N=4)	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Other (N=6)	2	1	0	2	2	0	0	0	0	0	0	1	0	0	4
Total	20	16	11	10	9	7	6	6	4	3	3	3	3	2	53

Table B11. Most common inhalation exposures in the Healthcare Support Occupations (N=57)

	Carbon Monoxide	Chlorine	Cleaners, Disinfectant	Chemicals	Cleaning Materials	Dust	Indoor Air Poll. from Renov.	Sodium Hypochlorite	Formaldehyde	Glues	Acrylates	Bleach plus Acid (mixture)	Inorganic Compounds	Methyl Methacrylate	Other
31-1011 Home Health Aides (N=2)	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
31-1015 Orderlies (N=18)	3	2	2	1	1	3	1	1	0	1	0	2	2	0	13
31-2011 Occupational Therapy Assistants (N=5)	1	1	0	0	1	2	0	0	0	0	0	0	0	0	3
31-2021 Physical Therapist Assistants (N=1)	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
31-9011 Massage Therapists (N=1)	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
31-9091 Dental Assistants (N=1)	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0
31-9092 Medical Assistants (N=3)	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-9093 Medical Equipment Preparers (N=6)	0	0	2	0	2	0	0	0	2	0	1	0	0	1	3
31-9095 Pharmacy Aides (N=2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
31-9096 Veterinary Assistants and Laboratory Animal Caretakers (N=7)	0	1	0	1	0	0	1	1	1	0	0	0	0	0	4
31-9099 Healthcare Support Workers, All Other (N=11)	0	1	2	3	1	0	1	1	1	1	1	0	0	1	6
Total	7	7	6	5	5	5	5	5	4	3	2	2	2	2	34

Table B12. Most common inhalation exposures in the Protective Service Occupations (N=170)

	Carbon Monoxide	Chemicals	Wildfire smoke	Pharmaceuticals	Mace	Chlorine	Propane	Freon	Hazard Not On File	Inorganic Compounds	Insecticides	Smoke	Diacetyl morphine	Dust	Other
33-1012 First-Line Supervisors of Police and Detectives (N=4)	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0
33-1021 First-Line Supervisors of Fire Fighting and Prevention Workers (N=3)	0	0	1	0	0	0	0	0	2	0	0	0	0	0	2
33-1099 First-Line Supervisors of Protective Service Workers, All Other (N=3)	0	1	0	0	0	2	1	0	0	0	0	0	0	0	0
33-2011 Firefighters (N=30)	11	3	9	0	0	0	0	0	2	4	0	0	0	0	13
33-2021 Fire Inspectors and Investigators (N=1)	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1
33-3012 Correctional Officers and Jailers (N=11)	1	0	0	0	2	0	4	0	0	0	0	0	0	0	8
33-3021 Detectives and Criminal Investigators (N=1)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33-3051 Police and Sheriff's Patrol Officers (N=81)	50	4	0	11	2	1	0	3	4	0	0	1	3	1	12
33-9021 Private Detectives and Investigators (N=1)	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
33-9032 Security Guards (N=27)	9	5	2	2	4	1	0	0	1	0	0	2	0	2	13
33-9091 Crossing Guards (N=1)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33-9092 Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers (N=7)	1	0	1	0	0	5	0	0	0	0	0	0	0	0	2
Total	76	15	14	13	8	7	6	5	5	4	4	4	3	3	52

Table B13. Most common inhalation exposures in the Food Preparation and Serving Related Occupations (N=109)

