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Night-shift work and hematological cancers: a population based case–control study in three Nordic countries

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1. *Supplementary tables*

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Supplementary Table 1. Odds ratios (OR) and 95% confidence intervals (95% CI) for acute myeloid leukemia (AML), chronic lymphocytic leukemia (CLL), and all leukemia types combined (Leukemia) in relation to cumulative night-work with 5-, 10- and 15-year lag-time.

Cumulative night-work	AML					CLL					Leukemia				
	Case	Control	OR ^a	95% CI	p-trend	Case	Control	OR ^a	95% CI	p-trend	Case	Control	OR ^a	95% CI	p-trend
5-year lag- time															
Unexposed	7215	35925	1.00			12844	63989	1.00			31182	155884	1.00		
Low	1563	7962	0.97	0.92-1.04		2671	13476	0.99	0.94-1.03		6404	32482	0.98	0.96-1.01	
Moderate	225	1243	0.89	0.78-1.04		439	2293	0.95	0.86-1.06		1075	5182	1.04	0.97-1.11	
High	155	660	1.17	0.98-1.40	0.86	315	1587	0.99	0.87-1.12	0.38	710	3307	1.07	0.99-1.17	0.32
10-year lag- time															
Unexposed	7326	36527	1.00			13007	64784	1.00			31619	158114	1.00		
Low	1507	7623	0.98	0.92-1.05		2597	13134	0.98	0.94-1.03		6195	31363	0.99	0.96-1.02	

Moderate	201	1076	0.93	0.79-1.08		390	2047	0.95	0.85-1.06		953	4539	1.05	0.98-1.13	
High	124	564	1.09	0.90-1.34	0.79	275	1380	0.99	0.87-1.13	0.36	604	2839	1.06	0.97-1.16	0.33
<i>15-year lag-time</i>															
Unexposed	7529	37540	1.00			13277	66080	1.00			32352	161633	1.00		
Low	1352	6845	0.98	0.92-1.05		2404	12241	0.98	0.93-1.02		5656	28823	0.98	0.95-1.01	
Moderate	211	1143	0.92	0.79-1.07		445	2311	0.96	0.86-1.06		1057	4893	1.08	1.01-1.16	
High	66	262	1.26	0.96-1.65	0.79	143	713	0.99	0.83-1.19	0.28	306	1506	1.02	0.90-1.15	0.59

^a Odds ratios were adjusted for cumulative benzene, formaldehyde and ionizing radiation. Unexposed group was used as a reference category.

Supplementary Table 2. Odds ratios (OR) and 95% confidence intervals (95% CI) for Hodgkin lymphoma (HL), non-Hodgkin lymphoma (NHL), and multiple myeloma (MM) in relation to cumulative night-work with 5-, 10- and 15-year lag-time.

Cumulative night-work	HL					NHL					MM				
	Case	Control	OR ^a	95% CI	p-trend	Case	Control	OR ^a	95% CI	p-trend	Case	Control	OR ^a	95% CI	p-trend
<i>5-year lag-time</i>															
Unexposed	7759	38715	1.00			45934	229597	1.00			21628	108073	1.00		

Low	1380	7027	0.98	0.92-1.04		9364	47071	0.99	0.97-1.02		3873	19389	0.99	0.96-1.04	
Moderate	111	516	1.08	0.88-1.33		799	3972	1.01	0.93-1.09		368	1861	0.99	0.88-1.11	
High	72	352	1.03	0.79-1.33	0.92	616	2925	1.05	0.97-1.15	0.69	319	1617	0.98	0.87-1.11	0.74
<i>10-year lag-time</i>															
Unexposed	7978	39782	1.00			46611	233087	1.00			21919	109614	1.00		
Low	1185	6084	0.97	0.90-1.04		8817	44263	0.99	0.97-1.02		3642	18105	1.01	0.97-1.05	
Moderate	96	451	1.07	0.85-1.33		751	3674	1.02	0.95-1.11		345	1805	0.96	0.85-1.08	
High	63	293	1.08	0.82-1.42	0.87	534	2541	1.05	0.96-1.16	0.55	282	1416	0.99	0.87-1.13	0.83
<i>15-year lag-time</i>															
Unexposed	8191	40895	1.00			47657	238471	1.00			22348	111830	1.00		
Low	1002	5075	0.98	0.91-1.06		7935	39626	1.00	0.98-1.03		3266	16227	1.01	0.97-1.05	
Moderate	95	446	1.07	0.85-1.34		816	3974	1.03	0.95-1.11		412	2051	1.00	0.90-1.12	
High	34	194	0.88	0.61-1.27	0.69	305	1494	1.02	0.90-1.16	0.54	162	832	0.97	0.82-1.15	0.93

^a Odds ratios were adjusted for cumulative benzene, formaldehyde and ionizing radiation. Unexposed group was used as a reference category.

Supplementary Table 3. Odds ratios (OR) and 95% confidence intervals (95% CI) for acute myeloid leukemia (AML), chronic lymphocytic leukemia (CLL), all leukemia types combined (Leukemia), Hodgkin lymphoma (HL), non-Hodgkin lymphoma (NHL), and multiple myeloma (MM) in relation to duration of night work.

Duration of night-work	Case	Control	OR^a	95% CI	p-trend
<i>AML</i>					
0 years	7195	35620	1.00		
≤ 10 years	570	3031	0.92	0.84-1.02	
11-20 years	332	1798	0.91	0.80-1.02	
> 20 years	1061	5341	0.98	0.91-1.05	0.25
<i>CLL</i>					
0 years	12799	63721	1.00		
≤ 10 years	882	4507	0.97	0.90-1.05	
11-20 years	478	2500	0.95	0.86-1.05	
> 20 years	2110	10617	0.99	0.94-1.04	0.44
<i>Leukemia</i>					
0 years	31062	154915	1.00		
≤ 10 years	2248	11564	0.97	0.92-1.01	
11-20 years	1267	6524	0.97	0.91-1.03	
> 20 years	4794	23852	1.00	0.97-1.04	0.71
<i>HL</i>					
0 years	7613	37832	1.00		
≤ 10 years	730	4050	0.89	0.82-0.97	
11-20 years	293	1330	1.09	0.95-1.25	

> 20 years	686	3398	1.01	0.92-1.09	0.91
<i>NHL</i>					
0 years	45757	228186	1.00		
≤ 10 years	4315	21933	0.98	0.95-1.01	
11-20 years	1437	7545	0.95	0.89-1.00	
> 20 years	5204	25901	1.00	0.97-1.04	0.54
<i>MM</i>					
0 years	21559	107534	1.00		
≤ 10 years	1660	8440	0.98	0.93-1.04	
11-20 years	518	2508	1.03	0.93-1.14	
> 20 years	2451	12458	0.98	0.93-1.03	0.43

^a Odds ratios were adjusted for cumulative benzene, formaldehyde and ionizing

radiation. 0 years duration was used as a reference category.