

Relative risk and excess fraction of preterm birth across maternal occupation and industry: a Danish nationwide register-based cohort study of employed pregnant women¹

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1. Supplementary materials
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S1: Deviations from the published study protocol

1. Due to the high number of rate ratios reported, we decided to use 99% Confidence Intervals (CI), instead of 95% CIs. However, a 95% CI was mistakenly stated in two of three columns in the protocol's Table 3.
2. We have added two more industrial groups. After the publication of the study protocol, we became aware of the advantage of grouping the industrial group "17: Administration, brokerage, consultancy, financing and insurance activities" into three groups: "17.1: Public administration", "17.2: Finance and insurance activities" and "17.3: Other private offices and associations". We therefore include a total of 38 industrial groups. This grouping has previously been used by the Danish Working Environment Authority.
3. The total number of individuals included in our analyses (N=644,349) is higher than we initially presented in the flow chart in the study protocol (N=632,886). When we prepared the flow chart for the study protocol, we excluded those who were "independent". These have been included in the analyses, which is consistent with what we state in the study protocol (under inclusion criteria).
4. Specification of the results table presented in the study protocol: We present risks rates (RR) from the minimal adjusted model (stated in the protocol: "Crude RR"). Further, all tables on occupational groups were organized according to social class (c.f. the job group classification in S6), with job groups within each social class ordered alphabetically.
5. Sensitivity analyses:
 - a. We planned to run analyses on four outcome categories of preterm birth. However, since there were too few cases of extremely preterm birth in some of the occupational and industrial groups, we grouped "Extremely preterm birth" and "Very preterm birth" together, resulting in three outcome categories.
 - b. We added more sensitivity analyses than initially planned, including:
 - i. Further adjustment of household income in an extra model.
 - ii. Time stratified analyses: Divided observations into two periods.
 - iii. Analyses restricted to mothers with Denmark as country of origin.
 - iv. Minimal adjusted model.

S2: Overview over models, adjustment and reference group (Figure S1 and S2)

Figure S1: Directed acyclic graph for identification of confounders

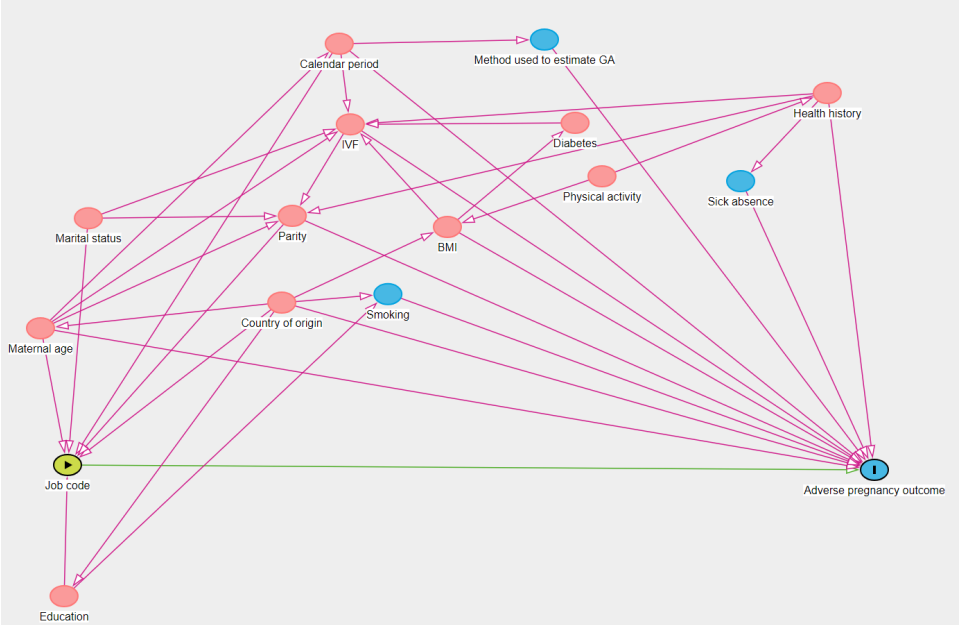


Figure S2: overview of the three statistical models

Model	Adjustment level	Comparison group
Model 1	Minimal	Average risk in total study population
Model 2	Full	Average risk in total study population
Model 3	Full	Simulation-based lowest-risk

S3: Sociodemographic characteristics of occupational and industrial groups (Table S1-S2)

Table S1: Sociodemographic characteristics of the occupational groups, ordered by social class (1. to 4.) and alphabetically within social class. Number of births (N), preterm birth cases, median age, and percentage of the observations in the occupational group belonging to the highest risk category for the mother's country of origin, BMI and smoking.

Occupational group and social class	N	Preterm birth cases (%)	Age, median [IQR]	Origin from outside of Europe or unstated, %	BMI ≥30, %	Smoking during pregnancy, %
1. Medical doctors, dentists, and veterinarians	12 537	435 (3.8)	31.8 (29.6--34.6)	5.0	2.8	0.7
1. Professionals (physics, mathematics, engineering, architects)	15 350	613 (4.0)	32.4 (30.0--35.2)	6.0	5.9	2.4
1. Professionals at academic level, not elsewhere classified	54 556	2229 (4.1)	32.3 (29.8--35.1)	2.5	5.1	2.6
1. Senior officials and corporate managers	6035	285 (4.7)	33.4 (30.4--36.5)	2.3	8.3	6.5
2. Associate professionals (business and administration)	51 144	2325 (4.6)	31.6 (28.9--34.6)	2.5	7.9	5.7
2. Associate professionals (physics and engineering)	10 065	433 (4.3)	31.7 (29.0--34.8)	3.9	10.1	5.6
2. Managers (<10 employees)	2247	112 (5.0)	30.9 (27.7--34.3)	5.3	13.0	10.8
2. Psychologists and social workers	10 062	444 (4.4)	31.5 (29.0--34.4)	2.8	8.2	4.4
2. Teachers in higher, secondary, vocational, and special education	15 615	576 (3.7)	32.3 (29.8--35.2)	4.2	5.6	2.2
3. Associate professionals (health)	18 653	852 (4.6)	30.3 (27.9--33.1)	3.0	7.0	3.8
3. Associate professionals (nursery and kindergarten)	35 883	1568 (4.4)	30.4 (27.8--33.4)	1.6	13.8	7.4
3. Associate professionals (special education and care)	12 758	625 (4.9)	30.3 (27.5--33.3)	0.7	15.8	10.6
3. Associate professionals, not elsewhere classified	41 749	2076 (5.0)	28.5 (25.2--32.1)	7.5	12.7	13.6
3. Clerks without customer contacts	44 230	2127 (4.8)	30.5 (27.6--33.7)	2.9	12.4	8.4
3. Clerks, not elsewhere classified	13 661	735 (5.4)	29.8 (26.8--33.1)	3.1	11.7	12.3
3. Customer service clerks	17 350	866 (5.0)	30.4 (27.7--33.3)	2.9	9.7	6.4
3. Nurses and midwives	38 133	1677 (4.4)	30.3 (27.8--33.2)	1.8	9.2	4.1
3. Primary School teachers	30 583	1192 (3.9)	31.1 (28.6--34.0)	1.4	10.6	5.0
3. Public safety workers	2303	111 (4.8)	31.3 (28.8--34.1)	0.6	5.5	9.8
3. Sales and service workers, not elsewhere classified	1919	96 (5.0)	28.9 (25.3--33.0)	10.7	11.6	20.0
3. Travel attendants and related workers	1707	90 (5.3)	31.6 (28.4--35.0)	6.6	5.4	9.9
4. Assembly workers	2183	127 (5.8)	29.9 (26.6--33.5)	8.1	20.0	24.7
4. Childcare workers in private homes	19 206	855 (4.5)	28.3 (24.9--32.1)	6.3	16.4	15.0
4. Cleaners, janitors and kitchen helpers	17 693	895 (5.1)	29.4 (26.0--33.2)	24.9	14.0	19.0
4. Cooks and housekeepers	7894	412 (5.2)	28.9 (25.6--32.5)	8.7	18.8	15.5
4. Drivers and manual workers in construction or manufacturing industries	6015	320 (5.3)	29.0 (25.7--32.6)	8.2	15.7	21.5
4. Food and beverage production workers	4432	237 (5.4)	28.7 (25.5--32.0)	6.9	19.1	23.6
4. Hairdressers, beauticians, and related workers	7358	363 (4.9)	28.4 (25.7--31.7)	2.5	9.0	13.1
4. Home care workers	26 603	1496 (5.6)	27.5 (24.2--31.5)	10.1	21.0	26.7
4. Nursing home workers	20 377	1038 (5.1)	28.8 (25.8--32.4)	6.5	19.0	18.7
4. Painters	2277	98 (4.3)	27.7 (24.9--31.0)	0.2	13.0	25.0
4. Production and plant operators	3088	170 (5.5)	30.1 (26.8--33.5)	6.1	18.4	23.9
4. Shop assistants	29 683	1610 (5.4)	27.6 (24.5--31.1)	4.2	13.9	15.7
4. Skilled and unskilled agricultural, forest, and fishery workers	4672	231 (4.9)	28.8 (25.8--32.1)	2.7	12.0	11.5
4. Skilled workers, not elsewhere classified	3622	185 (5.1)	30.7 (27.5--34.0)	3.2	13.6	14.7
4. Unskilled workers NEC	1514	67 (4.4)	28.8 (25.5--32.5)	11.0	10.2	17.0

4.Unstated	49 154	2500 (5.1)	30.0 (26.6--33.5)	8.4	10.3	13.6
4.Waiting staff and bartenders	2038	96 (4.7)	27.6 (24.8--30.9)	4.8	6.6	21.3
NEC=Not elsewhere classified. Job group classification by social class is described in Supplementary, section S6.						