	Cleaning Materials	Chlorine	Sodium Hypochlorite	Carbon Monoxide	Chemicals	Degreaser	Other Cleaning Mixtures	Freon	Fire Extinguisher Mixtures	Bleach plus Acid Discharge	Cleaners, Detergent	Cleaners, Disinfectant	Cleaners, Drain	Cleaners, Oven	Other
35-1011 Chefs and Head Cooks (N=2)	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0
35-1012 First-Line Supervisors of Food Preparation and Serving Workers (N=9)	2	1	1	2	1	0	1	0	1	0	0	0	1	0	6
35-2011 Cooks, Fast Food (N=2)	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0
35-2012 Cooks, Institution and Cafeteria (N=11)	3	3	3	0	2	0	0	0	1	0	0	1	0	1	4
35-2014 Cooks, Restaurant (N=17)	7	2	1	1	0	2	0	2	1	0	0	2	0	2	7
35-2019 Cooks, All Other (N=2)	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
35-3011 Bartenders (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
35-3021 Combined Food Preparation and Serving Workers, Including Fast Food (N=29)	6	10	9	9	2	1	1	0	0	2	1	0	0	0	8
35-3022 Counter Attendants, Cafeteria, Food Concession, and Coffee Shop (N=6)	3	3	3	0	0	0	2	0	0	0	0	0	2	0	2
35-3031 Waiters and Waitresses (N=8)	2	0	0	1	1	1	0	2	0	0	0	0	0	0	5
35-3041 Food Servers, Nonrestaurant (N=2)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
35-9021 Dishwashers (N=18)	8	10	8	0	0	1	1	0	0	1	2	0	0	0	8
35-9099 Food Preparation and Serving Related Workers, All Other (N=2)	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	34	30	26	16	6	6	5	5	4	3	3	3	3	3	44

Table B14. Most common inhalation exposures in the Building and Grounds Cleaning and Maintenance Occupations (N=171)

	Chlorine	Cleaning Materials	Sodium Hypochlorite	Chemicals	Other Cleaning Mixtures	Carbon Monoxide	Cleaners, Disinfectant	Sodium Hydroxide	Bleach plus Acid (mixture)	Fire Extinguisher (mixture)	Herbicides	Sulfonates	Ammonium Hydroxide	Anhydrous Ammonia	Other
37-1011 First-Line Supervisors of Housekeeping and Janitorial Workers (N=7)	2	2	1	1	0	0	1	0	0	0	0	1	0	6	
37-1012 First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers (N=3)	0	1	0	0	0	0	0	0	0	1	0	0	0	2	
37-2011 Janitors and Cleaners, Except Maids and Housekeeping Cleaners (N=104)	44	37	29	9	8	4	4	7	4	3	0	3	2	2	43
37-2012 Maids and Housekeeping Cleaners (N=35)	4	12	4	10	0	3	2	0	1	2	0	1	0	0	19
37-2019 Building Cleaning Workers, All Other (N=5)	4	2	0	0	0	0	0	0	0	0	0	0	0	0	1
37-3011 Landscaping and Groundskeeping Workers (N=9)	2	2	2	0	1	1	0	0	0	1	0	0	1	8	
37-3012 Pesticide Handlers, Sprayers, and Applicators, Vegetation (N=4)	0	0	0	0	0	0	0	0	0	1	0	0	0	5	
37-3013 Tree Trimmers and Pruners (N=4)	0	0	0	1	0	0	0	0	0	1	0	0	0	2	
Total	56	56	36	21	9	8	7	7	5	5	4	4	3	3	86

Table B15. Most common inhalation exposures in the Personal Care and Service Occupations (N=50)

	Chlorine	Cleaning Materials	Sodium Hypochlorite	Carbon Monoxide	Natural Gas	Chemicals	Air Freshener	Cleaners, Oven	Dyes	Hair Products	Mace	Aluminum Chloride	Ammonium Chloride	Ammonium Hydroxide	Other
39-1021 First-Line Supervisors of Personal Service Workers (N=2)	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
39-2021 Nonfarm Animal Caretakers (N=7)	3	1	2	0	0	1	0	0	0	0	0	1	1	0	4
39-3011 Gaming Dealers (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
39-5012 Hairdressers, Hairstylists, and Cosmetologists (N=8)	1	0	1	3	1	0	0	0	2	2	0	0	0	0	2
39-5094 Skincare Specialists (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
39-9011 Childcare Workers (N=4)	1	1	1	0	2	0	0	0	0	0	0	0	0	0	0
39-9021 Personal Care Aides (N=20)	6	8	6	3	1	1	2	2	0	0	1	0	0	1	6
39-9032 Recreation Workers (N=5)	3	2	1	1	0	0	0	0	0	0	0	0	0	0	1
39-9041 Residential Advisors (N=1)	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
39-9099 Personal Care and Service Workers, All Other (N=1)	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Total	16	13	12	7	5	3	2	2	2	2	2	1	1	1	15

