Table A1: Multilevel models with RSD level variables

Dependent variable: Mortality Index

	(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Wife's age		0.001***	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***
Husband's age		0.0002***	0.0004***	0.0002***	0.0004***	0.001***	0.001***	0.001***
Mortality ref. date		0.096***	0.094***	0.096***	0.094***	0.085***	0.085***	0.085***
Parity		0.157***	0.151***	0.157***	0.151***	0.151***	0.151***	0.151***
Social class 1 (reference)								
Social class 2			0.103***		0.106***	0.072***	0.072***	0.073***
Social class 3			0.136***		0.137***	0.054***	0.053***	0.053***
Social class 4			0.166***		0.167***	0.072***	0.072***	0.073***
Social class 5			0.302***		0.301***	0.160***	0.159***	0.159***
Textile workers			0.245***		0.235***	0.121***	0.110***	0.111***
Miners			0.287***		0.280***	0.169***	0.159***	0.159***
Agricultural labourers			0.156***		0.178***	0.030***	0.056***	0.055***
Social class missing			0.222***		0.224***	0.117***	0.119***	0.119***
Wife born GB (reference)								
Wife born Eastern Europe						-0.232***	-0.233***	-0.233***
Wife born rest of Europe						-0.070***	-0.069***	-0.070***
Wife born Ireland						-0.023**	-0.024**	-0.024**
Wife born elsewhere						-0.029**	-0.027*	-0.028*
Wife born missing						0.031***	0.032***	0.032***
Husband born GB (reference)								
Husband born Eastern Europe						-0.119***	-0.121***	-0.121***
Husband born rest of Europe						0.025*	0.024*	0.023*
Husband born Ireland						-0.017*	-0.018**	-0.019**
Husband born elsewhere						0.022	0.023	0.023
Husband born missing						0.009	0.01	0.01
Wife's work: none (reference)								
Wife's work: at home						0.188***	0.186***	0.186***
Wife's work: outside the home						0.395***	0.393***	0.393***
Servants: no live-servants (reference)								
Servants: one live-in servant						-0.091***	-0.083***	-0.083***

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Servants: two live-in servants						-0.140***	-0.120***	-0.118***
Servants: three or more live-in servants						-0.201***	-0.171***	-0.171***
Husband/Wife is household head (ref)								
Husband/Wife is not household head						0.226***	0.226***	0.227***
Rooms in the house: <3 rooms						0.408***	0.406***	0.406***
Rooms in the house: 3-5 rooms (ref)								
Rooms in the house: 6+ rooms						-0.108***	-0.102***	-0.103***
Rooms in the house: missing						0.066***	0.068***	0.067***
% Social class 1 in RSD				-0.028***	-0.021***		-0.010*	-0.038***
% Social class 5 in RSD				0.057***	0.044***		0.019***	0.008*
% Textile workers in RSD				0.073***	0.065***		0.029***	0.031***
% Miners in RSD				0.075***	0.049***		0.033***	0.026***
% Agricultural labourers in RSD				-0.069***	-0.071***		-0.061***	-0.036***
% Households with 1 servant in RSD							-0.006***	-0.006***
% Households with 2 servants in RSD							-0.004**	-0.004*
% Households with 3+ servants in RSD							-0.008***	-0.007***
% Households with <3 rooms in RSD							-0.028***	-0.022***
% Households with 6+ rooms in RSD							-0.035***	-0.018***
% people born Eastern Europe in RSD							0.008*	0.005
% people born Ireland in RSD							0.017***	0.015***
Population (log) of RSD								0.067***
London								-0.028
Constant	0.845***	-182.872***	-178.554***	-182.905***	-178.623***	-161.575***	-161.637***	-161.626***
Akaike Inf. Crit.	8,927,182	8,838,119	8,831,147	8,836,667	8,829,887	8,804,561	8,803,342	8,803,116
Bayesian Inf. Crit.	8,927,220	8,838,207	8,831,337	8,836,818	8,830,140	8,804,991	8,803,923	8,803,723

Note: *p<0.1; **p<0.05; ***p<0.01

All models use a total of 2,295,993 women, weighted by number of children, to represent 6,155,142 children.