Table S2: Sociodemographic characteristics in industrial groups, ordered alphabetically. Number of pregnancies (N), preterm birth cases, median age, and percentage of observations in the industrial group belonging to the highest risk category for the mother's country of origin, BMI and smoking.

Industrial group	N	Preterm birth cases (%)	Age, median [IQR]	Origin from outside of Europe or unstated, %	BMI ≥30, %	Smoking during pregnancy, %	Low SES, %
Agriculture, forestry and fishing	3206	183 (5.7)	28.1 (25.4-31.2)	1.4	10.9	11.9	67.2
Building completion and finishing	3874	194 (5.0)	28.6 (25.3-32.1)	1.2	14.1	21.0	69.4
Civil engineering	792	33 (4.2)	30.8 (27.5-34.1)	1.6	11.0	9.0	15.8
Cleaning industry	14 108	705 (5.0)	29.3 (25.9-33.1)	25.9	13.5	18.4	89.6
Construction and demolition of buildings	1854	80 (4.3)	30.4 (27.1-33.7)	3.3	11.4	11.9	21.6
Culture and sports	8953	412 (4.6)	31.1 (27.8-34.4)	3.1	6.8	7.0	20.5
Daycare (all ages)	62 721	2834 (4.5)	30.0 (27.0-33.2)	3.7	14.2	9.8	30.9
Defense, security and justice activities	7821	345 (4.4)	31.0 (28.1-34.0)	1.4	9.4	9.7	33.3
Energy, mining and quarrying	1683	58 (3.5)	31.8 (29.0-34.5)	2.5	9.5	4.6	11.0
Finance and insurance activities	21 232	999 (4.7)	30.9 (28.2-34.0)	3.1	7.6	4.3	47.2
Hairdressing and other personal service activities	8969	421 (4.7)	28.5 (25.7-31.9)	4.0	8.8	12.9	85.6
Health practitioners and veterinarians	23 022	1015 (4.4)	30.9 (28.1-34.0)	4.2	7.4	5.1	6.3
Hospitals	64 354	2845 (4.4)	30.6 (28.1-33.5)	3.2	8.9	4.5	12.4
Hotel and other accommodation facilities	5310	247 (4.7)	29.1 (26.0-32.6)	9.9	11.3	15.8	65.6
IT and telecommunications	9798	490 (5.0)	31.7 (29.0-34.8)	6.3	8.9	6.7	15.7
Manufacture and repair of vehicles	1236	61 (4.9)	30.0 (27.1-33.4)	4.8	16.7	16.3	41.3
Manufacture of chemicals and pharmaceuticals	8712	349 (4.0)	32.4 (29.8-35.3)	5.1	6.9	4.1	9.6
Manufacture of electronic components/equipment	4734	250 (5.3)	31.3 (28.4-34.6)	6.6	12.1	12.6	39.2
Manufacture of Food products	6619	352 (5.3)	30.0 (26.5-33.4)	4.3	13.8	15.3	51.6
Manufacture of meat products	2809	147 (5.2)	29.4 (26.2-32.7)	13.7	17.3	20.5	78.4
Manufacture of metals and machinery	7785	418 (5.4)	31.1 (28.1-34.3)	4.3	14.3	13.2	32.6
Manufacture of plastic, glass and concrete	4004	192 (4.8)	31.4 (28.2-34.5)	4.1	13.3	13.1	34.6
Non-university education and training	57 822	2374 (4.1)	31.4 (28.7-34.4)	2.5	10.4	5.9	7.2
Other private offices and associations	60 364	2792 (4.6)	31.1 (28.2-34.2)	4.0	8.0	7.0	13.0
Public administration	32 732	1420 (4.3)	31.3 (28.6-34.3)	3.5	10.2	6.0	3.0
Publishing, Broadcasting and motion pictures	9929	412 (4.2)	32.1 (29.4-35.1)	2.3	5.7	6.4	11.1
Religious institutions and funeral activities	2123	86 (4.1)	32.5 (29.2-35.6)	1.6	9.8	4.0	8.2
Repair and installation of machinery and equipment	563	23 (4.1)	31.1 (27.9-34.1)	6.2	13.9	14.0	27.4
Research and university education	15 419	604 (3.9)	31.7 (29.2-34.6)	6.3	5.3	2.7	2.3
Residential centers and home care workers	70 033	3645 (5.2)	28.9 (25.6-32.5)	6.3	18.2	19.1	66.2
Restaurants and bars	12 318	633 (5.1)	27.7 (24.3-31.5)	14.8	11.4	20.8	51.9

Retail trade	52 684	2759 (5.2)	28.1 (24.9-31.6)	4.5	13.0	14.5	57.4
Textile and paper products	3905	191 (4.9)	29.6 (26.4-33.1)	2.2	10.9	11.2	28.3
Transport of goods	7654	399 (5.2)	30.5 (27.3-33.8)	8.2	12.7	13.5	48.4
Transport of passengers	3418	159 (4.7)	31.4 (28.2-34.9)	4.0	12.5	13.6	57.2
Unstated	10 524	479 (4.6)	29.6 (26.2-33.2)	9.0	11.1	15.1	24.5
Water supply, sewage and waste management	697	40 (5.7)	30.8 (27.4-34.2)	2.3	15.1	12.8	29.1
Wholesale trade	27 991	1383 (4.9)	31.3 (28.4-34.3)	3.6	8.9	8.0	20.7
Wood products and furniture	2577	138 (5.4)	30.2 (27.3-33.6)	1.7	13.3	13.3	47.3

S4: Results from the minimally adjusted analyses (Table S3-

Table S3: Minimally adjusted model, excluding adjustment for sociodemographic characteristics, with occupational groups ordered by social class (1. to 4.) and alphabetically within social class. Number of births (N), observed number of cases of preterm birth, and adjusted risk ratios (RR) with 99% confidence interval (CI).
N=644 349.