Table B16. Most common inhalation exposures in the Sales and Related Occupations (N=85)

	Cleaning Materials	Carbon Monoxide	Chemicals	Indoor Air Poll. from Renov.	Mace	Chlorine	Cleaners, Disinfectant	Sodium Hypochlorite	Sewer Water	Acids, Bases, Oxidizers	Asphalt	Gasoline	Hazard Not On File	Cement Dust	Other
41-1011 First-Line Supervisors of Retail Sales Workers (N=18)	1	2	0	1	1	1	0	1	3	0	1	0	2	0	12
41-2011 Cashiers (N=17)	2	2	1	0	3	2	1	2	0	0	0	0	0	1	12
41-2022 Parts Salespersons (N=1)	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
41-2031 Retail Salespersons (N=39)	5	3	4	6	1	3	4	2	1	2	2	3	1	1	19
41-3021 Insurance Sales Agents (N=2)	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
41-3099 Sales Representatives, Services, All Other (N=2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
41-4011 Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products (N=1)	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
41-9011 Demonstrators and Product Promoters (N=1)	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
41-9021 Real Estate Brokers (N=2)	1	0	1	0	1	0	0	0	0	0	0	0	0	0	1
41-9022 Real Estate Sales Agents (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
41-9091 Door-to-Door Sales Workers, News and Street Vendors, and Related Workers (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	9	8	7	7	7	6	5	5	4	3	3	3	3	2	51

Table B17. Most common inhalation exposures in the Office and Administrative Support Occupations (N=122)

	Chemicals	Indoor Air Poll. from Renovation	Carbon Monoxide	Cleaning Materials	Dust	Paint	Air Pollutants, Indoor	Chlorine	Sodium Hypochlorite	Ammonia Solution (10%)	Cleaners, Disinfectant	Cleaners, Floor Stripping	Hazard Not On File	Perfume	Other
43-1011 First-Line Supervisors of Office and Administrative Support Workers (N=5)	2	0	1	0	1	0	0	1	1	1	0	1	0	0	1
43-3011 Bill and Account Collectors (N=2)	1	0	0	0	0	0	1	0	0	0	0	0	0	1	1
43-3031 Bookkeeping, Accounting, and Auditing Clerks (N=4)	0	0	0	0	1	0	2	0	0	0	0	0	0	0	2
43-4031 Court, Municipal, and License Clerks (N=4)	0	0	0	1	0	0	0	0	4	0	4	0	0	0	0
43-4051 Customer Service Representatives (N=21)	6	1	3	5	0	1	0	3	4	0	3	0	1	1	5
43-4081 Hotel, Motel, and Resort Desk Clerks (N=2)	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
43-4171 Receptionists and Information Clerks (N=6)	0	3	0	0	0	0	2	0	0	0	0	0	1	0	2
43-5021 Couriers and Messengers (N=2)	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1
43-5031 Police, Fire, and Ambulance Dispatchers (N=2)	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
43-5081 Stock Clerks and Order Fillers (N=15)	3	0	0	2	3	3	0	1	0	0	0	0	1	0	11
43-6011 Executive Secretaries and Executive Administrative Assistants (N=3)	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1
43-6013 Medical Secretaries (N=7)	0	2	0	0	0	3	0	0	0	0	0	1	1	4	
43-6014 Secretaries and Administrative Assistants, Except Legal, Medical, and Executive (N=18)	1	2	3	1	1	1	2	1	0	0	0	0	0	1	14
43-9021 Data Entry Keyers (N=5)	1	1	1	0	0	0	0	1	1	0	1	0	0	0	1
43-9061 Office Clerks, General (N=8)	2	1	1	0	0	0	0	0	0	0	0	0	1	0	5
43-9199 Office and Administrative Support Workers, All Other (N=6)	1	4	2	0	1	1	0	0	0	0	0	0	0	0	1
Other (N=12)	1	3	2	2	1	0	0	0	0	0	0	0	0	0	5
Total	19	18	15	12	9	9	7	7	6	5	5	5	5	5	55

Table B18. Most common inhalation exposures in the Farming, Fishing, and Forestry Occupations (N=212)