Area level variables are percentages, expressed as the effect of 1 standard deviation.

Social class and occupations are percentages of males aged 15-64; servants and rooms are of households; birth places are of all people

Source: I-CeM dataset.

Table A2: Multilevel models with ED level variables

	(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable: Mortality Index								
Wife's age		0.001***	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***
Husband's age		0.0002***	0.0003***	0.0004***	0.0005***	0.001***	0.001***	0.001***
Mortality ref. date		0.095***	0.094***	0.095***	0.093***	0.085***	0.085***	0.085***
Parity		0.156***	0.151***	0.153***	0.149***	0.153***	0.152***	0.152***
Social class 1 (reference)								
Social class 2			0.074***		0.073***	0.054***	0.060***	0.062***
Social class 3			0.122***		0.099***	0.047***	0.043***	0.042***
Social class 4			0.144***		0.125***	0.060***	0.061***	0.061***
Social class 5			0.264***		0.226***	0.141***	0.130***	0.130***
Textile workers			0.283***		0.185***	0.157***	0.095***	0.096***
Miners			0.299***		0.225***	0.196***	0.139***	0.140***
Agricultural labourers			0.031***		0.181***	-0.077***	0.083***	0.081***
Social class missing			0.175***		0.166***	0.083***	0.092***	0.092***
Wife born GB (reference)								
Wife born Eastern Europe						-0.219***	-0.224***	-0.224***
Wife born rest of Europe						-0.073***	-0.073***	-0.073***
Wife born Ireland						-0.015	-0.031***	-0.031***
Wife born elsewhere						-0.035**	-0.035**	-0.036**
Wife born missing						0.023***	0.027***	0.028***
Husband born GB (reference)								
Husband born Eastern Europe						-0.090***	-0.103***	-0.103***
Husband born rest of Europe						0.022	0.016	0.017
Husband born Ireland						-0.0004	-0.028***	-0.028***
Husband born elsewhere						0.019	0.013	0.013
Husband born missing						-0.006	0.002	0.003
Wife's work: none (reference)								
Wife's work: at home						0.191***	0.181***	0.181***
Wife's work: outside the home						0.411***	0.392***	0.392***
Servants: no live-servants (reference)								
Servants: one live-in servant						-0.100***	-0.079***	-0.077***
Servants: two live-in servants						-0.169***	-0.117***	-0.115***

Servants: three or more live-in servants						-0.242***	-0.170***	-0.169***
Husband/Wife is household head (ref)								
Husband/Wife is not household head						0.232***	0.229***	0.230***
Rooms in the house: <3 rooms						0.404***	0.398***	0.397***
Rooms in the house: 3-5 rooms (ref)								
Rooms in the house: 6+ rooms						-0.115***	-0.090***	-0.091***
Rooms in the house: missing						0.044*	0.053**	0.051**
% Social class 1 in ED				-0.055***	-0.045***		-0.020***	-0.022***
% Social class 5 in ED				0.080***	0.066***		0.034***	0.028***
% Textile workers in ED				0.071***	0.064***		0.036***	0.034***
% Miners in ED				0.070***	0.045***		0.038***	0.032***
% Agricultural labourers in ED				-0.088***	-0.094***		-0.077***	-0.053***
% Households with 1 servant in ED							-0.001	-0.001
% Households with 2 servants in ED							-0.006**	-0.004
% Households with 3+ servants in ED							-0.012***	-0.008***
% Households with <3 rooms in ED							-0.029***	-0.020***
% Households with 6+ rooms in ED							-0.024***	-0.023***
% people born Eastern Europe in ED							0.005***	0.006***
% people born Ireland in ED							0.036***	0.033***
Population (log) of ED								0.041***
London								-0.059***
Constant	0.922***	-181.631***	-178.355***	-180.235***	-177.570***	-162.401***	-162.603***	-162.677***
Akaike Inf. Crit.	8,929,976	8,846,925	8,840,217	8,834,352	8,830,496	8,813,086	8,805,850	8,805,357
Bayesian Inf. Crit.	8,930,014	8,847,014	8,840,407	8,834,503	8,830,749	8,813,516	8,806,432	8,805,964

Note: *p<0.1; **p<0.05; ***p<0.01

All models use a total of 2,295,993 women, weighted by number of children, to represent 6,155,142 children.
Area level variables are percentages, expressed as the effect of 1 standard deviation.
Social class and occupations are percentages of males aged 15-64; servants and rooms are of households; birth places are of all people
Source: I-CeM dataset.

