Health and Work in the Family:
Evidence from Spouses' Cancer Diagnoses
(Online Appendix)

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A   Data Description

The 1991 Census–LWF is a unique dataset that combines data from five sources: Canada's 1991 Census of Population, the Canadian Mortality Data Bank (CMDB), the Canadian Cancer Data Bank (CCDB), the Longitudinal Worker File (LWF) and the T1 Family File (T1FF). The CMDB contains individual death records from 1950 onward. Provincial and territorial Vital Statistics offices provide these records annually to Statistics Canada for national-level analysis.

The CCDB is a databank combining two cancer-related data sources: the Canadian Cancer Registry (CCR) and the National Cancer Incidence Reporting System (NCIRS). The former is a person-oriented tumor database that includes clinical and demographic information about Canadian residents with cancer since 1992 (Statistics Canada 2008). The latter is a historical tumor-oriented database containing cancer cases diagnosed as far back as 1969 (Carpenter etal. 2008). Individual cancer records from the CCR are used in the analysis; historical information from the NCIRS is used to verify that individuals in the CCR had no prior cancer history.

The LWF represents 10% of the random sample of Canadians who either filed a personal income tax (T1) form or received a statement of remuneration (T4 form) from their employer in each year from 1983 onward. Once individuals are selected into the LWF, they are followed regardless of their employment status for as long as they file a tax return (T1) or their income is reported to the Canada Revenue Agency (CRA) by their employer. The current version of the LWF contains information on wages, salaries and net self-employment income as well as firm-level information. Wages and salaries are obtained from T4s issued by employers. Net self-employment income and

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basic personal information (marital status, province of residence, etc.) are obtained from the personal income tax files (T1).

The T1FF is a family tax file that is built annually based on the information included in the Personal Income Tax file (T1) and supplementary files such as the child tax benefit. A tax unit in Canada is an individual. Using a combination of information available in the T1 along with family benefit information, Statistics Canada constructs the T1FF on an annual basis. The tax filer's spouse is primarily identified based on the spouse's Social Insurance Number (SIN) in the T1, while children are identified based on their parents' tax return and child benefits program files. Individuals can be followed over time using their SIN, and their family income can be constructed in each year using their family identifier from the T1FF.

Statistics Canada's Health Analysis Division initially linked selected personal information from CMDB and CCDB to the individual records of individuals 25 and over in the 1991 Census file. This initial data linkage is called 1991 Canadian Census Cohort: Mortality and Cancer Follow-Up. Individuals' death records up to 2006 and individuals' cancer records up to 2003 were obtained from both the CMDB and the CCDB. Subsequently, the LWF records were linked to the 1991 Canadian Census Cohort to provide the crucial income component. The T1FF was added later to provide the spousal and total family income components.

The 1991 Census–LWF data sample contains 263,674 individual records corresponding to about 1.4% of the Canadian population aged 25 and over in 1991. Approximately 58.8% of the 1991 Census–LWF cohort was observed in all 28 years of the LWF (from 1983 to 2010). Individuals were present in the sample for an average of 24.8 years. Tax filing rates were slightly lower in the 1980s compared with more recent decades (from 1990 to 2010), and 66.9% of the 263,638 individuals were observed in all 21 years, for an average of 18.5 years.

Statistics Canada linked these data sources in multiple steps. First, the *1991 Canadian Census Cohort: Mortality and Cancer Follow-Up* links selected personal information from the CMDB and CCDB (including death records up to 2006 and cancer records up to 2003) to individual records of those 25 and over in the 1991 Census file. At that stage, the linkage was based on Statistics Canada's probabilistic record linkage methods. Names derived from tax records were linked to the Census and used to identify individuals in death records. Using this method, 76% of the 1991 Census respondents over 25 can be linked and followed for deaths. Among the linked respondents, about 12% were diagnosed with cancer between 1969 and 2003. (see Wilkins et al., 2008; Peters et al., 2013, for details). Due to the probabilistic linkage, some demographic groups are over- or underrepresented. Peters et al. (2013) show that men, individuals between 25 and 44, with a secondary degree, who are employed, and who are in the top three income quintiles are slightly underrepresented. They conclude, however, that "the Cohort remains broadly representative of most groups in the Canadian population." (Peters et al., 2013, p. 6). Second, the 1991 Census cohort was linked to the LWF, which is a random 10% sample of Canadian tax return files from 1983 onward, and the T1FF, which contains spousal and total family incomes. At this stage, the

LWF data were linked to the 1991 Census cohort using a deterministic record-linkage process based on Social Insurance Numbers.

B   Additional Regression Results

B.1   Time-Invariant Differece-in-Differences Estimates

We briefly present regression results from estimating regression (2) in the main text using a standard DID framework with time-invariant effects of spousal cancer diagnoses on labor market outcomes. Tables B1 and B2 contain the results for the outcomes employment, annual earnings, and family income for men and women, respectively. We provide three separate regressions for each outcome, which differ by the definition of the post-diagnosis period. In particular, how time period $t = 0$ (year of the cancer diagnosis) is treated varies as follows: included in the pre-period, included in the post-period, and excluded from the estimation sample.