Occupational group and social class	N	Observed cases	Compared with the average risk	
			RR ^a	99% CI
1. Medical doctors, dentists, and veterinarians	12 537	435	0.76	0.68-0.85
1. Professionals (physics, mathematics, engineering, architects)	15 350	613	0.83	0.76-0.92
1. Professionals at academic level, not elsewhere classified	54 556	2229	0.85	0.81-0.90
1. Senior officials and corporate managers	6035	285	0.98	0.84-1.14
2. Associate professionals (business and administration)	51 144	2325	0.95	0.90-1.00
2. Associate professionals (physics and engineering)	10 065	433	0.91	0.81-1.02
2. Managers (<10 employees)	2247	112	1.06	0.83-1.37
2. Psychologists and social workers	10 062	444	0.96	0.85-1.08
2. Teachers in higher, secondary, vocational, and special education	15 615	576	0.79	0.71-0.87
3. Associate professionals (health)	18 653	852	0.99	0.90-1.09
3. Associate professionals (nursery and kindergarten)	35 883	1568	0.96	0.90-1.02
3. Associate professionals (special education and care)	12 758	625	1.03	0.92-1.14
3. Associate professionals, not elsewhere classified	41 749	2076	1.04	0.98-1.10
3. Clerks without customer contacts	44 230	2127	1.03	0.97-1.09
3. Clerks, not elsewhere classified	13 661	735	1.12	1.01-1.24
3. Customer service clerks	17 350	866	1.06	0.96-1.16
3. Nurses and midwives	38 133	1677	0.97	0.91-1.03
3. Primary School teachers	30 583	1192	0.86	0.80-0.93
3. Public safety workers	2303	111	0.99	0.77-1.28
3. Sales and service workers, not elsewhere classified	1919	96	1.03	0.79-1.33
3. Travel attendants and related workers	1707	90	1.06	0.79-1.40
4. Assembly workers	2183	127	1.28	0.98-1.65
4. Childcare workers in private homes	19 206	855	0.97	0.89-1.06
4. Cleaners, janitors and kitchen helpers	17 693	895	1.07	0.98-1.17
4. Cooks and housekeepers	7894	412	1.10	0.96-1.26
4. Drivers and manual workers in construction or manufacturing industries	6015	320	1.11	0.96-1.29
4. Food and beverage production workers	4432	237	1.14	0.95-1.36
4. Hairdressers, beauticians, and related workers	7358	363	1.03	0.89-1.19
4. Home care workers	26 603	1496	1.23	1.14-1.33
4. Nursing home workers	20 377	1038	1.12	1.02-1.22
4. Painters	2277	98	0.92	0.71-1.19
4. Production and plant operators	3088	170	1.17	0.95-1.46
4. Shop assistants	29 683	1610	1.10	1.03-1.18
4. Skilled and unskilled agricultural, forest, and fishery workers	4672	231	1.05	0.88-1.25
4. Skilled workers, not elsewhere classified	3622	185	1.07	0.88-1.30
4. Unskilled workers NEC	1514	67	0.88	0.66-1.18
4. Unstated	49 154	2500	1.05	1.00-1.11
4. Waiting staff and bartenders	2038	96	0.89	0.70-1.15

^a Adjusted for: maternal age, parity, calendar period of birth, and quarter of conception, and sex of the child.

NEC=Not elsewhere classified. Job group classification by social class is described in Supplementary, section S6.

S4)

Table S4: Minimally adjusted model, excluding adjustment for sociodemographic characteristics, with industrial groups ordered alphabetically. Number of births (N), observed number of cases of preterm birth, and adjusted risk ratios (RR) with 99% confidence interval (CI). N=644 349.

Industrial group	N	Observed cases	Compared with the average risk	
			RR ^a	99% CI
Agriculture, forestry and fishing	3206	183	1.18	0.96-1.45
Building completion and finishing	3874	194	1.07	0.88-1.30
Civil engineering	792	33	0.88	0.58-1.34
Cleaning industry	14 108	705	1.07	0.96-1.18
Construction and demolition of buildings	1854	80	0.92	0.70-1.22
Culture and sports	8953	412	0.90	0.80-1.02
Daycare (all ages)	62 721	2834	0.99	0.94-1.04
Defense, security and justice activities	7821	345	0.93	0.81-1.07
Energy, mining and quarrying	1683	58	0.74	0.55-1.00
Finance and insurance activities	21 232	999	1.00	0.91-1.09
Hairdressing and other personal service activities	8969	421	0.96	0.84-1.09
Health practitioners and veterinarians	23 022	1015	0.97	0.90-1.05
Hospitals	64 354	2845	0.99	0.94-1.04
Hotel and other accommodation facilities	5310	247	0.90	0.77-1.06
IT and telecommunications	9798	490	1.04	0.92-1.17
Manufacture and repair of vehicles	1236	61	1.06	0.75-1.49
Manufacture of chemicals and pharmaceuticals	8712	349	0.86	0.75-0.98
Manufacture of electronic components/equipment	4734	250	1.13	0.95-1.35
Manufacture of Food products	6619	352	1.11	0.96-1.28
Manufacture of meat products	2809	147	1.13	0.90-1.43
Manufacture of metals and machinery	7785	418	1.15	1.00-1.32
Manufacture of plastic, glass and concrete	4004	192	1.02	0.84-1.23
Non-university education and training	57 822	2374	0.92	0.87-0.97
Other private offices and associations	60 364	2792	0.95	0.90-0.99
Public administration	32 732	1420	0.95	0.89-1.02
Publishing, Broadcasting and motion pictures	9929	412	0.83	0.74-0.94
Religious institutions and funeral activities	2123	86	0.86	0.66-1.12
Repair and installation of machinery and equipment	563	23	0.86	0.52-1.41
Research and university education	15 419	604	0.83	0.75-0.91
Residential centers and home care workers	70 033	3645	1.13	1.08-1.18
Restaurants and bars	12 318	633	0.98	0.88-1.08
Retail trade	52 684	2759	1.05	1.00-1.11
Textile and paper products	3905	191	0.99	0.82-1.20
Transport of goods	7654	399	1.06	0.93-1.22
Transport of passengers	3418	159	0.94	0.77-1.14
Unstated	10 524	479	0.90	0.80-1.00
Water supply, sewage and waste management	697	40	1.23	0.78-1.94
Wholesale trade	27 991	1383	1.03	0.96-1.11
Wood products and furniture	2577	138	1.15	0.90-1.46
^a Adjusted for: maternal age, parity, calendar period of birth, and quarter of conception, and sex of the child.				

S5: Sensitivity analyses

Subdivided outcome of preterm birth into three categories (Table S5-S6)

Table S5: Number of births (N), observed number of very preterm and moderately preterm birth cases, with occupational groups ordered by social class (1. to 4.) and alphabetically within social class. Risk rates (RR) and 99% confidence interval (CI) for very preterm and moderately preterm, compared with the average population risk.

Occupational group and social class	N total	Observed very preterm cases	Observed moderately preterm cases	RR ^a for very preterm	99% CI	RR ^a for moderately preterm	99% CI
1. Medical doctors, dentists, and veterinarians	12 537	63	372	0.62	0.44-0.87	0.83	0.72-0.95
1. Professionals (physics, mathematics, engineering, architects)	15 350	99	514	0.72	0.55-0.93	0.88	0.79-0.99
1. Professionals at academic level, not elsewhere classified	54 556	392	1837	0.81	0.71-0.93	0.89	0.83-0.94
1. Senior officials and corporate managers	6035	63	222	1.13	0.81-1.56	0.95	0.80-1.13
2. Associate professionals (business and administration)	51 144	443	1882	0.97	0.86-1.10	0.96	0.90-1.02
2. Associate professionals (physics and engineering)	10 065	105	328	1.16	0.90-1.50	0.86	0.74-0.99
2. Managers (<10 employees)	2247	19	93	0.95	0.52-1.72	1.07	0.82-1.39
2. Psychologists and social workers	10 062	84	360	0.99	0.75-1.33	0.96	0.84-1.11
2. Teachers in higher, secondary, vocational, and special education	15 615	110	466	0.81	0.63-1.05	0.80	0.71-0.91
3. Associate professionals (health)	18 653	159	693	1.05	0.85-1.29	1.00	0.91-1.11
3. Associate professionals (nursery and kindergarten)	35 883	308	1260	1.01	0.87-1.18	0.94	0.87-1.01
3. Associate professionals (special education and care)	12 758	114	511	1.00	0.78-1.28	1.02	0.91-1.14
3. Associate professionals, not elsewhere classified	41 749	391	1685	1.09	0.95-1.24	1.02	0.96-1.09
3. Clerks without customer contacts	44 230	408	1719	1.06	0.93-1.20	1.02	0.95-1.08
3. Clerks, not elsewhere classified	13 661	137	598	1.13	0.90-1.40	1.11	1.00-1.23
3. Customer service clerks	17 350	156	710	1.04	0.84-1.28	1.07	0.97-1.18
3. Nurses and midwives	38 133	294	1383	0.96	0.82-1.12	0.99	0.92-1.06
3. Primary School teachers	30 583	211	981	0.84	0.70-1.01	0.88	0.80-0.96
3. Public safety workers	2303	19	92	0.91	0.49-1.68	1.01	0.77-1.34
3. Sales and service workers, not elsewhere classified	1919	16	80	0.90	0.47-1.71	1.02	0.77-1.36
3. Travel attendants and related workers	1707	15	75	0.91	0.46-1.80	1.09	0.81-1.47
4. Assembly workers	2183	21	106	1.10	0.62-1.94	1.26	0.98-1.62
4. Childcare workers in private homes	19 206	133	722	0.82	0.65-1.03	0.98	0.89-1.08
4. Cleaners, janitors and kitchen helpers	17 693	177	718	1.08	0.89-1.31	1.05	0.96-1.16
4. Cooks and housekeepers	7894	71	341	1.01	0.74-1.37	1.09	0.95-1.25
4. Drivers and manual workers in construction or manufacturing industries	6015	65	255	1.18	0.86-1.63	1.06	0.91-1.25
4. Food and beverage production workers	4432	41	196	1.03	0.68-1.54	1.11	0.92-1.34
4. Hairdressers, beauticians, and related workers	7358	63	300	0.99	0.71-1.39	1.03	0.88-1.20
4. Home care workers	26 603	288	1208	1.24	1.07-1.45	1.15	1.07-1.24
4. Nursing home workers	20 377	185	853	1.06	0.87-1.28	1.09	0.99-1.19
4. Painters	2277	17	81	0.86	0.45-1.62	0.88	0.66-1.19
4. Production and plant operators	3088	39	131	1.39	0.92-2.11	1.08	0.86-1.36
4. Shop assistants	29 683	288	1322	1.08	0.92-1.26	1.08	1.01-1.16
4. Skilled and unskilled agricultural, forest, and fishery workers	4672	41	190	1.04	0.69-1.57	1.09	0.90-1.31
4. Skilled workers, not elsewhere classified	3622	36	149	1.10	0.72-1.70	1.05	0.85-1.29
4. Unskilled workers NEC	1514	11	56	0.73	0.34-1.60	0.89	0.63-1.25