Table A3: Multilevel models with 3 levels: individual, ED and RSD

		Dependent variable: Mortality Index						
	(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Wife's age		0.001***	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***
Husband's age		0.0003***	0.0005***	0.0004***	0.001***	0.001***	0.001***	0.001***
Mortality ref. date		0.095***	0.094***	0.094***	0.093***	0.085***	0.085***	0.085***
Parity		0.155***	0.150***	0.152***	0.148***	0.152***	0.150***	0.150***
Social class 1 (reference)								
Social class 2			0.089***		0.075***	0.066***	0.062***	0.063***
Social class 3			0.121***		0.097***	0.049***	0.042***	0.042***
Social class 4			0.148***		0.124***	0.066***	0.060***	0.060***
Social class 5			0.269***		0.227***	0.147***	0.131***	0.131***
Textile workers			0.225***		0.186***	0.115***	0.097***	0.097***
Miners			0.265***		0.225***	0.160***	0.138***	0.139***
Agricultural labourers			0.147***		0.181***	0.031***	0.083***	0.082***
Social class missing			0.201***		0.180***	0.108***	0.102***	0.102***
Wife born GB (reference)								
Wife born Eastern Europe						-0.228***	-0.222***	-0.222***
Wife born rest of Europe						-0.071***	-0.069***	-0.070***
Wife born Ireland						-0.024**	-0.030***	-0.030***
Wife born elsewhere						-0.028*	-0.028*	-0.028*
Wife born missing						0.031***	0.031***	0.031***
Husband born GB (reference)								
Husband born Eastern Europe						-0.116***	-0.112***	-0.112***
Husband born rest of Europe						0.02	0.019	0.019
Husband born Ireland						-0.022**	-0.032***	-0.032***
Husband born elsewhere						0.02	0.019	0.018
Husband born missing						0.009	0.009	0.009
Wife's work: none (reference)								
Wife's work: at home						0.179***	0.174***	0.174***
Wife's work: outside the home						0.387***	0.380***	0.380***
Servants: no live-servants (reference)								
Servants: one live-in servant						-0.092***	-0.083***	-0.082***
Servants: two live-in servants						-0.140***	-0.123***	-0.122***

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Servants: three or more live-in servants						-0.201***	-0.178***	-0.178***
Husband/Wife is household head (ref)								
Husband/Wife is not household head						0.223***	0.222***	0.222***
Rooms in the house: <3 rooms						0.405***	0.394***	0.394***
Rooms in the house: 3-5 rooms (ref)								
Rooms in the house: 6+ rooms						-0.103***	-0.092***	-0.092***
Rooms in the house: missing						0.060**	0.059**	0.058**
% Social class 1 in ED					-0.039***	-0.029***	-0.010***	-0.011***
% Social class 5 in ED					0.078***	0.064***	0.038***	0.036***
% Textile workers in ED					0.024***	0.016***	0.008**	0.006
% Miners in ED					0.054***	0.029***	0.022***	0.019***
% Agricultural labourers in ED					-0.029***	-0.036***	-0.033***	-0.022***
% Households with 1 servant in ED							0.004*	0.004*
% Households with 2 servants in ED							-0.001	-0.001
% Households with 3+ servants in ED							-0.001	-0.0001
% Households with <3 rooms in ED							-0.0002	0.0004
% Households with 6+ rooms in ED							-0.005*	-0.004
% people born Eastern Europe in ED							-0.001	-0.001
% people born Ireland in ED							0.015***	0.015***
Population (log) of ED								0.020***
% Social class 1 in RSD					-0.003	-0.005	-0.01	-0.056***
% Social class 5 in RSD					0.008	0.007	-0.009*	-0.016***
% Textile workers in RSD					0.052***	0.052***	0.020***	0.025***
% Miners in RSD					0.028***	0.027***	0.007	0.001
% Agricultural labourers in RSD					-0.043***	-0.043***	-0.036***	-0.019***
% Households with 1 servant in RSD							0.023***	0.043***
% Households with 2 servants in RSD							-0.030***	-0.020***
% Households with 3+ servants in RSD							-0.010**	-0.007
% Households with <3 rooms in RSD							-0.023***	-0.026***
% Households with 6+ rooms in RSD							-0.033***	-0.032***
% people born Eastern Europe in RSD							0.007	0.004
% people born Ireland in RSD							0.009**	0.004
Population (log) of RSD								0.063***
London								0.0003
Constant	-181.788***	-178.283***	-179.442***	-176.770***	-162.204***	-161.946***	-161.948***	-161.918***