The estimates show that both men and women reduce their employment by about two percentage points after the cancer diagnosis of their spouse. The decrease is slightly larger among women in both absolute and relative terms. Annual earnings decline by $1,600 to $2,100. Women's earnings decrease less in absolute terms than men's, but more relative to average pre-diagnosis earnings (about 3.4% for men and 5.2% for women). Finally, family income decreases substantially. This reduction is largest among women, where total income declines by about $7,000 (6.5%) relative to pre-treatment levels. Part of this reduction is due to women's decline in earnings, but a larger contribution comes from their husbands, whose earnings also decline after their cancer diagnoses (see Jeon, 2016). The estimated effects are slightly larger in absolute value when excluding observations in $t = 0$ because the cancer diagnosis may occur towards the end of that year. Table B3 corresponds to the DID results in Tables B1 and B2 but includes additional controls. The estimated effects become less precise, but the overall conclusions do not change.

B.2   Additional Robustness Checks

We restrict the sample to couples with both spouses being younger than 55 at the time of the diagnosis. Since we do not observe retirement decisions, we cannot distinguish between temporary and permanent employment reductions. To reduce the potential role of retirement decisions, we restrict the sample to individuals and spouses aged 59 and younger in our main results. However, individuals in their late 50s may possibly retire in response to a spousal health shock, so removing them from the sample allows us to focus on labor supply changes that are unlikely to be motivated by retirement.

Table B4, which has the same format as Table 9 in the main text, contains the regression results. Men's employment and earnings decline slightly less compared to column (1) in Tables 3 and 4 with the earnings effects losing statistical significance. Family income decreases by a similar amount in the restricted sample compared to the full sample. For women, we find similar results for

employment changes (comparing column (1) in Table 6 to column (4) in Table B4). In contrast, the decrease in annual earnings is slightly larger in the younger sample and the decline in family income is substantially larger than in the full sample (see columns (1) in Tables 7 and 8 and columns (5) and (6) in Table B4, respectively). Hence, we find some evidence that men who are older at the time of their spouse's diagnosis reduce their labor supply by a larger margin than men under the age of 55, but the same cannot be said about women. Overall, these results imply that retirement is not the main reason why individuals aged 55 to 59, and those whose spouses are in this age range, reduce their labor supply.

We now turn to a robustness check regarding the CEM weights. To increase the match rate, we limit the number of covariates entering the CEM weights in our main results by including only variables referring to individuals and not to spouses. However, spousal employment may change due to worsening health in the calendar year before the cancer diagnosis. Such a change may also affect the individual's employment and earnings before the diagnosis. To control for these effects, we add spousal employment status in the two years prior to the diagnosis. The bottom of Table 2 shows that even without CEM weighting, spousal employment status and earnings are relatively balanced between treated and control individuals with normalized differences of about 0.02 to 0.07. After matching, the balance improves and the normalized differences for all spousal pre-diagnosis labor market outcomes are below 0.02.

Table B5 contains the regression results for employment, annual earnings, and family income using CEM weights that include spousal employment status before the cancer diagnosis. The results for men and women are similar to the results in column (1) of Tables 3 to 8 in the main text. Some point estimates in Table B5 are larger than in the main results while others are smaller, but none of the differences are statistically significant. Hence, we conclude that not including pre-diagnosis spousal employment status in the CEM weights does not bias the results and spouses' pre-diagnosis health or employment status do not affect individuals' labor supply. We also provide the equivalent of Table 2 in the main text with spousal employment status in $t = -1$ and $t = -2$ as additional CEM covariates in Table B6.

C   Inverse Propensity Score Weighting

As an alternative to CEM weighting, we also provide regression results where the data are weighted using estimated inverse propensity score weights (IPSW) before estimating the effect of spousal cancer on individuals' labor market outcomes. Propensity scores are obtained by estimating a Probit regression of treatment status (the individual's spouse was diagnosed with cancer) using the following independent variables: individual's and spouse's age (both in five-year bins), individual's and spouse's education categories, a visible minority indicator, number of children, age of the youngest child, employment indicators for the individual and the spouse for five years prior to the diagnosis, individual's and spouse's earning quintiles for five years prior to the diagnosis, individual's

non-earned income quintiles and family income quintiles for five years prior to the diagnosis, and year and province dummies. To assign a placebo-diagnosis year to individuals in the control group, a year between 1992 and 2003 is randomly drawn for each control observation. After estimating Probits of treatment status separately for men and women, ISPW is obtained as

$$w_i = C_i + \frac{\hat{p}_i}{1 - \hat{p}_i}(1 - C_i), \tag{1}$$

where C_i is an indicator for treatment status (spousal cancer diagnosis) and $\hat{p}_i$ is the predicted treatment probability for individual i based on the Probit regression described above. Weighting the data by (1) and estimating the effect of spousal cancer on labor market outcomes leads to estimates of the average treatment effect on the treated (ATET). Hence, using these weights corresponds to using CEM weights since the weight for treated individuals is also one in the latter case.

Tables C1 to C6 below correspond to the main regression results in Tables 5 to 10 in the main text. The only difference is that the tables in the main text use CEM matching weights while Tables C1 to C6 use the weights (1).

References

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Peters, P. A., Tjepkema, M., Wilkins, R., Fines, P., Crouse, D. L., Chan, P. C. W., Burnett, R. T., 2013. Data Resource Profile: 1991 Canadian Census Cohort. International Journal of Epidemiology 42 (5), 1319–1326.

Wilkins, R., Tjepkema, M., Mustard, C., Choinière, R., 2008. The Canadian Census Mortality Follow-Up Study, 1991 Through 2001. Health Reports 19 (3), 25–43.