4.Unstated	49 154	477	2023	1.07	0.95-1.20	1.04	0.99-1.11
4.Waiting staff and bartenders	2038	14	82	0.69	0.35-1.39	0.92	0.69-1.21
^a Adjusted for: maternal age, BMI, smoking, parity, marital status, country of origin, calendar period of birth, and quarter of conception, and sex of the child. NEC=Not elsewhere classified. Job group classification by social class is described in Supplementary, section S6.							

Table S6: Number of births (N), observed number of very preterm and moderately preterm birth cases on maternal industrial group, ordered alphabetically. Risk rates (RR1) and 99% confidence interval (CI) for very preterm and moderately preterm, respectively, compared with the average population risk.

Industrial group	N total	Observed very preterm cases	Observed moderately preterm cases	RR ^a for very preterm	99% CI	RR ^a for moderately preterm	99% CI
Agriculture, forestry and fishing	3206	26	157	0.94	0.56-1.57	1.25	1.01-1.53
Building completion and finishing	3874	30	164	0.85	0.53-1.38	1.03	0.84-1.26
Civil engineering	792	7	26	1.01	0.38-2.68	0.86	0.52-1.42
Cleaning industry	14 108	152	553	1.10	0.89-1.36	0.98	0.88-1.09
Construction and demolition of buildings	1854	14	66	0.87	0.43-1.75	0.94	0.68-1.29
Culture and sports	8953	77	335	0.92	0.69-1.24	0.93	0.81-1.07
Daycare (all ages)	62 721	511	2323	0.94	0.84-1.06	0.97	0.92-1.02
Defense, security and justice activities	7821	73	272	1.02	0.75-1.38	0.88	0.75-1.03
Energy, mining and quarrying	1683	13	45	0.90	0.44-1.87	0.72	0.49-1.07
Finance and insurance activities	21 232	178	821	0.92	0.76-1.13	0.98	0.89-1.08
Hairdressing and other personal service activities	8969	72	349	0.84	0.62-1.15	0.91	0.79-1.05
Health practitioners and veterinarians	23 022	175	840	1.00	0.82-1.22	1.04	0.95-1.14
Hospitals	64 354	490	2355	1.00	0.89-1.13	1.04	0.99-1.10
Hotel and other accommodation facilities	5310	41	206	0.77	0.51-1.15	0.90	0.75-1.08
IT and telecommunications	9798	87	403	0.99	0.75-1.31	1.07	0.94-1.22
Manufacture and repair of vehicles	1236	13	48	1.16	0.57-2.39	0.99	0.68-1.44
Manufacture of chemicals and pharmaceuticals	8712	62	287	0.84	0.60-1.17	0.91	0.78-1.06
Manufacture of electronic components/equipment	4734	42	208	0.99	0.66-1.49	1.14	0.95-1.36
Manufacture of Food products	6619	62	290	1.02	0.73-1.42	1.09	0.93-1.27
Manufacture of meat products	2809	26	121	1.00	0.60-1.68	1.09	0.86-1.37
Manufacture of metals and machinery	7785	86	332	1.24	0.94-1.64	1.11	0.96-1.28
Manufacture of plastic, glass and concrete	4004	46	146	1.26	0.86-1.86	0.95	0.76-1.17
Non-university education and training	57 822	431	1943	0.96	0.84-1.09	0.96	0.90-1.02
Other private offices and associations	60 364	510	2282	0.95	0.84-1.06	0.98	0.92-1.03
Public administration	32 732	263	1157	1.00	0.85-1.17	0.99	0.91-1.07
Publishing, Broadcasting and motion pictures	9929	79	333	0.84	0.63-1.13	0.85	0.73-0.98
Religious institutions and funeral activities	2123	17	69	0.96	0.51-1.81	0.89	0.65-1.23

Repair and installation of machinery and equipment	563	5	18	0.97	0.31-3.11	0.82	0.45-1.51
Research and university education	15 419	106	498	0.84	0.65-1.09	0.90	0.80-1.01
Residential centers and home care workers	70 033	698	2947	1.10	1.00-1.21	1.05	1.00-1.10
Restaurants and bars	12 318	105	528	0.86	0.66-1.10	0.98	0.88-1.10
Retail trade	52 684	497	2262	1.00	0.89-1.12	1.02	0.96-1.07
Textile and paper products	3905	32	159	0.93	0.59-1.47	1.05	0.86-1.29
Transport of goods	7654	102	297	1.36	1.05-1.76	0.95	0.82-1.11
Transport of passengers	3418	31	128	0.90	0.56-1.43	0.89	0.71-1.12
Unstated	10 524	98	381	0.99	0.77-1.29	0.90	0.79-1.03
Water supply, sewage and waste management	697	9	31	1.45	0.61-3.44	1.15	0.73-1.83
Wholesale trade	27 991	282	1101	1.11	0.95-1.30	1.01	0.93-1.09
Wood products and furniture	2577	25	113	1.12	0.66-1.89	1.13	0.88-1.44
^a Adjusted for: maternal age, BMI, smoking, parity, marital status, country of origin, calendar period of birth, quarter of conception, and socioeconomic status, and sex of the child.							

Restriction to firstborns (Table S7-S8)

Table S7. Analyses restricted to first-born children in the study period, with occupational groups, ordered by social class (1. to 4.) and alphabetically within social class. Number of births (N), observed number of cases of preterm birth, and adjusted risk ratios (RR) with 99% confidence interval (CI). N=428 639.				
Occupational group and social class	N	Observed cases	Compared with the average risk	
			RR ^a	99% CI
1.Medical doctors, dentists, and veterinarians	7144	305	0.81	(0.69-0.93)
1.Professionals (physics, mathematics, engineering, architects)	9441	439	0.84	(0.74-0.94)
1.Professionals at academic level, not elsewhere classified	34 589	1664	0.87	(0.82-0.93)
1.Senior officials and corporate managers	3713	200	0.95	(0.79-1.14)
2.Associate professionals (business and administration)	32 882	1754	0.96	(0.90-1.02)
2.Associate professionals (physics and engineering)	6585	353	0.98	(0.85-1.12)
2.Managers (<10 employees)	1307	77	1.01	(0.74-1.35)
2.Psychologists and social workers	5834	314	0.97	(0.83-1.12)
2.Teachers in higher, secondary, vocational, and special education	9378	411	0.80	(0.70-0.91)
3. Associate professionals (health)	11 559	642	1.03	(0.93-1.14)
3.Associate professionals (nursery and kindergarten)	22 086	1194	0.99	(0.92-1.07)
3.Associate professionals (special education and care)	8383	504	1.06	(0.95-1.19)
3.Associate professionals, not elsewhere classified	31 289	1693	1.01	(0.95-1.07)
3.Clerks without customer contacts	28 451	1614	1.03	(0.96-1.10)
3.Clerks, not elsewhere classified	10 450	617	1.11	(1.00-1.23)
3.Customer service clerks	11 141	679	1.10	(0.99-1.21)
3.Nurses and midwives	22 960	1220	0.99	(0.92-1.07)
3.Primary School teachers	18 179	875	0.90	(0.82-0.98)
3.Public safety workers	1469	88	1.05	(0.78-1.37)
3.Sales and service workers, not elsewhere classified	1460	79	0.98	(0.72-1.31)
3.Travel attendants and related workers	1240	75	1.08	(0.79-1.45)
4.Assembly workers	1584	99	1.19	(0.90-1.53)
4.Childcare workers in private homes	13 276	664	0.94	(0.85-1.04)
4.Cleaners, janitors and kitchen helpers	13 860	742	1.05	(0.95-1.15)
4.Cooks and housekeepers	5523	318	1.04	(0.90-1.20)
4.Drivers and manual workers in construction or manufacturing industries	4422	267	1.11	(0.94-1.30)
4.Food and beverage production workers	3210	186	1.07	(0.88-1.29)
4.Hairdressers, beauticians, and related workers	5020	293	1.05	(0.89-1.21)
4.Home care workers	17947	1155	1.17	(1.09-1.27)
4.Nursing home workers	13 102	786	1.09	(1.00-1.20)
4.Painters	1594	82	0.92	(0.68-1.22)
4.Production and plant operators	2196	131	1.10	(0.87-1.37)
4.Shop assistants	21 488	1306	1.07	(1.00-1.15)
4.Skilled and unskilled agricultural, forest, and fishery workers	3168	181	1.10	(0.90-1.33)
4.Skilled workers, not elsewhere classified	2584	153	1.09	(0.87-1.33)
4.Unskilled workers NEC	1240	59	0.88	(0.61-1.22)
4.Unstated	37 222	2052	1.04	(0.98-1.10)
4.Waiting staff and bartenders	1663	86	0.90	(0.67-1.18)
^a Adjusted for: maternal age, BMI, smoking, parity, marital status, country of origin, calendar period of birth, and quarter of conception, and sex of the child. NEC=Not elsewhere classified. Job group classification by social class is described in Supplementary, section S6.				