Akaike Inf. Crit.	8,915,614	8,831,845	8,826,361	8,826,337	8,822,413	8,801,537	8,799,188	8,798,884
Bayesian Inf. Crit.	8,915,665	8,831,946	8,826,564	8,826,565	8,822,742	8,801,979	8,799,909	8,799,642

Table A4: Unadjusted coefficients from 3-level models

	Coefficient	AIC	BIC
Social class 1 (reference)		8826362	8826564
Social class 2	0.089***		
Social class 3	0.121***		
Social class 4	0.148***		
Social class 5	0.269***		
Textile workers	0.225***		
Miners	0.265***		
Agricultural labourers	0.147***		
Social class missing	0.201***		
Wife born GB (reference)		8831008	8831173
Wife born Eastern Europe	-0.388***		
Wife born rest of Europe	-0.151***		
Wife born Ireland	-0.035***		
Wife born elsewhere	0.059***		
Wife born missing	-0.095***		
Husband born GB (reference)		883113	8831304
Husband born Eastern Europe	-0.359***		
Husband born rest of Europe	-0.092***		
Husband born Ireland	-0.027**		
Husband born elsewhere	0.048		
Husband born missing	-0.036*		
Wife's work: none (reference)		8823152	8823278
Wife's work: at home	0.170***		
Wife's work: outside the home	0.419***		
Servants: no live-servants (reference)		8828560	8828699
Servants: one live-in servant	-0.200***		
Servants: two live-in servants	-0.272***		
Servants: three or more live-in servants	-0.337***		
Husband/Wife is household head (ref)		8831242	8831355
Husband/Wife is not household head	0.203***		
Rooms in the house: <3 rooms	0.431***	8807151	8807290
Rooms in the house: 3-5 rooms (ref)			

Rooms in the house: 6+ rooms	-0.153***		
Rooms in the house: missing	0.064*		
% Social class 1 in ED	-0.038***	8826735	8826899
% Social class 5 in ED	0.079***		
% Textile workers in ED	0.050***		
% Miners in ED	0.066***		
% Agricultural labourers in ED	-0.046***		
% Households with 1 servant in ED	-0.033***	8830733	883872
% Households with 2 servants in ED	-0.010***		
% Households with 3+ servants in ED	-0.018***		
% Households with <3 rooms in ED	0.086***	8828270	8828397
% Households with 6+ rooms in ED	-0.067***		
% people born Eastern Europe in ED	-0.019***	8831572	8831698
% people born Ireland in ED	0.025***		
Population (log) of ED	0.063***	8830637	8830751
% Social class 1 in RSD	-0.031***	8814244	8814408
% Social class 5 in RSD	0.058***		
% Textile workers in RSD	0.072***		
% Miners in RSD	0.074***		
% Agricultural labourers in RSD	-0.070***		
% Households with 1 servant in RSD	-0.020*	8831290	8831429
% Households with 2 servants in RSD	-0.0691***		
% Households with 3+ servants in RSD	-0.0254***		
% Households with <3 rooms in RSD	0.047***	8815118	8815245
% Households with 6+ rooms in RSD	-0.110***		
% people born Eastern Europe in RSD	0.018*	8831777	8831904
% people born Ireland in RSD	0.042***		
Population (log) of RSD	0.121***	8814767	8814881
London	0.159***	8831797	8831911

Note: *p<0.1; **p<0.05; ***p<0.01

Area level variables are percentages, expressed as the effect of 1 standard deviation.