Table B1: Difference-in-Differences Results for the Effect of Wives' Cancer Diagnoses on Men's Employment, Annual Earnings, and Family Income

	Employment			Annual Earnings			Family Income		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Post-diagnosis	-0.048***	-0.052***	-0.054***	-3359.024***	-3838.320***	-3948.284***	7656.712***	7242.961***	8184.350***
	(0.003)	(0.003)	(0.004)	(396.343)	(402.985)	(433.663)	(497.830)	(502.606)	(547.616)
Spousal cancer x post-diagnosis	-0.016*	-0.021**	-0.021**	-1828.960*	-1975.056*	-2100.747*	-2671.934*	-2648.783*	-2745.355*
	(0.007)	(0.007)	(0.008)	(887.768)	(921.186)	(984.797)	(1,087.549)	(1,127.257)	(1,208.370)
Constant	0.967***	0.964***	0.967***	57531.642***	57425.714***	57554.443***	32467.622***	32194.389***	32370.952***
	(0.002)	(0.001)	(0.002)	(200.650)	(169.099)	(200.557)	(1,544.369)	(1,557.838)	(1,605.156)
Post-diagnosis period: t = {0,…,5}	X			X			X		
Post-diagnosis period: t = {1,…,5}		X	X		X	X		X	X
t = 0 excluded from sample			X			X			X
Family size controls							X	X	X
N	167832	167832	152272	167832	167832	152272	166625	166625	151065

Notes: All regressions are weighted by CEM weights and include individual fixed effects. The definition of the post-diagnosis period is indicated for each regression (see text for details). Standard errors in parentheses are clustered on the individual level. ^ p< 0.1, * p< 0.05, ** p< 0.01, *** p< 0.001.

Table B2: Difference-in-Differences Results for the Effect of Husbands' Cancer Diagnoses on Women's Employment, Annual Earnings, and Family Income

	Employment			Annual Earnings			Family Income		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Post-diagnosis	-0.042***	-0.050***	-0.050***	86.679	-177.248	-53.529	10803.979***	10556.739***	11804.420***
	(0.005)	(0.005)	(0.005)	(282.088)	(285.813)	(309.064)	(820.770)	(872.578)	(941.932)
Spousal cancer x post-diagnosis	-0.020^	-0.021^	-0.023^	-1490.254*	-1460.621*	-1607.038*	-6850.687***	-6863.828***	-7047.387***
	(0.010)	(0.011)	(0.012)	(587.495)	(599.280)	(645.484)	(1,707.094)	(1,889.237)	(1,966.138)
Constant	0.834***	0.833***	0.834***	27118.408***	27234.518***	27122.413***	78187.177***	79347.408***	77671.303***
	(0.002)	(0.002)	(0.003)	(143.581)	(120.558)	(143.661)	(1,090.578)	(1,067.784)	(1,199.441)
Post-diagnosis period: t = {0,…,5}	X			X			X		
Post-diagnosis period: t = {1,…,5}		X	X		X	X		X	X
t = 0 excluded from sample			X			X			X
Family size controls							X	X	X
N	152087	152087	138019	152087	152087	138019	151094	151094	137026

Notes: All regressions are weighted by CEM weights and include individual fixed effects. The definition of the post-diagnosis period is indicated for each regression (see text for details). Standard errors in parentheses are clustered on the individual level. ^ p< 0.1, * p< 0.05, ** p< 0.01, *** p< 0.001.

Table B3: Difference-in-Differences Results for the Effect of Cancer Diagnoses on Men's and Wome's Employment, Annual Earnings, and Family Income (Including Additional Controls)

	Men (Wives' Diagnoses)			Women (Husbands' Diagnoses)		
	Employment	Annual Earnings	Family Income	Employment	Annual Earnings	Family Income
Post-diagnosis	-0.042***	-897.217*	8179.971***	-0.040***	330.804	11778.399***
	(0.003)	(432.926)	(547.650)	(0.005)	(311.279)	(942.262)
Spousal cancer x post-diagnosis	-0.013^	-1470.774	-2504.436*	-0.017	-1005.600	-4232.155*
	(0.007)	(971.178)	(1,222.298)	(0.013)	(700.737)	(2,029.503)
Constant	0.945***	57087.652***	80025.638***	0.796***	25900.044***	77918.849***
	(0.005)	(653.024)	(771.456)	(0.006)	(396.642)	(1,202.871)
Additional cancer diagnosis	X	X		X	X	
Lagged Widowhood	X	X	X	X	X	X
Non-labour income	X	X		X	X	
Number of children	X	X		X	X	
Self-employment in reference period	X	X		X	X	
Disability benefits or tax credits	X	X		X	X	
Family size controls			X			X
Post-diagnosis period: t = {1,…,5}	X	X	X	X	X	X
t = 0 excluded from sample	X	X	X	X	X	X
N	151065	151065	151065	137026	137026	137026

Notes: All regressions are weighted by CEM weights and include individual fixed effects. The definition of the post-diagnosis period is indicated for each regression (see text for details). These regressions correspond to the DID regressions in Tables 3 and 4 but include additional controls as indicated. Standard errors in parentheses are clustered on the individual level. ^ p< 0.1, * p< 0.05, ** p< 0.01, *** p< 0.001.

