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Cancer risk by occupation and socioeconomic group among men - a study by The Association of Swiss Cancer Registries

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Appendix 1

ASCR classification of occupations

ASCR codes	Occupational titles	Description of occupations
01	AGRICULTURE & ANIMAL PRODUCERS^a	
011	Farmers & animal producers	Farmers, animal producers (except specific breeders), agriculture workers
012	Viniculturists	Viniculturists, wine growers
013	Horticulturists & related occupations	Market gardeners, horticultural and nursery growers, other horticultural related occupations
019	Other occupations in agriculture & stockbreeding ^b	Farm laborers, motorized farm operators, arboriculturists, poultry farmers, smaller livestock breeders, animal keepers, foresters, loggers, fishermen, hunters and related, other occupations related to agriculture and stock breeding
02	FOOD, BEVERAGE & TOBACCO INDUSTRIES^a	
021	Bakers & related occupations	Bakers, pastry cooks, confectionery makers (except chocolatemakers), ice-cream makers
022	Cheesemakers & related occupations	Cheesemakers, dairymen, other occupations related to dairy-products
023	Butchers & related occupations	Butchers, pork butchers, other related meat preparers
024	Other related food & beverage preparers ^b	Millers, chocolate makers, cannery workers, pastamakers, oil and fat preservers, brewers, distillers, cellarmen, tasters, fishmongers, other related food and beverage preparers
025	Occupations in tobacco production ^b	Tobacco preparers and tobacco products makers
03	TEXTILE, LEATHER & FUR INDUSTRIES^a	
031	Textile-related trades workers	Carders, spinners, weavers, hosiers, fine-darners, dyers, textile machine operators, other occupations related to textile
032	Tailors & related occupations	Tailors, dressmakers, cutters, sewers, embroiders, hatters, milliners, upholsterers, quilt makers and other occupations related to textile
033	Occupations in the pelt, leather & fur industries	Leather processing workers, tanners, shoemakers and related, car upholsterers, saddlers, leather workers, other leather manufacturing trades, furriers and related occupations
04	CONSTRUCTION & RELATED OCCUPATIONS^a	
041	Bricklayers, stonemasons, tilers & related occupations	Bricklayers, stonemasons, tilers, cement and concrete workers, construction laborers
042	Roofers	Roofers (except metal roofers)
043	Plasterers & painters	Plasterers, stucco plasterers, building painters, paperhangers
044	Other painters & related occupations ^b	Sign painters, poster painters, scene painters, vehicle painters and spray painters, other occupations related to paint
049	Other occupations in construction & related trades ^b	Stove setters, heating engineers, paviours, specialized road builders, parquet layers, asphalters, other occupations in construction
05	STONE, EARTH & GLASS INDUSTRIES^a	
051	Stone & earth trades workers	Stone and marble cutters, stone carvers, polishers, workers in brick, tile and cement works, ceramists, potters
052	Glassmakers & related trades workers	Glassblowers, glass cutters, glass polishers, opticians, glaziers
059	Miners, quarriers & related occupations	Miners, quarriers, gravel workers, salt-works workers, other mine and quarry workers, other workers in stone, earth and glass trades
06	METALLURGY & ELECTROTECHNOLOGY^a	
061	Foundry workers	Foundry workers, coremakers, molders, scourers, other occupations related to smelting works
062	Turners & related occupations	Turners, drillers, machine-tool setter-operators, screw-cutting lathe operators, polishers, gunsmiths
063	Mechanics	Fitters, precision-instrument makers-repairers, typewriter, bicycle and motor vehicle mechanics, electrical mechanics, other specialized mechanics
064	Electricians	Linesmen and cable jointers, winders, radio and television installers and repairers, telecommunication and electrical equipment installers and repairers, telephone installers, motor vehicle electricians, other electricians

(continued)