All models use a total of 2,295,993 women, weighted by number of children, to represent 6,155,142 children.

Social class and occupations are percentages of males aged 15-64; servants and rooms are of households; birth places are of all people.

All models control for wife's age, husband's age, parity, and mortality reference date.

Source: I-CeM dataset.

Table A5: OLS and Fixed Effects models

	Dependent variable: Mortality Index						
	OLS, no fixed effects			Fixed Effects at ED level		Fixed Effects at RSD level	
Wife's age	0.0005***	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***
Husband's age	0.00002	0.0005***	0.0005***	0.001***	0.001***	0.0004***	0.001***
Mortality ref. date	0.095***	0.085***	0.085***	0.093***	0.086***	0.094***	0.085***
Parity	0.156***	0.155***	0.155***	0.149***	0.152***	0.151***	0.151***
Social class 1 (reference)							
Social class 2	0.108***	0.067***	0.065***	0.072***	0.060***	0.106***	0.074***
Social class 3	0.180***	0.067***	0.064***	0.094***	0.040***	0.136***	0.055***
Social class 4	0.207***	0.085***	0.080***	0.122***	0.058***	0.167***	0.074***
Social class 5	0.361***	0.181***	0.177***	0.224***	0.127***	0.301***	0.162***
Textile workers	0.443***	0.227***	0.214***	0.185***	0.097***	0.235***	0.113***
Miners	0.397***	0.261***	0.245***	0.221***	0.134***	0.280***	0.161***
Agricultural labourers	-0.039***	-0.141***	-0.155***	0.175***	0.078***	0.1780***	0.055***
Social class missing	0.206***	0.089***	0.084***	0.176***	0.099***	0.226***	0.122***
Wife born GB (reference)							
Wife born Eastern Europe		-0.227***	-0.212***		-0.225***		-0.233***
Wife born rest of Europe		-0.083***	-0.071***		-0.074***		-0.071***
Wife born Ireland		0.004	0.004		-0.027*		-0.025*
Wife born elsewhere		-0.052***	-0.048***		-0.029*		-0.029*
Wife born missing		0.012*	0.015**		0.034***		0.033***
Husband born GB (reference)							
Husband born Eastern Europe		-0.082***	-0.058**		-0.117***		-0.123***
Husband born rest of Europe		0.019	0.040***		0.009		0.022
Husband born Ireland		0.051***	0.048***		-0.034**		-0.020
Husband born elsewhere		0.018	0.023		0.013		0.022
Husband born missing		-0.024***	-0.022***		0.012		0.011
Wife's work: none (reference)							
Wife's work: at home		0.228***	0.230***		0.161***		0.186***
Wife's work: outside the home		0.465***	0.466***		0.367***		0.391***
Servants: no live-servants (reference)							
Servants: one live-in servant		-0.105***	-0.106***		-0.087***		-0.090***
Servants: two live-in servants		-0.188***	-0.188***		-0.128***		-0.135***

Servants: three or more live-in servants		-0.273***	-0.269***		-0.183***		-0.194***
Husband/Wife is household head (ref)							
Husband/Wife is not household head		0.257***	0.256***		0.218***		0.224***
Rooms in the house: <3 rooms		0.388***	0.408***		0.397***		0.406***
Rooms in the house: 3-5 rooms (ref)							
Rooms in the house: 6+ rooms		-0.141***	-0.146***		-0.091***		-0.105***
Rooms in the house: missing		0.034	0.036		0.053*		0.068**
London			-0.082***				
Constant							
R^2	0.049	0.063	0.064	0.086	0.094	0.066	0.077
Adjusted R^2	0.049	0.063	0.064	0.035	0.045	0.041	0.052

*Note: *$p<0.1$; **$p<0.05$; ***$p<0.01$*

All models use a total of 2,295,993 women, weighted by number of children, to represent 6,155,142 children.