Table S8. Analyses restricted to only first-born children in study period, with industrial groups ordered alphabetically. Number of births (N), observed number of cases of preterm birth, and adjusted risk ratios (RR) with 99% confidence interval (CI). N=428 639.

Industrial group	N	Observed cases	Compared with the average risk	
			RR ^a	99% CI
Agriculture, forestry and fishing	2422	154	1.22	(0.98-1.50)
Building completion and finishing	2665	162	1.06	(0.86-1.29)
Civil engineering	577	26	0.86	(0.49-1.39)
Cleaning industry	10 951	587	1.01	(0.90-1.12)
Construction and demolition of buildings	1167	62	0.98	(0.69-1.34)
Culture and sports	6473	333	0.92	(0.79-1.06)
Daycare (all ages)	40 572	2189	0.98	(0.93-1.04)
Defense, security and justice activities	5045	258	0.89	(0.76-1.05)
Energy, mining and quarrying	1029	42	0.76	(0.49-1.11)
Finance and insurance activities	12 973	764	1.02	(0.92-1.12)
Hairdressing and other personal service activities	6200	342	0.93	(0.81-1.07)
Health practitioners and veterinarians	14 108	757	1.06	(0.97-1.17)
Hospitals	39 319	2098	1.05	(0.99-1.11)
Hotel and other accommodation facilities	4045	203	0.87	(0.72-1.04)
IT and telecommunications	6454	359	1.01	(0.88-1.16)
Manufacture and repair of vehicles	826	50	1.09	(0.73-1.55)
Manufacture of chemicals and pharmaceuticals	5492	261	0.90	(0.77-1.06)
Manufacture of electronic components/equipment	3241	201	1.15	(0.95-1.37)
Manufacture of Food products	4651	292	1.12	(0.96-1.30)
Manufacture of meat products	2052	115	1.04	(0.81-1.32)
Manufacture of metals and machinery	5178	316	1.12	(0.96-1.29)
Manufacture of plastic, glass and concrete	2750	150	1.01	(0.81-1.24)
Non-university education and training	35 572	1768	0.98	(0.92-1.04)
Other private offices and associations	41 222	2164	0.96	(0.91-1.01)
Public administration	20 065	1037	0.99	(0.91-1.07)
Publishing, Broadcasting and motion pictures	7011	321	0.82	(0.71-0.95)
Religious institutions and funeral activities	1365	57	0.81	(0.56-1.13)
Repair and installation of machinery and equipment	391	15	0.70	(0.32-1.32)
Research and university education	10 060	466	0.90	(0.79-1.01)
Residential centers and home care workers	46 700	2830	1.07	(1.02-1.12)
Restaurants and bars	9904	541	0.96	(0.85-1.07)
Retail trade	38 519	2247	1.00	(0.95-1.06)
Textile and paper products	2702	143	0.99	(0.79-1.23)
Transport of goods	5367	324	1.06	(0.91-1.22)
Transport of passengers	2469	128	0.89	(0.70-1.12)
Unstated	8443	404	0.91	(0.80-1.04)
Water supply, sewage and waste management	466	31	1.21	(0.72-1.89)
Wholesale trade	18 418	1046	1.02	(0.94-1.10)
Wood products and furniture	1775	114	1.19	(0.92-1.51)

^a Adjusted for: maternal age, BMI, smoking, parity, marital status, country of origin, calendar period of birth, quarter of conception, and socioeconomic status, and sex of the child.

Further adjustment for household income (Table S9-S10)

Table S9: Main model with further adjustment for household income, with occupational groups ordered by social class (1. to 4.) and alphabetically within social class. Number of births (N), observed number of cases of preterm birth, and adjusted risk ratios (RR) with 99% confidence interval (CI). N=644 349.

Occupational group and social class	N	Observed cases	Compared with the average risk	
			RR ^a	99% CI
1. Medical doctors, dentists, and veterinarians	12 537	435	0.81	0.71-0.92
1. Professionals (physics, mathematics, engineering, architects)	15 350	613	0.87	0.78-0.97
1. Professionals at academic level, not elsewhere classified	54 556	2229	0.88	0.84-0.93
1. Senior officials and corporate managers	6035	285	1.00	0.86-1.17
2. Associate professionals (business and administration)	51 144	2325	0.97	0.92-1.02
2. Associate professionals (physics and engineering)	10 065	433	0.92	0.81-1.04
2. Managers (<10 employees)	2247	112	1.05	0.82-1.34
2. Psychologists and social workers	10 062	444	0.97	0.86-1.10
2. Teachers in higher, secondary, vocational, and special education	15 615	576	0.81	0.73-0.91
3. Associate professionals (health)	18 653	852	1.01	0.92-1.11
3. Associate professionals (nursery and kindergarten)	35 883	1568	0.95	0.88-1.01
3. Associate professionals (special education and care)	12 758	625	1.01	0.91-1.12
3. Associate professionals, not elsewhere classified	41 749	2076	1.04	0.98-1.10
3. Clerks without customer contacts	44 230	2127	1.02	0.97-1.08
3. Clerks, not elsewhere classified	13 661	735	1.11	1.01-1.22
3. Customer service clerks	17 350	866	1.07	0.97-1.17
3. Nurses and midwives	38 133	1677	0.98	0.92-1.05
3. Primary School teachers	30 583	1192	0.87	0.80-0.94
3. Public safety workers	2303	111	0.99	0.77-1.28
3. Sales and service workers, not elsewhere classified	1919	96	1.00	0.77-1.30
3. Travel attendants and related workers	1707	90	1.06	0.80-1.39
4. Assembly workers	2183	127	1.22	0.97-1.53
4. Childcare workers in private homes	19 206	855	0.95	0.87-1.04
4. Cleaners, janitors and kitchen helpers	17 693	895	1.05	0.97-1.15
4. Cooks and housekeepers	7894	412	1.07	0.94-1.22
4. Drivers and manual workers in construction or manufacturing industries	6015	320	1.08	0.94-1.25
4. Food and beverage production workers	4432	237	1.09	0.92-1.29
4. Hairdressers, beauticians, and related workers	7358	363	1.02	0.89-1.17
4. Home care workers	26 603	1496	1.16	1.09-1.25
4. Nursing home workers	20 377	1038	1.08	0.99-1.17
4. Painters	2277	98	0.88	0.67-1.15
4. Production and plant operators	3088	170	1.13	0.93-1.38
4. Shop assistants	29 683	1610	1.08	1.01-1.15
4. Skilled and unskilled agricultural, forest, and fishery workers	4672	231	1.08	0.91-1.28
4. Skilled workers, not elsewhere classified	3622	185	1.05	0.87-1.27
4. Unskilled workers NEC	1514	67	0.87	0.64-1.18
4. Unstated	49 154	2500	1.05	1.00-1.11
4. Waiting staff and bartenders	2038	96	0.88	0.68-1.14

^a Adjusted for: maternal age, BMI, smoking, parity, marital status, country of origin, calendar period of birth, and quarter of conception, and sex of the child. NEC=Not elsewhere classified. Job group classification by social class is described in Supplementary, section S6.