	Pesticides	Insecticides	Chemicals	Fertilizers	Chlorine	Sodium Hypochlorite	Carbon Monoxide	Anhydrous Ammonia	Fungicide	Cleaning Materials	Sulfur, Elemental	Organophosphate Pesticides	Acids, Bases, Oxidizers	Animal Material	Other
45-1011 First-Line Supervisors of Farming, Fishing, and Forestry Workers (N=5)	3	2	1	2	0	0	0	0	0	0	0	0	0	0	1
45-2041 Graders and Sorters, Agricultural Products (N=22)	0	0	5	0	6	4	2	3	0	2	0	0	1	0	12
45-2091 Agricultural Equipment Operators (N=4)	0	1	0	0	0	0	0	0	1	0	0	0	0	0	9
45-2092 Farmworkers and Laborers, Crop, Nursery, and Greenhouse (N=158)	64	35	27	30	6	4	7	5	7	2	6	4	0	2	53
45-2093 Farmworkers, Farm, Ranch, and Aquacultural Animals (N=18)	0	0	3	0	9	4	0	0	0	3	0	0	1	1	10
45-4011 Forest and Conservation Workers (N=2)	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
45-4023 Log Graders and Scalers (N=1)	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
45-4029 Logging Workers, All Other (N=2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	67	38	36	32	21	12	10	8	8	7	6	4	3	3	90

Table B19. Most common inhalation exposures in the Construction and Extraction Occupations (N=244)

	Dust	Carbon Monoxide	Paint	Lead-based Paint	Chemicals	Cement Dust	Welding Fume	Solvents	Fiberglass	Metal Dust	Silica, Crystalline	Cleaning Materials	Polyurethane	Chlorine	Other
47-1011 First-Line Supervisors of Construction Trades and Extraction Workers (N=23)	2	5	2	1	1	0	0	2	0	1	0	0	2	0	21
47-2031 Carpenters (N=18)	8	5	1	4	2	1	0	1	1	0	1	2	0	0	7
47-2051 Cement Masons and Concrete Finishers (N=7)	4	1	0	0	0	3	0	0	0	0	1	0	0	0	3
47-2061 Construction Laborers (N=43)	12	7	4	2	2	7	1	4	2	1	2	0	1	1	26
47-2073 Operating Engineers and Other Construction Equipment Operators (N=8)	1	3	0	0	2	0	0	0	0	0	0	1	0	2	2
47-2081 Drywall and Ceiling Tile Installers (N=5)	1	1	2	0	0	0	0	0	0	0	0	0	0	0	8
47-2111 Electricians (N=35)	8	5	4	0	4	0	5	0	2	0	4	1	4	0	16
47-2131 Insulation Workers, Floor, Ceiling, and Wall (N=10)	1	1	0	1	0	1	0	0	2	0	0	1	0	1	8
47-2141 Painters, Construction and Maintenance (N=23)	2	1	14	2	0	0	0	2	0	0	0	0	0	0	14
47-2152 Plumbers, Pipefitters, and Steamfitters (N=15)	0	6	0	0	3	0	2	0	0	0	0	1	0	0	9
47-2181 Roofers (N=6)	0	0	2	0	0	0	0	1	1	0	0	0	0	0	4
47-2211 Sheet Metal Workers (N=5)	1	0	1	0	1	1	1	0	0	0	1	0	0	0	2
47-2221 Structural Iron and Steel Workers (N=7)	0	0	2	6	0	0	1	0	0	4	0	0	0	0	0
47-4021 Elevator Installers and Repairers (N=7)	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0
47-4041 Hazardous Materials Removal Workers (N=9)	1	0	0	0	3	0	0	0	0	0	0	0	0	2	11
47-4051 Highway Maintenance Workers (N=6)	1	1	0	0	1	0	0	0	0	0	0	1	0	0	6
Other (N=17)	4	2	0	1	2	0	1	0	1	3	0	0	0	0	14
Total	53	38	32	24	21	13	11	10	9	9	9	7	7	6	151

Table B20. Most common inhalation exposures in the Installation, Maintenance, and Repair Occupations (N=214)