065	Watchmakers	Watchmakers, watch menders, micro-mechanics and setters, watch adjusters
066	Watch industry & other related occupations ^b	Gem setters, other specific occupations related to the watch industry
067	Pump attendants ^b	Pump attendants
069	Metallurgy, electrotechnology & related occupations ^b	Rolling mill operators, wire drawers, temperers, enamellers, nickel-plating and zinc workers, welders, ironmongers, blacksmiths, coppersmiths, cutlers, agricultural machinery mechanics, tool makers, locksmiths/ironsmiths, tinsmiths, vehicle panel beaters, boilersmiths, plumbers, refrigeration fitters, other occupations related to metallurgy, electronic and machinery industries
07	WOOD, CORK & PAPER INDUSTRIES ^a	
071	Carpenters	Carpenters
072	Joiners, cabinetmakers & related occupations	Joiners, cabinetmakers, glass joiners, other specialized joiners
073	Occupations related to the wood & cork industry ^b	Sawyers, machine operators, wood turners, dyers-polishers, cartwrights, woodcarvers, gilders, coopers, other occupations related to wood, cork workers, basket makers and cane workers
074	Occupations related to the paper industry ^b	Cardboard makers and other occupations related to the production and preparing of paper and cardboard
08	GRAPHIC ARTS ^a	
081	Typographers	Compositors, typesetters
089	Other occupations related to printing & graphic arts	Offset printers, rotogravure printers, silk-screen printers, stereotypers, electrotypers, lithographers, cartographers, photo-engravers, laboratory photographers, bookbinders and related workers, layers-on, receivers, duplicator operators, other occupations related to graphic arts
09	CHEMICAL & PLASTICS INDUSTRIES ^a	
091	Chemical workers	Chemical workers
092	Gasworks & refinery workers ^b	Gasworks and oil refinery workers
093	Plastics & rubber workers ^b	Workers in artificial fibers and plastics, vulcanizer and tire makers, other workers related to synthetics and rubber industry
10	TECHNICAL PROFESSIONS & TRADES	
101	Architects	Architects, architects ETS, landscape architects, town planners
102	Chemical engineers	Chemical engineers ETS
103.1	Agronomists & related occupations	Forestry engineers and agronomists
103.9	Other engineers	Engineers, civil engineers and technicians, automotive and mechanical engineers, electrical or electronics engineers, surveyors, heating engineers, engineers in microtechnology, agriculture engineers, engineers in typography, and other engineers
104	Technicians & foremen	Operations managers, foremen, and site foremen
105	Draftspersons ^b	Draftspersons in construction and civil engineering, surveyors and related technical occupations
106	Laboratory assistants	Laboratory assistants and workers (except medical, optical and photography laboratories)
107	Machinists & related occupations	Dredgers and crane operators and other related plant operators
109	Other related technical occupations ^b	Technical counselors and other related technical occupations
11	TRADE, ADMINISTRATION & COMPUTERS	
111	Entrepreneurs & managers	Company presidents, directors and managers, senior government officials, senior officials, political-party officials
112	Clerks	Office clerks, accountants, cashiers, account clerks, correspondence assistants, receptionists, travel agents, correctors, and other occupations related to office work
113	Computing occupations ^b	Programmers, data entry operators, other occupations related to computers
114	Pharmaceutical assistants ^b	Pharmaceutical assistants and retailers in drugs and chemicals
115	Salespersons & representatives	Buyers, shop clerks, salespersons, booksellers, livestock merchants, traveling salesmen and representatives, newspaper vendors, hawkers, and other occupations related to wholesale and retail trades
116	Chartered accountants & related occupations ^b	Insurance inspectors and mercantile brokers, brokers, advertising workers, public relations workers, tax consultants, trust and business agents, auditors, and related occupations
12	TRANSPORT & TELECOMMUNICATIONS	
121.1	Locomotive engineers	Locomotive engineers
121.2	Other occupations related to railways	Stationmasters, railway employees, guards, train conductors, conveyors, signalers, level-crossing keepers, linemen, and other occupations related to railway work
122	Occupations related to public transport ^b	Bus and tram drivers
123	Drivers	Truck drivers, and drivers
124	Aircraft pilots	Aircraft pilots
125	Other occupations related to transport	Carters, ships' officers, other occupations related to waterway transports, air transport department managers, supervisors and employees, other occupations related to air transport, transport laborers and freight handlers, porters, messengers, and other occupations related to transport

(continued)