Table B4: Regression Results for the Effect of Spouses' Cancer Diagnoses on Men's and Women's Employment, Annual Earnings, and Family Income (Individual and Spouse Are Younger Than 55 at Diagnosis)

	Men (Wives' Diagnoses)			Women (Husbands' Diagnoses)		
	Employ. (1)	Earn. (2)	Family Inc. (3)	Employ. (4)	Earn. (5)	Family Inc. (6)
δ: Effects of spousal cancer - Equation (1)						
$k = -5$	-0.010	876.651	620.733	-0.016	-321.235	-2054.848
	(0.007)	(1,019.074)	(1,461.788)	(0.016)	(745.683)	(2,963.722)
$k = -4$	0.001	1379.181	1466.672	-0.018	210.793	-884.513
	(0.007)	(865.915)	(1,286.304)	(0.014)	(667.337)	(2,621.554)
$k = -3$	0.002	1350.735^	875.499	0.002	-144.127	-2134.717
	(0.006)	(815.517)	(1,158.110)	(0.012)	(653.420)	(2,527.369)
$k = -2$	0.000	-21.879	973.394	0.000	365.887	222.300
	(0.005)	(655.592)	(1,084.687)	(0.008)	(506.890)	(2,748.384)
$k = -1$ (reference)						
$k = 0$ (the year of diagnoses)	0.004	293.145	-1522.720	-0.007	-963.355*	-6846.770**
	(0.006)	(652.004)	(1,083.952)	(0.011)	(451.097)	(2,435.050)
$k = +1$	-0.020*	-1192.236	-4603.960**	-0.025^	-1992.463**	-9156.709***
	(0.008)	(921.146)	(1,405.479)	(0.014)	(613.630)	(2,650.834)
$k = +2$	-0.017*	-675.692	-2889.152*	-0.019	-1816.743*	-6806.281*
	(0.008)	(1,008.750)	(1,422.514)	(0.016)	(719.094)	(3,332.560)
$k = +3$	-0.017^	-52.929	-1748.625	-0.020	-1823.549*	-11431.721***
	(0.009)	(1,094.594)	(1,633.620)	(0.017)	(828.638)	(2,843.836)
$k = +4$	-0.017^	-527.495	-1743.213	-0.026	-945.192	-10449.391**
	(0.010)	(1,281.598)	(1,819.224)	(0.018)	(918.100)	(3,382.100)
$k = +5$	-0.002	773.522	-358.872	-0.005	-1412.190	-9091.897**
	(0.010)	(1,414.187)	(1,975.624)	(0.018)	(1,052.664)	(3,390.225)
N	122,705	122,705	121,590	92,131	92,131	91,459

Notes: Regressions corresponds to column (1) in Tables 5 to 10, respectively, but the sample is restricted to individuals who were less than 55 years old and whose spouse was less than 55 years old at the time of the cancer diagnosis. All regressions are weighted by CEM weights and include individual fixed effects. In (3) and (6) family size is controlled. Standard errors in parentheses are clustered on the individual level. ^ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table B5: Regression Results for the Effect of Spouses' Cancer Diagnoses on Men's and Women's Employment, Annual Earnings, and Family Income (Spouse's Employment Status in t=-1 and t=-2 Included in CEM Covariates)

	Men (Wives' Diagnoses)			Women (Husbands' Diagnoses)		
	Employ. (1)	Earn. (2)	Family Inc. (3)	Employ. (4)	Earn. (5)	Family Inc. (6)
δ: Effects of spousal cancer - Equation (1)						
k = -5	-0.008	29.712	-342.132	-0.012	-196.687	-415.241
	(0.007)	(993.826)	(1,362.091)	(0.013)	(596.922)	(2,144.129)
k = -4	-0.001	389.035	-633.392	-0.003	286.582	164.883
	(0.006)	(852.626)	(1,252.362)	(0.012)	(543.015)	(1,920.906)
k = -3	0.001	648.860	-327.011	0.005	10.585	-1310.216
	(0.006)	(800.407)	(1,150.737)	(0.010)	(519.318)	(1,841.361)
k = -2	0.000	-263.548	190.489	0.000	393.222	26.086
	(0.004)	(626.785)	(1,021.306)	(0.006)	(409.428)	(1,904.946)
k = -1 (reference)						
k = 0 (the year of diagnoses)	-0.003	-229.758	-1568.511	-0.008	-689.028^	-3373.861^
	(0.005)	(630.338)	(1,051.092)	(0.008)	(365.495)	(1,740.924)
k = +1	-0.027***	-1954.137*	-5016.703***	-0.028*	-1642.512**	-7327.447***
	(0.008)	(925.870)	(1,360.991)	(0.012)	(529.472)	(2,168.139)
k = +2	-0.023*	-1506.925	-2061.248	-0.025^	-1755.430**	-7901.579***
	(0.009)	(1,084.178)	(1,428.925)	(0.013)	(625.355)	(2,094.026)
k = +3	-0.024*	-1265.429	-1510.924	-0.032*	-1386.147^	-10663.350***
	(0.010)	(1,181.811)	(1,657.564)	(0.015)	(708.839)	(2,243.817)
k = +4	-0.032**	-2315.077^	-2296.898	-0.027^	-855.402	-10215.353***
	(0.011)	(1,306.322)	(1,736.410)	(0.016)	(800.744)	(2,532.720)
k = +5	-0.022^	-465.500	-317.054	-0.023	-1348.062	-7565.544**
	(0.012)	(1,420.721)	(1,893.606)	(0.017)	(895.833)	(2,708.193)
N	122,456	122,456	121,649	138,858	138,858	137,953

Notes: Regressions corresponds to column (1) in Tables 5 to 10, respectively, but the CEM covariates include the spouse's employment status in the two years before the cancer diagnosis in addition to the other covariates listed in Table 2. All regressions are weighted by CEM weights and include individual fixed effects. In (3) and (6) family size is controlled. Standard errors in parentheses are clustered on the individual level. ^ p< 0.1, * p< 0.05, ** p< 0.01, *** p< 0.001.