	Carbon Monoxide	Chlorine	Chemicals	Cleaning Materials	Dust	Paint	Anhydrous Ammonia	Degreaser	Fiberglass	Freon	Sodium Hypochlorite	Ammonium Hydroxide	Cleaners, Disinfectant	Insecticides	Other
49-1011 First-Line Supervisors of Mechanics, Installers, and Repairers (N=15)	2	2	2	1	1	1	0	1	1	1	1	0	0	0	10
49-2011 Computer, Automated Teller, and Office Machine Repairers (N=2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
49-2096 Electronic Equipment Installers and Repairers, Motor Vehicles (N=2)	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
49-3021 Automotive Body and Related Repairers (N=7)	1	0	1	0	0	3	0	0	1	0	0	0	0	0	7
49-3023 Automotive Service Technicians and Mechanics (N=15)	3	0	1	2	2	0	0	0	0	2	0	1	0	0	8
49-3031 Bus and Truck Mechanics and Diesel Engine Specialists (N=15)	5	0	0	2	1	1	1	2	0	0	0	0	0	0	10
49-3041 Farm Equipment Mechanics and Service Technicians (N=3)	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2
49-3051 Motorboat Mechanics and Service Technicians (N=4)	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
49-3092 Recreational Vehicle Service Technicians (N=6)	3	0	0	0	0	0	0	0	1	0	0	1	0	0	1
49-3093 Tire Repairers and Changers (N=2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
49-9021 Heating, Air Conditioning, and Refrigeration Mechanics and Installers (N=18)	4	0	3	0	0	0	0	0	0	0	0	0	0	0	15
49-9041 Industrial Machinery Mechanics (N=13)	1	1	3	1	0	0	2	0	0	0	0	0	1	0	6
49-9043 Maintenance Workers, Machinery (N=4)	0	0	0	2	0	1	0	0	0	0	0	1	0	0	5
49-9051 Electrical Power-Line Installers and Repairers (N=5)	1	0	0	0	1	2	0	0	0	0	0	0	0	0	4
49-9071 Maintenance and Repair Workers, General (N=57)	10	13	7	7	4	2	1	2	0	1	3	0	1	4	33
49-9099 Installation, Maintenance, and Repair Workers, All Other (N=38)	1	12	3	5	1	0	0	0	1	1	1	1	2	0	31
Other (N=8)	4	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Total	37	28	21	20	10	10	5	5	5	5	5	4	4	4	152

Table B21. Most common inhalation exposures in the Production Occupations (N=385)

	Welding Fume	Chemicals	Chlorine	Paint	Carbon Monoxide	Dust	Cleaning Materials	Solvents	Sodium Hypochlorite	Fiberglass	Metal Dust	Acetone	Cleaners, Disinfectant	Thimer	Other
51-1011 First-Line Supervisors of Production and Operating Workers (N=24)	4	2	5	1	3	1	1	2	1	0	0	1	0	1	11
51-2011 Aircraft Structure, Surfaces, Rigging, and Systems Assemblers (N=5)	0	0	0	1	0	0	0	1	0	0	0	0	0	0	4
51-2041 Structural Metal Fabricators and Fitters (N=8)	1	1	0	1	0	1	0	1	0	0	3	0	0	0	11
51-2091 Fiberglass Laminators and Fabricators (N=8)	0	1	0	1	1	1	1	0	0	3	0	0	0	0	5
51-2099 Assemblers and Fabricators, All Other (N=23)	2	3	2	1	1	1	1	3	1	1	0	1	0	0	22
51-3022 Meat, Poultry, and Fish Cutters and Trimmers (N=11)	0	0	5	0	0	0	1	0	4	0	0	0	0	0	7
51-3092 Food Batchmakers (N=8)	0	0	5	0	0	1	1	0	0	0	0	0	0	0	8
51-4011 Computer-Controlled Machine Tool Operators, Metal and Plastic (N=10)	0	3	0	0	2	0	2	0	0	1	0	0	0	0	8
51-4041 Machinists (N=8)	0	0	0	1	0	0	0	2	0	1	0	1	0	1	8
51-4121 Welders, Cutters, Solderers, and Brazers (N=58)	40	0	0	7	2	4	1	0	0	1	5	0	0	0	30
51-6011 Laundry and Dry-Cleaning Workers (N=14)	0	1	5	0	6	0	2	0	5	0	0	0	0	0	6
51-7011 Cabinetmakers and Bench Carpenters (N=7)	0	1	0	1	1	0	0	1	0	0	0	0	0	1	7
51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers (N=26)	1	3	0	0	3	3	2	2	1	1	0	2	3	0	30
51-9111 Packaging and Filling Machine Operators and Tenders (N=6)	0	0	0	0	1	0	1	0	0	0	0	0	0	0	9
51-9122 Painters, Transportation Equipment (N=14)	0	1	0	8	0	0	0	2	0	1	0	0	0	3	12
51-9199 Production Workers, All Other (N=98)	6	15	12	2	1	9	5	4	4	3	2	3	2	2	94
Other (N=57)	2	10	5	3	3	2	4	2	1	1	3	3	4	1	64
Total	56	41	39	27	24	23	22	20	17	13	13	11	9	9	336