Table S10: Main model with further adjustment for household income, with industrial groups ordered alphabetically. Number of births (N), observed number of cases of preterm birth, and adjusted risk ratios (RR) with 99% confidence interval (CI). N=644 349.

Industrial group	N	Observed cases	Compared with the average risk	
			RR ^a	99% CI
Agriculture, forestry and fishing	3206	183	1.19	0.98-1.44
Building completion and finishing	3874	194	0.99	0.82-1.20
Civil engineering	792	33	0.89	0.57-1.39
Cleaning industry	14 108	705	1.01	0.91-1.11
Construction and demolition of buildings	1854	80	0.93	0.69-1.24
Culture and sports	8953	412	0.93	0.82-1.06
Daycare (all ages)	62 721	2834	0.96	0.92-1.01
Defense, security and justice activities	7821	345	0.91	0.79-1.05
Energy, mining and quarrying	1683	58	0.77	0.54-1.09
Finance and insurance activities	21 232	999	0.98	0.90-1.07
Hairdressing and other personal service activities	8969	421	0.90	0.79-1.03
Health practitioners and veterinarians	23 022	1015	1.04	0.95-1.13
Hospitals	64 354	2845	1.04	0.98-1.09
Hotel and other accommodation facilities	5310	247	0.88	0.75-1.04
IT and telecommunications	9798	490	1.07	0.95-1.20
Manufacture and repair of vehicles	1236	61	1.02	0.73-1.42
Manufacture of chemicals and pharmaceuticals	8712	349	0.91	0.79-1.05
Manufacture of electronic components/equipment	4734	250	1.11	0.94-1.31
Manufacture of Food products	6619	352	1.07	0.94-1.24
Manufacture of meat products	2809	147	1.07	0.86-1.32
Manufacture of metals and machinery	7785	418	1.13	1.00-1.29
Manufacture of plastic, glass and concrete	4004	192	1.01	0.83-1.22
Non-university education and training	57 822	2374	0.96	0.91-1.01
Other private offices and associations	60 364	2792	0.98	0.93-1.03
Public administration	32 732	1420	0.99	0.92-1.06
Publishing, Broadcasting and motion pictures	9929	412	0.85	0.75-0.97
Religious institutions and funeral activities	2123	86	0.91	0.68-1.21
Repair and installation of machinery and equipment	563	23	0.85	0.50-1.46
Research and university education	15 419	604	0.89	0.80-0.99
Residential centers and home care workers	70 033	3645	1.05	1.01-1.10
Restaurants and bars	12 318	633	0.97	0.87-1.07
Retail trade	52 684	2759	1.01	0.97-1.07
Textile and paper products	3905	191	1.03	0.86-1.25
Transport of goods	7654	399	1.03	0.91-1.18
Transport of passengers	3418	159	0.90	0.73-1.11
Unstated	10 524	479	0.93	0.82-1.04
Water supply, sewage and waste management	697	40	1.21	0.81-1.81
Wholesale trade	27 991	1383	1.03	0.96-1.11
Wood products and furniture	2577	138	1.12	0.90-1.40

^a Adjusted for: maternal age, BMI, smoking, parity, marital status, country of origin, calendar period of birth, quarter of conception, and socioeconomic status, and sex of the child.

Analyses stratified by time (Table S11-S14)

Table S11: Analyses including births from April 1 st 2004 to December 31 st 2011, with occupational groups ordered by social class (1. to 4.) and alphabetically within social class. Number of births (N), observed number of cases of preterm birth, and adjusted risk ratios (RR) with 99% confidence interval (CI). N=347 153.				
Occupational group and social class	N	Observed cases	Compared with the average risk	
			RR ^a	99% CI
1.Medical doctors, dentists, and veterinarians	5603	204	0.81	0.68-0.98
1.Professionals (physics, mathematics, engineering, architects)	6733	278	0.86	0.74-1.01
1.Professionals at academic level, not elsewhere classified	27 701	1138	0.87	0.80-0.94
1.Senior officials and corporate managers	3302	146	0.90	0.73-1.12
2.Associate professionals (business and administration)	28 295	1346	0.99	0.92-1.06
2.Associate professionals (physics and engineering)	5733	266	0.97	0.83-1.14
2.Managers (<10 employees)	688	33	0.98	0.63-1.53
2.Psychologists and social workers	2988	114	0.82	0.65-1.05
2.Teachers in higher, secondary, vocational, and special education	5517	213	0.83	0.70-1.00
3.Associate professionals (health)	9755	456	1.01	0.90-1.15
3.Associate professionals (nursery and kindergarten)	19 727	888	0.96	0.88-1.05
3.Associate professionals (special education and care)	6902	364	1.07	0.94-1.23
3.Associate professionals, not elsewhere classified	23 294	1157	1.01	0.94-1.09
3.Clerks without customer contacts	22 755	1087	0.99	0.92-1.07
3.Clerks, not elsewhere classified	10 873	581	1.09	0.98-1.21
3.Customer service clerks	10 177	508	1.04	0.93-1.17
3.Nurses and midwives	19 266	835	0.96	0.87-1.05
3.Primary School teachers	16 749	660	0.86	0.78-0.96
3.Public safety workers	1136	61	1.08	0.77-1.51
3.Sales and service workers, not elsewhere classified	1201	55	0.89	0.63-1.25
3.Travel attendants and related workers	1082	52	0.96	0.67-1.38
4.Assembly workers	1773	102	1.20	0.93-1.55
4.Childcare workers in private homes	11 039	513	0.99	0.89-1.11
4.Cleaners, janitors and kitchen helpers	10 456	555	1.07	0.96-1.20
4.Cooks and housekeepers	3997	214	1.08	0.91-1.29
4.Drivers and manual workers in construction or manufacturing industries	3430	196	1.13	0.95-1.36
4.Food and beverage production workers	2857	145	1.02	0.82-1.26
4.Hairdressers, beauticians, and related workers	3845	199	1.05	0.87-1.26
4.Home care workers	13 495	766	1.15	1.05-1.26
4.Nursing home workers	10 655	543	1.06	0.95-1.18
4.Painters	1254	45	0.73	0.49-1.08
4.Production and plant operators	2184	119	1.10	0.87-1.39
4.Shop assistants	14 688	797	1.06	0.97-1.16
4.Skilled and unskilled agricultural, forest, and fishery workers	2388	123	1.10	0.87-1.38
4.Skilled workers, not elsewhere classified	2373	119	1.04	0.82-1.32
4.Unskilled workers NEC	996	47	0.90	0.62-1.30
4.Unstated	31 029	1651	1.07	1.01-1.14
4.Waiting staff and bartenders	1217	61	0.92	0.66-1.27
^a Adjusted for: maternal age, BMI, smoking, parity, marital status, country of origin, calendar period of birth, and quarter of conception, and sex of the child. NEC=Not elsewhere classified. Job group classification by social class is described in Supplementary, section S6.				

Table S12: Analyses including births from January 1st 2012 to December 31st 2018, with occupational groups ordered by social class (1. to 4.) and alphabetically within social class. Number of births (N), observed number of cases of preterm birth, and adjusted risk ratios (RR) with 99% CI. N=297 196.

