

**Table 1 Provincial observed ( $Y_{ij}$ ), estimated expected number ( $E_{ij}$ ), and relative risk ( $\theta_{ij}$ ) of illicit drug-related mortality across different age groups in Islamic Republic of Iran**

Province	Age groups (years)															
	0-19				20-39				40-59				≥ 60			
	$Y_{ij}^a$	$P_{ij}^b$	$E_{ij}^c$	$\theta_{ij}^d$	$Y_{ij}$	$P_{ij}$	$E_{ij}$	$\theta_{ij}$	$Y_{ij}$	$P_{ij}$	$E_{ij}$	$\theta_{ij}$	$Y_{ij}$	$P_{ij}$	$E_{ij}$	$\theta_{ij}$
Alborz	0	746 621	3.18	0.68	27	1 073 298	45.76	0.61	19	650 706	25.77	0.75	1	241 775	3.59	0.44
Ardebil	0	388 028	1.65	0.57	11	479 968	20.46	0.57	6	283 377	11.22	0.57	0	119 047	1.77	0.34
Bushehr	0	379 636	1.62	0.84	9	486 302	20.73	0.49	1	217 876	8.63	0.31	0	79 586	1.18	0.43
Chaharmahal-va-Bakhtiari	2	313 193	1.33	1.40	12	357 680	15.25	0.81	4	194 516	7.70	0.59	1	82 374	1.22	0.74
East Azarbaijan	2	1 153 391	4.91	0.56	8	1 409 154	60.08	0.17	7	927 513	36.73	0.24	2	419 594	6.23	0.39
Fars	4	1 430 634	6.09	0.86	63	1 893 954	80.75	0.78	37	1 067 930	42.29	0.86	5	458 756	6.81	0.71
Gilan	1	611 880	2.61	0.65	44	887 718	37.85	1.15	15	695 785	27.55	0.57	1	335 313	4.97	0.33
Golestan	3	629 619	2.68	1.10	14	691 464	29.48	0.51	7	402 042	15.92	0.50	1	145 694	2.16	0.59
Hamadan	2	505 217	2.15	0.92	93	647 073	27.59	3.29	52	398 195	15.77	3.14	17	187 749	2.79	5.24
Hormozgan	3	666 576	2.84	0.99	15	703 773	30.01	0.53	6	298 672	11.83	0.56	2	107 394	1.59	1.01
Ilam	1	171 901	0.73	1.25	12	237 608	10.13	1.20	6	121 289	4.80	1.24	0	49 360	0.73	0.56
Isfahan	15	1 427 840	6.08	1.80	126	1 922 778	81.98	1.52	55	1 225 234	48.51	1.12	2	544 998	8.09	0.35
Kerman	2	1 099 672	4.68	0.76	26	1 208 336	51.52	0.53	10	609 504	24.13	0.46	0	247 206	3.67	0.29
Kermanshah	3	555 283	2.37	1.10	74	751 046	32.02	2.28	23	450 404	17.83	1.30	3	195 701	2.90	0.98
Khuzestan	13	1 632 963	6.96	1.58	28	1 828 435	77.96	0.39	19	916 912	36.31	0.55	0	332 199	4.93	0.24
Kohgiluyeh-va-Buyer Ahmad	1	246 378	1.05	1.15	8	279 848	11.93	0.71	0	135 924	5.38	0.33	0	50 902	0.76	0.47
Kordistan	2	488 886	2.08	0.86	14	623 672	26.59	0.57	12	341 308	13.51	0.90	1	149 145	2.21	0.59
Lorestan	2	554 256	2.36	1.04	46	676 668	28.85	1.58	31	374 254	14.82	2.00	5	155 471	2.31	1.73
Markazi	2	404 360	1.72	0.96	13	532 385	22.70	0.64	11	337 035	13.35	0.88	0	155 695	2.31	0.38
Mazandaran	0	846 957	3.61	0.60	2	1 213 543	51.74	0.12	3	848 281	33.59	0.20	0	374 801	5.56	0.23
North Khorasan	2	302 872	1.29	1.39	17	310 891	13.26	1.25	5	175 966	6.97	0.77	2	73 363	1.09	1.35
Qazvin	2	377 490	1.61	0.87	27	493 929	21.06	1.25	10	288 663	11.43	0.88	1	113 679	1.69	0.64
Qom	0	426 724	1.82	0.80	25	497 993	21.23	1.17	9	268 112	10.62	0.90	1	99 454	1.48	0.73
Razavi Khorasan	20	2 190 692	9.33	1.97	121	2 376 929	101.34	1.19	58	1 321 359	52.32	1.10	9	545 521	8.09	1.06
Semnan	3	199 813	0.85	1.41	9	278 333	11.87	0.80	10	154 136	6.10	1.40	0	70 078	1.04	0.48
Sistan-va-Baluchestan	5	1 328 404	5.66	0.94	39	949 569	40.49	0.96	20	361 460	14.31	1.32	3	135 581	2.01	1.22
South Khorasan	1	281 868	1.20	1.05	6	266 619	11.37	0.61	2	145 386	5.76	0.52	0	75 025	1.11	0.46
Tehran	10	3 503 441	14.92	0.74	354	5 119 526	218.28	1.62	244	3 259 125	129.05	1.88	52	1 385 545	20.56	2.46
West Azarbaijan	0	1 079 069	4.50	0.50	5	1 207 911	51.50	0.15	3	698 655	27.66	0.19	1	279 584	4.15	0.38
Yazd	1	386 066	1.64	1.02	16	423 441	18.05	0.90	2	228 976	9.07	0.41	0	100 050	1.48	0.41
Zanjan	3	321 932	1.37	0.93	25	402 679	17.17	1.38	11	229 399	9.08	1.09	0	103 451	1.53	0.39

<sup>a</sup>Number of illicit-drug-related deaths in each province: (i), each province; (j), each age group.

<sup>b</sup>Population of each province obtained from the 2016 National Census of Population and Housing.

<sup>c</sup>Expected number of illicit-drug-related deaths in each province.

<sup>d</sup>Province-specific relative risk of illicit-drug-related mortality. More details about parameters of the model are presented in the supplementary file.