126	Post & telecommunications	Postal counter clerks, office and distribution clerks, postmen, postal clerks in uniform, office boys, ushers, telephone, and telegraph and radiotelegraph operators
13	LAW & SECURITY OCCUPATIONS	
131	Legal experts & related occupations	Judges, attorneys, court clerks, deputy public prosecutors, lawyers, notaries, legal advisers, other related occupations
132	Police officers & related occupations	Armed forces, police officers and assistants, firefighters, security agents, other occupations related to security and order restoring
14	MEDIA & RELATED OCCUPATIONS	
141	Editors, librarians & related occupations ^b	Writers, editors, journalists, librarians, curators, historians, archeologists, ethnologists, sociologists, political scientists, education advisers, translators
142	Cinema operators ^b	Cinema operators
15	ARTISTIC OCCUPATIONS	
151	Jewelers & related occupations	Jewelers, goldsmiths, musical instruments makers, tuners
152	Artists & related occupations	Sculptors, artists, graphic designers, interior decorators, display decorators, photographers, cameramen, musicians, dancers, actors, stage directors, stall-keepers, models, other artistic occupations
16	HOTEL & CATERING OCCUPATIONS	
161	Hotel & restaurant managers	Hotel, restaurant and boarding house managers
162	Cooks	Cooks
163	Catering & hotel employees ^b	Cold buffet managers, head waiters, waiters, department managers, waitresses, flight attendants, bartenders, kitchen, buffet and kitchen dependencies assistants, hotel desk concierges, doorkeepers, chambermaids, valets, other hotel employees
164	Domestic workers & related occupations ^b	Linenkeepers, housekeepers, servants, nurses, nannies, other occupations related to hotel and domestic work
17	CLEANING & PERSONAL SERVICES	
171	Chimney sweeps	Chimney sweeps
172	Occupations related to laundering, dyeing & dry cleaning ^b	Launderers, dyers and dry-cleaners, ironers
173	Other occupations related to cleaning	Office and building cleaners, caretakers, doorkeepers (except hotel), sacristans, cleaning ladies, other occupations related to cleaning
174	Occupations related to roads department & undertakers ^b	Undertakers, street sweepers, garbage collectors, other occupations related to public health
175	Hairdressers	Hairdressers
176	Other occupations related to body care ^b	Beauticians, manicurists, chiropodists, other occupations related to body care
18	HEALTH CARE OCCUPATIONS	
181	Physicians	Physicians
182	Dentists, veterinarians & pharmacists	Dentists, veterinarians, pharmacists
183	Nurses & related occupations	Midwives, professional nurses, hospital aides
184	Medical assistants ^b	Medical laboratory assistants, medical or dental assistants
185	Radiology assistants ^b	Radiology assistants
189	Other occupations related to health ^b	Orthopedists, dental technicians, chiropractors, opticians, optical laboratory assistants, dieticians, physiotherapists, occupational therapists, other occupations related to medical care, psychologists, psychotherapists
19	SOCIAL WORK & TEACHING PROFESSIONS	
191	Professors & teachers	University professors, primary and secondary school teachers, special education teachers, music and singing teachers, physical education teachers, kindergarten teachers, other teachers and instructors
192	Religious professionals ^b	Clergymen, priests, ministers
193	Social workers & related occupations ^b	Spiritual assistants, social workers
20	SCIENCE PROFESSIONS	
201	Chemists	Chemists, chemists and engineers specialized in food products
202	Physicists, biologists & related occupations	Physicists, meteorologists, astronomers, geologists, geographers, biologists
209	Other scientific occupations	Mathematicians, systems analysts, computer analysts, statisticians, economists, market research analysts, other scientific occupations and related occupations
21	UNCLASSIFIABLE OR NOT CLASSIFIED ELSEWHERE	
		Infrequent occupations such as mountain guides, professional sportsmen, model makers, brushmakers and the like, and imprecise definition of occupations such as laborers or workers, etc.
22	UNEMPLOYED OR UNKNOWN OCCUPATIONS	
		Students, unknown, unemployed, retired, persons of private means, housewives, children under 18 years of age

^a Professional engineers and technicians not included.^b Not enough represented for separate routine analyses.

Appendix 2

Social class classification^a

Level I: liberal professions

Architects (101), legal experts and related occupations (131), artists and related occupations (152), physicians (181), dentists, veterinarians, pharmacists (182), professors, teachers (191), religious professionals (192)

Level II: executives

Chemical engineers (102), other engineers (103.9), agronomists and related occupations (103.1), Entrepreneurs, administration department managers (111), aircraft pilots (124), editors, librarians and related occupations (141), chemists (201), physicists, biologists and related occupations (202), other scientific occupations (209)

Level III: nonmanual employees

Technicians and foremen (104), draftspersons (105), clerks (112), computing occupations (113), pharmaceutical assistants (114), salespersons, representatives (115), chartered accountants and related occupations (116), locomotive engineers (121.1), post and telecommunications (126), police officers and related occupations (132), nurses and related occupations (183), radiology assistants (185), other occupations related to health (189), social workers and related occupations (193)

Level IV: manual employees

Bakers and related occupations (021), cheesemakers and related occupations (022), butchers and related occupations (023), other occupations related to food and beverage preparers (024), occupations in tobacco production (025), other occupations related to printing and graphic arts (089), laboratory assistants (106), occupations related to public transport (122), other occupations related to railways (121.2), drivers (123), other occupations related to transport (125), hotel and restaurant managers (161), occupations related to laundering, dyeing and dry cleaning (172), hairdressers (175), other occupations related to body care (176), medical assistants (184)

Level V: skilled workers

Textile-related trades workers (031), tailors and related occupations (032), occupations in the pelt, leather and fur industries (033), bricklayers, stonemasons, tilers and related occupations (041), roofers (042), plasterers, painters (043), other painters and related occupations (044), other occupations in construction and related trades (049), glassmakers, related occupations and trades workers (052), turners and related occupations (062), mechanics (063), electricians (064), watchmakers (065), watch industry, other related occupations (066), pump attendants (067), carpenters (071), joiners and cabinetmakers and related occupations (072), typographers (081), machinists and related occupations (107), other related technical occupations (109), jewelers and related occupations (151), cooks (162), restaurant and hotel employees (163), chimney sweeps (171), occupations related to roads department and undertakers (174), farmers and animal producers (011), viniculturists (012), horticulturists and related occupations (013), other occupations in agriculture and stock breeding (019)

Level VI: unskilled workers

Stone and earth trade workers (051), miners, quarriers and related occupations (059), foundry workers (061), metallurgy, electrotechnology and related occupations (069), occupations related to the wood and cork industry (073), occupations related to the paper industry (074), chemical workers (091), gasworks and refinery workers (092), plastic and rubber workers (093), cinema operators and related occupations (142), domestic works and related occupations (164), other occupations related to cleaning (173)

Level VII: unclassified

Unclassifiable or not classified elsewhere (21), unemployed or unknown (22)

^aThe numbers in parentheses refer to the ASCR classification codes of occupation.