Occupational group and social class	N	Observed cases	Compared with the average risk	
			RR ^a	99% CI
1. Medical doctors, dentists, and veterinarians	6934	231	0.78	0.65-0.93
1. Professionals (physics, mathematics, engineering, architects)	8617	335	0.85	0.74-0.99
1. Professionals at academic level, not elsewhere classified	26 855	1091	0.89	0.82-0.96
1. Senior officials and corporate managers	2733	139	1.10	0.89-1.37
2. Associate professionals (business and administration)	22 849	979	0.93	0.86-1.01
2. Associate professionals (physics and engineering)	4332	167	0.84	0.69-1.03
2. Managers (<10 employees)	1559	79	1.08	0.81-1.45
2. Psychologists and social workers	7074	330	1.04	0.90-1.20
2. Teachers in higher, secondary, vocational, and special education	10 098	363	0.80	0.70-0.92
3. Associate professionals (health)	8898	396	1.01	0.89-1.16
3. Associate professionals (nursery and kindergarten)	16 156	680	0.95	0.86-1.05
3. Associate professionals (special education and care)	5856	261	0.95	0.80-1.11
3. Associate professionals, not elsewhere classified	18 455	919	1.07	0.98-1.16
3. Clerks without customer contacts	21 475	1040	1.06	0.98-1.15
3. Clerks, not elsewhere classified	2788	154	1.21	0.99-1.48
3. Customer service clerks	7173	358	1.10	0.96-1.26
3. Nurses and midwives	18 867	842	1.02	0.93-1.12
3. Primary School teachers	13 834	532	0.89	0.79-0.99
3. Public safety workers	1167	50	0.92	0.63-1.34
3. Sales and service workers, not elsewhere classified	718	41	1.22	0.82-1.82
3. Travel attendants and related workers	625	38	1.23	0.81-1.88
4. Assembly workers	410	25	1.34	0.80-2.23
4. Childcare workers in private homes	8167	342	0.91	0.79-1.05
4. Cleaners, janitors and kitchen helpers	7237	340	1.04	0.90-1.19
4. Cooks and housekeepers	3897	198	1.07	0.89-1.28
4. Drivers and manual workers in construction or manufacturing industries	2585	124	1.02	0.81-1.29
4. Food and beverage production workers	1575	92	1.24	0.95-1.62
4. Hairdressers, beauticians, and related workers	3513	164	1.00	0.82-1.23
4. Home care workers	13 108	730	1.20	1.09-1.32
4. Nursing home workers	9722	495	1.11	0.99-1.25
4. Painters	1023	53	1.08	0.75-1.54
4. Production and plant operators	904	51	1.24	0.86-1.77
4. Shop assistants	14 995	813	1.10	1.01-1.21
4. Skilled and unskilled agricultural, forest, and fishery workers	2284	108	1.06	0.83-1.36
4. Skilled workers, not elsewhere classified	1249	66	1.10	0.80-1.50
4. Unskilled workers NEC	518	20	0.80	0.45-1.42
4. Unstated	18 125	849	1.01	0.93-1.11
4. Waiting staff and bartenders	821	35	0.82	0.53-1.27

^a Adjusted for: maternal age, BMI, smoking, parity, marital status, country of origin, calendar period of birth, and quarter of conception, and sex of the child. NEC=Not elsewhere classified. Job group classification by social class is described in Supplementary, section S6.

Table S13: Analyses including births from April 1st 2004 to December 31st 2011, with industrial groups ordered alphabetically. Number of births (N), observed number of cases of preterm birth, and adjusted risk ratios (RR) with 99% confidence interval (CI). N=347 153.

Industrial group	N	Observed cases	Compared with the average risk	
			RR ^a	99% CI
Agriculture, forestry and fishing	1882	115	1.25	0.99-1.59
Building completion and finishing	2277	111	0.96	0.75-1.23
Civil engineering	490	18	0.77	0.42-1.41
Cleaning industry	7535	392	1.02	0.90-1.16
Construction and demolition of buildings	975	35	0.75	0.48-1.15
Culture and sports	4494	195	0.86	0.72-1.04
Daycare (all ages)	34 789	1628	0.98	0.92-1.05
Defense, security and justice activities	3915	180	0.93	0.76-1.13
Energy, mining and quarrying	886	26	0.64	0.38-1.06
Finance and insurance activities	11 356	545	0.96	0.86-1.08
Hairdressing and other personal service activities	4521	223	0.94	0.79-1.12
Health practitioners and veterinarians	10 877	493	1.05	0.93-1.18
Hospitals	32 818	1463	1.03	0.96-1.11
Hotel and other accommodation facilities	2846	123	0.80	0.63-1.01
IT and telecommunications	5034	272	1.12	0.95-1.30
Manufacture and repair of vehicles	766	39	1.03	0.68-1.56
Manufacture of chemicals and pharmaceuticals	4496	187	0.92	0.76-1.11
Manufacture of electronic components/equipment	3211	182	1.17	0.97-1.42
Manufacture of Food products	4270	225	1.05	0.89-1.25
Manufacture of meat products	1715	84	0.98	0.74-1.30
Manufacture of metals and machinery	4833	264	1.12	0.96-1.32
Manufacture of plastic, glass and concrete	2582	122	0.97	0.77-1.22
Non-university education and training	31 554	1342	0.98	0.91-1.05
Other private offices and associations	31 745	1515	0.98	0.92-1.05
Public administration	16 240	720	0.98	0.89-1.08
Publishing, Broadcasting and motion pictures	5807	249	0.87	0.74-1.02
Religious institutions and funeral activities	1187	48	0.89	0.61-1.29
Repair and installation of machinery and equipment	341	10	0.61	0.27-1.38
Research and university education	6978	274	0.87	0.74-1.02
Residential centers and home care workers	37 102	1974	1.06	1.00-1.12
Restaurants and bars	6147	316	0.93	0.81-1.08
Retail trade	28 947	1547	1.02	0.96-1.09
Textile and paper products	2180	111	1.04	0.82-1.33
Transport of goods	4664	247	1.01	0.86-1.20
Transport of passengers	2199	101	0.88	0.68-1.14
Unstated	7483	350	0.92	0.81-1.05
Water supply, sewage and waste management	417	28	1.37	0.85-2.21
Wholesale trade	15 777	782	1.01	0.92-1.10
Wood products and furniture	1817	101	1.15	0.89-1.49
^a Adjusted for: maternal age, BMI, smoking, parity, marital status, country of origin, calendar period of birth, quarter of conception, and socioeconomic status, and sex of the child.				

Table S14: Analyses including births from January 1st 2012 to December 31st 2018, with industrial groups ordered alphabetically. Number of births (N), observed number of cases of preterm birth, and adjusted risk ratios (RR) with 99% confidence interval (CI). N=297 196.

Industrial group	N	Observed cases	Compared with the average risk	
			RR ^a	99% CI
Agriculture, forestry and fishing	1324	68	1.10	0.80-1.50
Building completion and finishing	1597	83	1.04	0.79-1.39
Civil engineering	302	15	1.09	0.57-2.11
Cleaning industry	6573	313	0.99	0.86-1.14
Construction and demolition of buildings	879	45	1.15	0.79-1.69
Culture and sports	4459	217	1.01	0.84-1.20
Daycare (all ages)	27 932	1206	0.95	0.88-1.02
Defense, security and justice activities	3906	165	0.89	0.73-1.10
Energy, mining and quarrying	797	32	0.92	0.58-1.45
Finance and insurance activities	9876	454	0.99	0.87-1.12
Hairdressing and other personal service activities	4448	198	0.87	0.72-1.05
Health practitioners and veterinarians	12 145	522	1.03	0.92-1.16
Hospitals	31 536	1382	1.05	0.98-1.13
Hotel and other accommodation facilities	2464	124	0.98	0.78-1.23
IT and telecommunications	4764	218	1.01	0.85-1.20
Manufacture and repair of vehicles	470	22	1.01	0.58-1.75
Manufacture of chemicals and pharmaceuticals	4216	162	0.88	0.72-1.09
Manufacture of electronic components/equipment	1523	68	0.99	0.72-1.35
Manufacture of Food products	2349	127	1.11	0.88-1.40
Manufacture of meat products	1094	63	1.21	0.87-1.67
Manufacture of metals and machinery	2952	154	1.15	0.94-1.42
Manufacture of plastic, glass and concrete	1422	70	1.08	0.80-1.48
Non-university education and training	26 268	1032	0.94	0.87-1.02
Other private offices and associations	28 619	1277	0.97	0.90-1.05
Public administration	16 492	700	1.00	0.91-1.10
Publishing, Broadcasting and motion pictures	4122	163	0.83	0.68-1.02
Religious institutions and funeral activities	936	38	0.94	0.62-1.44
Repair and installation of machinery and equipment	222	13	1.25	0.62-2.55
Research and university education	8441	330	0.91	0.79-1.05
Residential centers and home care workers	32 931	1671	1.05	0.99-1.12
Restaurants and bars	6171	317	1.00	0.87-1.16
Retail trade	23 737	1212	1.00	0.93-1.08
Textile and paper products	1725	80	1.02	0.77-1.36
Transport of goods	2990	152	1.07	0.86-1.32
Transport of passengers	1219	58	0.94	0.67-1.33
Unstated	3041	129	0.94	0.75-1.17
Water supply, sewage and waste management	280	12	0.95	0.46-1.98
Wholesale trade	12 214	601	1.07	0.96-1.19
Wood products and furniture	760	37	1.06	0.69-1.62
^a Adjusted for: maternal age, BMI, smoking, parity, marital status, country of origin, calendar period of birth, quarter of conception, and socioeconomic status, and sex of the child.				

