

Web Table 1. Age-breakdown of excess all-cause deaths by 4 statistical methods and 4 measures of influenza activity, assuming a 1-week lag between influenza incidence and death.

	Influenza incidence proxy							
	Age-standardized incidence proxy		ILI×LAB		ILI		LAB	
	No.	(95% CI)	No.	(95% CI)	No.	(95% CI)	No.	(95% CI)
By time series regression model								
0-4y	-8	(-13, -3)	-6	(-11, 0)	-12	(-18, -7)	-9	(-15, -4)
5-14y	-3	(-17, 12)	-2	(-16, 13)	-1	(-16, 14)	-3	(-19, 12)
15-29y	2	(-31, 35)	1	(-30, 33)	7	(-26, 41)	3	(-31, 36)
30-39y	2	(-23, 28)	0	(-24, 25)	5	(-21, 31)	3	(-24, 29)
40-49y	8	(-22, 37)	-3	(-31, 25)	13	(-17, 43)	11	(-19, 41)
50-59y	1	(-24, 26)	-7	(-31, 17)	-31	(-56, -5)	-5	(-31, 20)
60-69y	47	(22, 72)	43	(19, 68)	63	(37, 88)	63	(38, 88)
≥70y	184	(112, 256)	180	(110, 250)	99	(26, 173)	138	(65, 211)
Overall	232	(136, 328)	208	(114, 302)	143	(45, 242)	200	(101, 298)
By linear regression model								
0-4y	-8	(-14, -3)	-6	(-11, -1)	-13	(-18, -7)	-9	(-15, -4)
5-14y	-3	(-6, 0)	-2	(-5, 1)	-1	(-4, 2)	-3	(-7, 0)
15-29y	6	(-3, 15)	5	(-5, 14)	13	(4, 23)	8	(-1, 17)
30-39y	3	(-6, 12)	1	(-8, 10)	6	(-4, 15)	3	(-6, 13)
40-49y	15	(-2, 33)	4	(-13, 22)	25	(7, 42)	21	(3, 38)

50-59y	6 (-23, 34)	-3 (-31, 26)	-21 (-49, 8)	2 (-27, 30)
60-69y	46 (13, 80)	43 (9, 76)	62 (28, 95)	62 (29, 95)
≥70y	184 (87, 281)	180 (83, 277)	99 (2, 196)	138 (41, 234)
Overall	249 (140, 358)	222 (113, 331)	170 (61, 278)	221 (112, 329)

By Poisson regression model with log link

0-4y	-8 (-14, -3)	-6 (-11, 0)	-12 (-17, -7)	-9 (-14, -4)
5-14y	-3 (-6, -1)	-2 (-4, 1)	-2 (-4, 1)	-4 (-6, -1)
15-29y	2 (-5, 8)	1 (-6, 8)	7 (-1, 14)	2 (-5, 9)
30-39y	2 (-7, 12)	0 (-9, 10)	5 (-5, 14)	3 (-7, 12)
40-49y	13 (-3, 28)	2 (-14, 18)	20 (4, 35)	17 (1, 32)
50-59y	4 (-21, 30)	-4 (-30, 21)	-24 (-49, 1)	-1 (-26, 25)
60-69y	33 (5, 61)	31 (3, 59)	42 (14, 70)	44 (16, 72)
≥70y	197 (126, 268)	190 (118, 261)	119 (48, 190)	153 (82, 224)
Overall	240 (157, 323)	213 (130, 297)	155 (72, 237)	205 (112, 288)

By Poisson regression model with identity link

0-4y	-9 (-14, -4)	-6 (-11, 0)	-12 (-17, -7)	-9 (-14, -4)
5-14y	-4 (-6, -1)	-2 (-5, 0)	-2 (-5, 1)	-5 (-7, -2)
15-29y	5 (-3, 13)	4 (-4, 12)	12 (4, 20)	7 (-1, 15)
30-39y	2 (-2, 31)	0 (-10, 11)	5 (-5, 15)	3 (-7, 13)
40-49y	15 (-20, 32)	3 (-13, 20)	25 (-9, 42)	21 (5, 38)
50-59y	6 (17, 77)	-3 (-29, 23)	-21 (-47, 5)	1 (-25, 27)

60-69y	47 (17, 77)	44 (14, 74)	65 (35, 94)	64 (34, 94)
≥70y	201 (129, 273)	193 (120, 265)	128 (56, 200)	160 (88, 232)
Overall	264 (179, 349)	233 (148, 319)	200 (115, 285)	243 (158, 327)

ILI = influenza like illness based on general practitioners (GP) consultations; LAB = laboratory specimens positive for influenza; ILI×LAB

= GP consultations associated with influenza.

Web Table 2. Estimated overall excess all-cause deaths by 4 statistical methods and 4 measures of influenza activity, assuming 0-week and 2-week lags between influenza incidence and death.

Lag	Statistical model	Influenza incidence proxy							
		Age-standardized incidence proxy		ILI×LAB		ILI		LAB	
		No.	(95% CI)	No.	(95% CI)	No.	(95% CI)	No.	(95% CI)
No lag	Time series regression	109	(-3, 221)	136	(27, 245)	19	(-96, 134)	76	(-38, 191)
	Linear regression	125	(-9, 259)	149	(15, 284)	43	(-91, 176)	95	(-38, 229)
	Poisson regression with log link	120	(37, 202)	141	(58, 225)	31	(-52, 113)	85	(3, 168)
	Poisson regression with identity link	150	(65, 236)	169	(83, 255)	83	(-2, 168)	130	(46, 215)
2-week lag	Time series regression	145	(36, 255)	125	(18, 232)	33	(-79, 145)	119	(7, 231)
	Linear regression	164	(35, 294)	141	(10, 271)	60	(-69, 190)	141	(12, 271)
	Poisson regression with log link	156	(73, 240)	131	(47, 215)	49	(-34, 132)	128	(45, 211)
	Poisson regression with identity link	181	(96, 266)	153	(68, 239)	95	(10, 180)	168	(83, 253)

ILI = influenza like illness based on general practitioners (GP) consultations; LAB = laboratory specimens positive for influenza; ILI×LAB

= GP consultations associated with influenza.