Table B6: Summary Statistics for Pre-Matched and Matched Samples

	Men					Women				
	Pre-Matched Sample			Matched Sample		Pre-Matched Sample			Matched Sample	
	Treatment Group	Control Group	Normalized Difference	Treatment Group	Control Group	Treatment Group	Control Group	Normalized Difference	Treatment Group	Control Group
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Age (mean) at t=0	48.365	45.221	0.301	48.314	48.227	48.211	42.993	0.539	48.084	47.927
Coarsened age at t=0										
25-29	--	--	0.053	--	--	--	--	0.114	--	--
30-34	--	--	0.094	--	--	--	--	0.242	--	--
35-39	0.091	0.166	0.159	0.082	0.082	0.076	0.209	0.274	0.079	0.079
40-44	0.153	0.218	0.119	0.154	0.154	0.160	0.236	0.135	0.165	0.165
45-49	0.211	0.216	0.008	0.227	0.227	0.256	0.208	0.080	0.262	0.262
50-54	0.256	0.182	0.127	0.264	0.264	0.300	0.149	0.259	0.300	0.300
55-59	0.241	0.133	0.197	0.225	0.225	0.178	0.063	0.253	0.162	0.162
Highest level of schooling										
no high school	0.243	0.238	0.007	0.234	0.234	0.280	0.225	0.090	0.256	0.256
hs-w/wo trades certificate	0.428	0.425	0.004	0.452	0.452	0.409	0.409	0.000	0.455	0.455
postsecondary non-university	0.147	0.158	0.020	0.128	0.128	0.188	0.218	0.053	0.175	0.175
university degree	0.183	0.179	0.006	0.186	0.186	0.123	0.148	0.052	0.114	0.114
Visible minority										
no minority	0.928	0.914	0.036	0.970	0.970	0.940	0.919	0.058	0.975	0.975
Asian	0.049	0.060	0.036	0.025	0.025	0.042	0.060	0.056	0.020	0.020
other	0.023	0.025	0.009	0.005	0.005	0.018	0.022	0.020	0.005	0.005
Province/territory at t=0										
Newfoundland	0.022	0.023	0.003	0.008	0.008	0.026	0.031	0.018	0.018	0.018
Prince Edward Island	--	0.005	0.012	--	--	0.004	0.006	0.012	0.000	0.000
Nova Scotia	0.048	0.033	0.052	0.032	0.032	0.033	0.032	0.002	0.025	0.025
New Brunswick	0.029	0.027	0.008	0.018	0.018	0.026	0.026	0.003	--	--
Quebec	0.268	0.259	0.015	0.301	0.301	0.244	0.236	0.014	0.263	0.263
Ontario	0.303	0.355	0.078	0.357	0.357	0.353	0.352	0.002	0.401	0.401
Manitoba	0.031	0.042	0.039	0.023	0.023	0.043	0.042	0.004	0.036	0.036
Saskatchewan	0.037	0.037	0.000	0.027	0.027	0.028	0.036	0.032	0.024	0.024
Alberta	0.118	0.092	0.060	0.115	0.115	0.085	0.097	0.028	0.080	0.080
British Columbia	0.127	0.108	0.040	0.116	0.116	0.117	0.109	0.018	0.105	0.105
North West Territories	--	0.005	0.048	0.000	0.000	0.004	0.006	0.014	--	--
Yukon	--	0.002	0.022	0.000	0.000	0.000	0.001	0.036	0.000	0.000
missing	0.009	0.012	0.024	--	--	0.034	0.027	0.032	0.029	0.029
Year at t=0 (year of spousal cancer diagnosis)										
1992	0.088	0.105	0.041	0.091	0.091	0.067	0.105	0.095	0.072	0.072
1993	0.079	0.103	0.060	0.075	0.075	0.087	0.103	0.038	0.095	0.095
1994	0.078	0.098	0.051	0.081	0.081	0.083	0.098	0.038	0.082	0.082
1995	0.079	0.094	0.037	0.071	0.071	0.093	0.094	0.001	0.083	0.083