Table B22. Most common inhalation exposures in the Transportation and Material Moving Occupations (N=361)

	Carbon Monoxide	Chemicals	Chlorine	Cleaning Materials	Anhydrous Ammonia	Propane	Cleaners, Disinfectant	Diesel Exhaust	Ammonium Hydroxide	Dust	Hazard Not On File	Wood Dust	Sodium Hypochlorite	Gasoline	Other
53-2011 Airline Pilots, Copilots, and Flight Engineers (N=6)	2	4	0	0	0	0	0	0	0	0	0	0	0	0	1
53-2031 Flight Attendants (N=39)	13	19	0	0	0	0	1	0	0	0	3	0	0	0	13
53-3021 Bus Drivers, Transit and Intercity (N=36)	22	1	0	3	0	0	6	6	0	0	0	0	0	0	11
53-3022 Bus Drivers, School or Special Client (N=5)	2	0	0	0	0	0	0	1	0	0	0	0	0	0	6
53-3032 Heavy and Tractor-Trailer Truck Drivers (N=65)	32	4	2	2	2	0	1	2	1	1	1	1	1	5	17
53-3033 Light Truck or Delivery Services Drivers (N=18)	3	1	2	1	0	1	1	1	1	1	0	0	0	2	5
53-3041 Taxi Drivers and Chauffeurs (N=4)	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1
53-3099 Motor Vehicle Operators, All Other (N=2)	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
53-4011 Locomotive Engineers (N=2)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
53-6099 Transportation Workers, All Other (N=5)	2	0	0	0	0	0	0	0	0	0	1	0	0	0	2
53-7051 Industrial Truck and Tractor Operators (N=20)	7	2	1	0	2	2	0	0	0	1	1	1	0	0	6
53-7061 Cleaners of Vehicles and Equipment (N=25)	0	0	5	8	0	0	2	1	2	1	1	0	1	0	27
53-7062 Laborers and Freight, Stock, and Material Movers, Hand (N=82)	9	13	11	4	6	5	2	2	3	5	1	2	6	0	61
53-7063 Machine Feeders and Offbearers (N=7)	0	1	0	0	0	0	0	0	0	1	0	5	0	0	5
53-7064 Packers and Packagers, Hand (N=28)	7	3	1	3	4	6	0	0	2	0	1	0	0	0	5
53-7081 Refuse and Recyclable Material Collectors (N=6)	0	1	0	0	0	0	0	0	1	1	1	0	0	0	4
Other (N=11)	0	1	3	1	1	0	0	0	1	0	0	1	1	0	10
Total	103	51	25	22	15	14	13	13	11	11	10	10	9	7	176

Table B23. Most common inhalation exposures in Non-classifiable Occupations (N=130)

	Chemicals	Carbon Monoxide	Cleaning Materials	Chlorine	Cleaners, Disinfectant	Dust	Natural Gas	Anhydrous Ammonia	Paint	Sodium Hypochlorite	Indoor Air Poll. from Renov.	Welding Fume	Mace	Plant Material	Other
99-9999 Non-classifiable (N=130)	16	14	12	9	7	7	6	5	5	5	4	4	3	3	105
Total	16	14	12	9	7	7	6	5	5	5	4	4	3	3	105