Analyses restricted to mothers with Denmark as country of origin (Table

Table S15: Analyses restricted to mothers with Denmark as country of origin, with occupational groups ordered by social class (1. to 4.) and alphabetically within social class. Number of births (N), observed number of cases of preterm birth, and adjusted risk ratios (RR) with 99% confidence interval (CI) . N=566 289.				
Occupational group and social class	N	Observed cases	Compared with the average risk	
			RR ^a	99% CI
1.Medical doctors, dentists, and veterinarians	10 598	358	0.77	0.66-0.89
1.Professionals (physics, mathematics, engineering, architects)	12 885	520	0.86	0.76-0.97
1.Professionals at academic level, not elsewhere classified	50 179	2079	0.88	0.83-0.93
1.Senior officials and corporate managers	5537	260	0.98	0.84-1.15
2.Associate professionals (business and administration)	47 234	2166	0.96	0.91-1.02
2.Associate professionals (nursery and kindergarten)	34 073	1500	0.96	0.90-1.03
2.Associate professionals (physics and engineering)	9054	400	0.94	0.82-1.07
2.Managers (<10 employees)	2020	100	1.03	0.79-1.33
2.Psychologists and social workers	9239	418	0.99	0.87-1.12
2.Teachers in higher, secondary, vocational, and special education	13 738	504	0.80	0.71-0.90
3.Associate professionals (health)	17 113	794	1.02	0.93-1.13
3.Associate professionals (special education and care)	12 384	611	1.02	0.92-1.14
3.Associate professionals, not elsewhere classified	35 206	1763	1.03	0.97-1.09
3.Clerks without customer contacts	40 324	1960	1.03	0.97-1.09
3.Clerks, not elsewhere classified	12 619	689	1.13	1.02-1.24
3.Customer service clerks	16 008	806	1.07	0.97-1.17
3.Nurses and midwives	36 148	1571	0.97	0.91-1.04
3.Primary School teachers	29 172	1135	0.87	0.80-0.94
3.Public safety workers	2245	111	1.02	0.79-1.32
3.Sales and service workers, not elsewhere classified	1573	84	1.04	0.79-1.37
3.Travel attendants and related workers	1434	73	1.01	0.74-1.37
4.Assembly workers	1808	110	1.27	0.99-1.63
4.Childcare workers in private homes	16 676	748	0.95	0.86-1.04
4.Cleaners, janitors and kitchen helpers	7848	432	1.10	0.97-1.24
4.Cooks and housekeepers	6566	342	1.07	0.93-1.23
4.Drivers and manual workers in construction,or manufacturing industries	4561	253	1.11	0.94-1.31
4.Food and beverage production workers	3649	194	1.08	0.89-1.30
4.Hairdressers, beauticians, and related workers	6869	347	1.04	0.90-1.20
4.Home care workers	21 924	1247	1.17	1.09-1.26
4.Nursing home workers	17 813	906	1.07	0.98-1.17
4.Painters	2243	98	0.89	0.68-1.17
4.Production and plant operators	2541	149	1.20	0.97-1.49
4.Shop assistants	26 753	1451	1.07	1.00-1.14
4.Skilled and unskilled agricultural, forest, and fishery workers	3264	170	1.11	0.91-1.36
4.Skilled workers, not elsewhere classified	3286	170	1.06	0.87-1.30
4.Unskilled workers NEC	1053	51	0.91	0.64-1.31
4.Unstated	38 882	2036	1.07	1.01-1.13
4.Waiting staff and bartenders	1770	82	0.85	0.64-1.13
^a Adjusted for: maternal age, BMI, smoking, parity, marital status, calendar period of birth, and quarter of conception, and sex of the child. NEC=Not elsewhere classified. Job group classification by social class is described in Supplementary, section S6.				

S15-S16)

Table S16: Analyses restricted to mothers with Denmark as country of origin, with industrial groups ordered alphabetically. Number of births (N), observed number of cases of preterm birth, and adjusted risk ratios (RR) with 99% confidence interval (CI). N=566 289.				
Industrial group	N	Observed cases	Compared with the average risk	
			RR ^a	99% CI
Agriculture, forestry and fishing	2178	139	1.30	1.01-1.68
Building completion and finishing	3723	189	1.01	0.83-1.22
Civil engineering	733	33	0.95	0.62-1.48
Cleaning industry	5774	298	1.00	0.86-1.16
Construction and demolition of buildings	1640	68	0.88	0.66-1.19
Culture and sports	8065	378	0.94	0.82-1.06
Daycare (all ages)	57 392	2608	0.96	0.92-1.02
Defense, security and justice activities	7524	338	0.92	0.80-1.06
Energy, mining and quarrying	1530	51	0.73	0.53-1.00
Finance and insurance activities	19 509	929	0.98	0.89-1.07
Hairdressing and other personal service activities	8122	392	0.92	0.81-1.05
Health practitioners and veterinarians	20655	922	1.04	0.95-1.14
Hospitals	58 930	2599	1.03	0.98-1.09
Hotel and other accommodation facilities	3883	193	0.92	0.77-1.10
IT and telecommunications	8300	428	1.08	0.95-1.23
Manufacture and repair of vehicles	1085	57	1.08	0.75-1.54
Manufacture of chemicals and pharmaceuticals	7559	316	0.93	0.80-1.07
Manufacture of electronic components/equipment	3999	223	1.16	0.96-1.41
Manufacture of Food products	5857	319	1.10	0.94-1.28
Manufacture of meat products	1851	106	1.15	0.88-1.51
Manufacture of metals and machinery	6731	378	1.18	1.02-1.37
Manufacture of plastic, glass and concrete	3407	162	0.99	0.81-1.22
Non-university education and training	53 904	2193	0.95	0.90-1.01
Other private offices and associations	53 677	2524	0.98	0.93-1.03
Public administration	29 890	1309	0.99	0.92-1.07
Publishing, Broadcasting and motion pictures	9243	381	0.84	0.74-0.95
Religious institutions and funeral activities	1995	80	0.90	0.68-1.20
Repair and installation of machinery and equipment	484	21	0.90	0.53-1.53
Research and university education	12 834	505	0.88	0.79-0.98
Residential centers and home care workers	61 730	3223	1.05	1.01-1.11
Restaurants and bars	8969	479	0.96	0.86-1.08
Retail trade	47 360	2491	1.01	0.95-1.06
Textile and paper products	2876	143	1.02	0.82-1.27
Transport of goods	6197	322	1.01	0.87-1.17
Transport of passengers	3025	139	0.88	0.71-1.08
Unstated	7954	358	0.90	0.79-1.02
Water supply, sewage and waste management	642	39	1.29	0.81-2.05
Wholesale trade	24 756	1225	1.02	0.95-1.10
Wood products and furniture	2306	130	1.19	0.92-1.52
^a Adjusted for: maternal age, BMI, smoking, parity, marital status, calendar period of birth, quarter of conception, and socioeconomic status, and sex of the child.				



S6: Job group classification by social class

Classification of job groups by social class (1-5) inspired by the Danish Economic Council of the Labour Movement's division, ordered alphabetically within classes (1).

1. Upper Class

- Medical doctors, dentists, and veterinarians
- Professionals (physics, mathematics, engineering and architects)
- Professionals at academic level, not elsewhere classified (NEC)
- Senior officials and corporate managers

2. Upper Middle Class

- Associate professionals (business and administration)
- Associate professionals (physics and engineering)
- Managers (<10 employees)
- Psychologists and social workers
- Teachers in higher, secondary, vocational and special education

3. Middle Class

- Associate professionals (health)
- Associate professionals (nursery and kindergarten)
- Associate professionals (special education and care)
- Associate professionals, not otherwise classified
- Clerks, not otherwise classified
- Clerks without customer contacts
- Customer service clerks
- Nurses and midwives
- Primary school teachers
- Public safety workers
- Sales and service workers, not otherwise classified
- Travel attendants and related workers

4. Working Class

- Assembly workers
- Child care workers in private homes
- Cleaners, janitors and kitchen helpers
- Cooks and house keepers
- Drivers and manual workers in construction, or manufacturing industries
- Food and beverage industry workers
- Hairdressers, beauticians and related workers
- Home care workers
- Nursing home workers
- Painters
- Production and plant operators
- Shop assistants
- Skilled and unskilled agricultural, forest and fishery workers
- Skilled workers, not otherwise classified
- Unskilled workers, not otherwise classified
- Waiting staff and bartenders

5. Long-term out of the labor market

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(1) [Juul J.S. Det danske klassesamfund. Inddeling af befolkningen i sociale klasser. Arbejderbevægelsens Erhvervsråd, København, Danmark.
https://www.ae.dk/files/dokumenter/analyse/ae_inddeling-af-befolkningen-i-sociale-klasser.pdf]