Table B6 continued

	Men					Women				
	Pre-Matched Sample			Matched Sample		Pre-Matched Sample			Matched Sample	
	Treatment Group	Control Group	Normalized Difference	Treatment Group	Control Group	Treatment Group	Control Group	Normalized Difference	Treatment Group	Control Group
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1996	0.089	0.089	0.001	0.084	0.084	0.076	0.089	0.035	0.068	0.068
1997	0.075	0.085	0.025	0.078	0.078	0.081	0.085	0.010	0.083	0.083
1998	0.095	0.081	0.036	0.102	0.102	0.103	0.081	0.054	0.089	0.089
1999	0.099	0.077	0.054	0.101	0.101	0.092	0.077	0.038	0.099	0.099
2000	0.091	0.073	0.046	0.085	0.085	0.080	0.073	0.019	0.088	0.088
2001	0.085	0.069	0.041	0.086	0.086	0.094	0.069	0.064	0.098	0.098
2002	0.073	0.065	0.022	0.075	0.075	0.065	0.065	0.001	0.059	0.059
2003	0.070	0.061	0.026	0.071	0.071	0.078	0.061	0.048	0.083	0.083
Number of children at t=-1										
no dependent	0.292	0.196	0.159	0.325	0.325	0.321	0.192	0.210	0.335	0.335
1	0.268	0.232	0.060	0.250	0.250	0.243	0.227	0.026	0.221	0.221
2	0.310	0.385	0.112	0.321	0.321	0.314	0.389	0.112	0.328	0.328
3+	0.129	0.187	0.113	0.103	0.103	0.122	0.191	0.134	0.116	0.116
Age of the youngest child at t=-1										
no dependent	0.292	0.196	0.159	0.325	0.325	0.321	0.192	0.210	0.335	0.335
age 0-6	0.147	0.237	0.163	0.120	0.120	0.078	0.240	0.320	0.072	0.072
age 7-17	0.331	0.411	0.117	0.332	0.332	0.338	0.414	0.110	0.334	0.334
age 18+	0.230	0.157	0.132	0.223	0.223	0.263	0.154	0.191	0.260	0.260
Total family income at t=-1 (mean)	100,339.653	94,046.486	0.080	107,959.332	105,830.758	102,319.648	98,389.221	0.031	109,964.239	109,511.510
Quintiles of family income at t=-1										
Lowest	0.175	0.2	0.046	0.125	0.125	0.192	0.2	0.014	0.149	0.149
Second	0.175	0.2	0.046	0.174	0.174	0.189	0.2	0.019	0.165	0.165
Third	0.215	0.2	0.025	0.211	0.211	0.181	0.2	0.033	0.195	0.195
Fourth	0.205	0.2	0.009	0.216	0.216	0.204	0.2	0.008	0.219	0.219
Highest	0.231	0.2	0.054	0.274	0.274	0.233	0.2	0.056	0.273	0.273
Share of earnings in the total family income at t=-1 > 50%	0.568	0.613	0.064	0.607	0.607	0.123	0.134	0.233	0.096	0.096
Working at t=-1	0.931	0.938	0.020	0.971	0.971	0.791	0.808	0.029	0.854	0.854
Working at t=-2	0.932	0.943	0.033	0.977	0.977	0.804	0.809	0.010	0.863	0.863
Earnings at t=-1 (mean)	54,664.764	53,125.769	0.028	60,211.989	58,207.768	26,442.540	26,255.395	0.005	29,639.050	28,814.985
Earnings at t=-2 (mean)	55,139.961	53,091.717	0.038	60,072.228	58,331.555	26,700.395	25,788.135	0.025	29,820.241	28,602.954
Spouse working at t=-1	0.813	0.803	0.019	0.880	0.880	0.907	0.933	0.068	0.964	0.964
Spouse working at t=-2	0.815	0.804	0.020	0.883	0.883	0.918	0.939	0.056	0.976	0.976
Spousal earnings at t=-1 (mean)	27,579.803	25,895.680	0.044	31,214.113	31,902.224	53,106.047	56,541.649	0.036	58,140.823	60,958.518
Spousal earnings at t=-2 (mean)	27,750.081	25,439.347	0.061	31,061.803	31,129.711	54,053.505	56,174.215	0.023	59,416.526	61,718.962
Total number of observations	1,501	450,763		1,064	10,285	1,135	482,207		851	11,992

Notes: Pre-matched sample consists of all individuals, matched sample consists of individuals for whom a match in the treatment or control group could be found. The sample averages for the matched sample are weighted by the CEM weights (see text for details). -- indicates supressed result due to Statistics Canada disclosure policies.

Table C1: Regression Results for the Effect of Wives' Cancer Diagnoses on Men's Employment (Inverse Propensity Score Weights)

	(1)	(2)	(3)	(4)	(5)	(6)
δ: Effects of spousal cancer - Equation (1)						
$k = -5$	0.000	0.000	-0.000	-0.001	0.002	0.002
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
$k = -4$	-0.001	-0.001	-0.001	-0.002	-0.000	-0.000
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
$k = -3$	-0.002	-0.002	-0.002	-0.003	-0.001	-0.001
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
$k = -2$	-0.002	-0.002	-0.002	-0.002	-0.001	-0.001
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
$k = -1$ (reference year)						
$k = 0$ (diagnosis year)	0.002	0.003	0.002	0.003	0.003	0.003
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
$k = +1$	-0.015*	-0.014^	-0.011	-0.016*	-0.014^	-0.010
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)
$k = +2$	-0.011	-0.010	-0.003	-0.011	-0.010	-0.001
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
$k = +3$	-0.021*	-0.020^	-0.011	-0.021*	-0.020*	-0.008
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
$k = +4$	-0.028*	-0.026*	-0.017	-0.028*	-0.026*	-0.013
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
$k = +5$	-0.016	-0.014	-0.005	-0.015	-0.016	-0.003
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
Additional cancer diagnosis		X				X
Widowhood			X			X
Non-labour income				X	X	X
Number of children					X	X
Self-employment in reference period					X	X
Disability benefits or tax credits					X	X
N	151904	151904	151770	151904	151904	151770

Notes: All regressions are weighted by inverse propensity score weights and include individual fixed effects. Standard errors in parentheses are clustered on the individual level. ^ p< 0.1, * p< 0.05, ** p< 0.01, *** p< 0.001

Table C2: Regression Results for the Effect of Wives' Cancer Diagnoses on Men's Annual Earnings (Inverse Propensity Score Weights)

	(1)	(2)	(3)	(4)	(5)	(6)
δ: Effects of spousal cancer - Equation (1)						
$k = -5$	511.613	511.613	445.862	298.883	635.178	589.471
	(981.703)	(981.706)	(984.387)	(985.210)	(973.527)	(976.845)
$k = -4$	81.860	81.860	81.860	-75.450	183.444	177.863
	(907.681)	(907.684)	(907.687)	(917.577)	(902.458)	(902.692)
$k = -3$	-57.477	-57.477	-57.477	-217.102	-29.031	-32.483
	(911.381)	(911.384)	(911.387)	(920.792)	(922.186)	(922.917)
$k = -2$	-751.126	-751.126	-751.126	-774.462	-774.315	-774.904
	(637.093)	(637.096)	(637.098)	(649.399)	(646.830)	(647.490)
$k = -1$ (reference year)						
$k = 0$ (diagnosis year)	-552.108	-533.797	-552.108	-584.618	-654.277	-636.327
	(747.772)	(749.162)	(747.777)	(746.719)	(749.765)	(751.453)
$k = +1$	-1606.375	-1565.224	-1250.962	-2069.257^	-2124.170*	-1658.077
	(1095.007)	(1099.043)	(1096.835)	(1060.944)	(1080.232)	(1084.163)
$k = +2$	-1607.009	-1547.061	-866.774	-1936.240^	-2087.248^	-1117.478
	(1226.256)	(1233.729)	(1257.715)	(1159.715)	(1196.652)	(1222.535)
$k = +3$	-1931.482	-1843.169	-911.188	-2159.164	-2349.838	-997.942
	(1537.423)	(1551.717)	(1569.487)	(1465.158)	(1521.037)	(1542.436)
$k = +4$	-3356.442*	-3242.338*	-2250.396	-3723.151*	-4028.279*	-2546.677
	(1624.175)	(1641.792)	(1681.743)	(1552.668)	(1608.149)	(1662.418)
$k = +5$	-2679.927	-2559.966	-1612.419	-3005.072^	-3393.407*	-1950.087
	(1710.397)	(1729.747)	(1770.432)	(1623.973)	(1696.868)	(1757.676)
Additional cancer diagnosis		X				X
Widowhood			X			X
Non-labour income				X	X	X
Number of children					X	X
Self-employment in reference period					X	X
Disability benefits or tax credits					X	X
N	151904	151904	151770	151904	151904	151770

Notes: All regressions are weighted by inverse propensity score weights and include individual fixed effects. Standard errors in parentheses are clustered on the individual level. ^ $p< 0.1$, * $p< 0.05$, ** $p< 0.01$, *** $p< 0.001$

Table C3: Regression Results for the Effect of Wives' Cancer Diagnoses on Men's Family Income (Inverse Propensity Score Weights)

	(1)	(2)	(3)
δ: Effects of spousal cancer - Equation (1)			
k = -5	122.075	125.661	192.695
	(1312.737)	(1312.867)	(1311.126)
k = -4	-141.559	-134.841	-105.865
	(1286.995)	(1286.879)	(1288.150)
k = -3	-434.466	-431.456	-399.605
	(1230.722)	(1230.449)	(1230.024)
k = -2	-676.319	-673.867	-626.214
	(930.951)	(930.628)	(930.737)
k = -1 (reference year)			
k = 0 (diagnosis year)	-625.730	-743.789	-388.429
	(1116.322)	(1121.377)	(1120.110)
k = +1	-3845.556**	-4130.732**	-3124.817*
	(1486.116)	(1445.498)	(1502.312)
k = +2	-2516.630^	-2907.594^	-1812.603
	(1468.683)	(1499.125)	(1468.214)
k = +3	-2246.215	-2642.075	-1482.411
	(1952.065)	(1971.008)	(1966.277)
k = +4	-5187.331**	-5531.033**	-4543.705*
	(1968.242)	(2017.487)	(1973.841)
k = +5	-4024.501^	-4348.899*	-3484.230
	(2119.472)	(2168.576)	(2121.683)
Widowhood		X	
Lagged widowhood			X
Family size	X	X	X
Disability benefits or tax credits			
N	151904	151904	151904

Notes: All regressions are weighted by inverse propensity score weights and include individual fixed effects. Standard errors in parentheses are clustered on the individual level. ^ p< 0.1, * p< 0.05, ** p< 0.01, *** p< 0.001

Table C4: Regression Results for the Effect of Husbands' Cancer Diagnoses on Women's Employment (Inverse Propensity Score Weights)

	(1)	(2)	(3)	(4)	(5)	(6)
δ: Effects of spousal cancer - Equation (1)						
$k = -5$	0.004	0.004	0.006	0.005	0.003	0.005
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
$k = -4$	0.009	0.009	0.009	0.009	0.009	0.009
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
$k = -3$	0.000	0.000	0.000	0.000	-0.001	-0.001
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
$k = -2$	-0.008	-0.008	-0.008	-0.008	-0.012*	-0.012*
	(0.007)	(0.007)	(0.007)	(0.007)	(0.006)	(0.006)
$k = -1$ (reference)						
$k = 0$ (the year of diagnoses)	0.005	0.005	0.005	0.005	0.007	0.007
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
$k = +1$	-0.014	-0.014	-0.009	-0.014	-0.012	-0.008
	(0.013)	(0.013)	(0.011)	(0.013)	(0.011)	(0.011)
$k = +2$	-0.019	-0.019	-0.006	-0.018	-0.018	-0.009
	(0.015)	(0.016)	(0.015)	(0.016)	(0.015)	(0.015)
$k = +3$	-0.041*	-0.041*	-0.026	-0.040*	-0.040*	-0.028^
	(0.018)	(0.018)	(0.018)	(0.018)	(0.017)	(0.017)
$k = +4$	-0.035^	-0.035^	-0.018	-0.033^	-0.034*	-0.021
	(0.018)	(0.018)	(0.018)	(0.018)	(0.017)	(0.017)
$k = +5$	-0.034^	-0.034^	-0.017	-0.033^	-0.034^	-0.021
	(0.019)	(0.019)	(0.019)	(0.019)	(0.018)	(0.018)
Additional cancer diagnosis		X				X
Widowhood			X			X
Non-labour income				X	X	X
Number of children					X	X
Self-employment in reference period					X	X
Disability benefits or tax credits					X	X
N	139167	139167	139041	139167	139167	139041

Notes: All regressions are weighted by inverse propensity score weights and include individual fixed effects. Standard errors in parentheses are clustered on the individual level. ^ p< 0.1, * p< 0.05, ** p< 0.01, *** p< 0.001

Table C5: Regression Results for the Effect of Husbands' Cancer Diagnoses on Women's Annual Earnings (Inverse Propensity Score Weights)

	(1)	(2)	(3)	(4)	(5)	(6)
δ: Effects of spousal cancer - Equation (1)						
$k = -5$	-215.306	-215.306	-356.785	-140.251	-167.588	-312.622
	(828.461)	(828.464)	(825.796)	(804.225)	(834.555)	(829.947)
$k = -4$	-118.928	-118.928	-118.928	-55.526	-41.118	-40.831
	(746.904)	(746.907)	(746.910)	(742.483)	(758.507)	(757.541)
$k = -3$	-698.809	-698.809	-698.809	-670.535	-689.206	-686.738
	(763.180)	(763.182)	(763.185)	(763.036)	(765.987)	(766.047)
$k = -2$	111.631	111.631	111.631	109.448	71.474	74.989
	(398.242)	(398.244)	(398.245)	(398.877)	(396.891)	(397.196)
$k = -1$ (reference)						
$k = 0$ (the year of diagnoses)	-688.200	-730.529	-688.200	-594.746	-643.625	-692.799
	(432.641)	(447.530)	(432.644)	(429.544)	(430.982)	(445.230)
$k = +1$	-1757.347*	-1814.422*	-1289.262*	-1575.440*	-1622.432*	-1316.881*
	(703.732)	(723.634)	(632.776)	(727.339)	(676.902)	(639.014)
$k = +2$	-1984.508*	-2042.132*	-996.046	-1758.351*	-1856.320*	-1130.478
	(784.385)	(799.530)	(762.733)	(806.779)	(778.815)	(766.221)
$k = +3$	-1822.900*	-1889.776*	-629.494	-1480.009^	-1636.194*	-763.996
	(838.011)	(855.840)	(841.893)	(856.816)	(823.420)	(834.242)
$k = +4$	-1201.565	-1273.016	117.213	-865.606	-965.202	-0.151
	(930.635)	(951.225)	(966.545)	(962.556)	(935.045)	(953.521)
$k = +5$	-1844.008^	-1917.342^	-447.842	-1482.298	-1526.249	-506.931
	(1059.359)	(1080.030)	(1101.544)	(1086.915)	(1071.184)	(1076.368)
Additional cancer diagnosis		X				X
Widowhood			X			X
Non-labour income				X	X	X
Number of children					X	X
Self-employment in reference period					X	X
Disability benefits or tax credits					X	X
N	139167	139167	139041	139167	139167	139041

Notes: All regressions are weighted by inverse propensity score weights and include individual fixed effects. Standard errors in parentheses are clustered on the individual level. ^ $p< 0.1$, * $p< 0.05$, ** $p< 0.01$, *** $p< 0.001$

Table C6: Regression Results for the Effect of Husbands' Cancer Diagnoses on Women's Family Income (Inverse Propensity Score Weights)

	(1)	(2)	(3)
δ: Effects of spousal cancer - Equation (1)			
k = -5	2262.207	2189.628	2221.673
	(2443.587)	(2443.580)	(2445.412)
k = -4	1725.706	1660.453	1680.873
	(2065.112)	(2063.879)	(2067.790)
k = -3	997.441	1005.760	986.607
	(2027.917)	(2025.829)	(2029.019)
k = -2	1321.435	1361.852	1279.009
	(1985.549)	(1982.260)	(1986.757)
k = -1 (reference year)			
k = 0 (diagnosis year)	-1943.475	-317.542	-1516.975
	(1936.932)	(1943.195)	(1970.708)
k = +1	-4121.282	-937.699	-3507.066
	(3041.515)	(3076.748)	(3099.059)
k = +2	-4821.163	-1005.661	-4337.618
	(3042.538)	(2971.138)	(3106.370)
k = +3	-8420.245*	-4033.353	-8037.977*
	(3348.437)	(3166.194)	(3392.634)
k = +4	-8181.911*	-3997.711	-7863.081*
	(3428.556)	(3345.732)	(3462.118)
k = +5	-9547.691**	-5379.574^	-9175.774**
	(3363.704)	(3176.313)	(3383.884)
Widowhood		X	
Family size	X	X	X
Disability benefits or tax credits			X
N	139167	139167	139167

Notes: All regressions are weighted by inverse propensity score weights and include individual fixed effects. Standard errors in parentheses are clustered on the individual level.
^ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$