

**The Europe and Eurasia Region.** The E&E countries analyzed in this report have traditionally been assigned into six subregions based upon historical, political, and social ties.

**Baltics**

- Estonia
- Latvia
- Lithuania

**Northern Tier**

- Czech Republic
- Hungary
- Poland
- Slovakia
- Slovenia

**Caucasus**

- Armenia
- Azerbaijan
- Georgia

**Russia, Ukraine, Moldova, Belarus (RUMB)**

- Belarus
- Moldova
- Russia
- Ukraine

**Central Asian Republics (CAR)**

- Kazakhstan
- Kyrgyzstan
- Tajikistan
- Turkmenistan
- Uzbekistan

**Southeastern Europe**

- Albania
- Bosnia and Herzegovina
- Bulgaria
- Croatia
- Macedonia
- Romania
- Serbia and Montenegro (Montenegro became an independent state through national referendum. The UN protectorate of Kosovo is not included as a separate nation, both because of its non-country status and the lack of data on the area.)

**Table 2: VULNERABILITY INDEX 2007: COUNTRY RANKING**

Vulnerability Analysis	Life expectancy			Adult mortality per 1000, total***			Under 5 mortality per 1000 live births			Public health expenditure as % of GDP			TB incidence rate per 100,000 population			New HIV infection rate per million population				
	Year	Source	Adjusted Score (1-10)	Year	Source	Adjusted Score	Year	Source	Adjusted Score	Year	Source	Adjusted Score	Year	Source	Adjusted Score	Year	Source	Adjusted Score		
	2005	WHO World Health Report 2004		2005	WHO World Health Statistics 2007		2005	WHO World Health Statistics 2007		2004	WDI 2007		2005	WHO World Health Statistics 2007		2005	EuroHIV			
May 2007																				
Country	Value	Rank		Value	Rank		Value	Rank		Value	Rank		Value	Rank		Value	Rank		Avg score	Rank
Albania	75	4	8.35	135	6	8.33	18	18	9.01	3.00	21	4.78	20	4	9.92	9.9	7	11.72	8.69	12
Armenia	73	9	7.12	175	15	6.75	29	21	8.13	1.40	26	1.90	71	18	7.36	24.9	15	11.37	7.11	17
Azerbaijan	72	16	6.51	152	13	7.67	89	27	3.32	0.90	28	1.00	76	19	7.11	25	16	11.37	6.16	21
Belarus	68	20	4.06	246	25	3.97	9	7	9.73	4.60	10	7.66	62	14	7.82	77.0	22	10.15	7.23	16
Bosnia & Herzegovina	74	6	7.73	138	7	8.21	15	14	9.25	4.10	14	6.76	52	13	8.32	3.3	2	11.88	8.69	11
Bulgaria	73	9	7.12	151	12	7.69	15	14	9.25	4.60	10	7.66	39	10	8.97	10.7	8	11.71	8.73	10
Croatia	76	2	8.96	115	3	9.10	7	3	9.89	6.10	5	10.36	41	11	8.87	14.5	12	11.62	9.80	3
Czech Republic	76	2	8.96	113	2	9.18	4	1	10.13	6.50	4	11.08	10	1	10.42	8.8	5	11.75	10.25	2
Estonia	73	9	7.12	197	19	5.90	7	3	9.89	4.00	15	6.58	43	12	8.77	467	28	1.00	6.54	19
Georgia	73	9	7.12	122	4	8.84	45	22	6.85	1.50	25	2.08	83	20	6.76	54.1	20	10.69	7.06	18
Hungary	73	9	7.12	180	17	6.56	8	5	9.81	5.70	6	9.64	22	5	9.82	10.9	9	11.70	9.11	8
Kazakhstan	66	25	2.84	311	27	1.41	73	26	4.61	2.30	23	3.52	144	27	3.71	65	21	10.43	4.42	26
Kyrgyzstan	68	20	4.06	235	23	4.40	67	23	5.09	2.30	23	3.52	121	24	4.86	32.5	18	11.19	5.52	24
Latvia	71	18	5.90	211	20	5.36	10	10	9.65	4.00	15	6.58	63	15	7.77	129.6	25	8.92	7.36	14
Lithuania	71	18	5.90	215	21	5.18	9	7	9.73	4.90	9	8.20	63	15	7.77	35	19	11.14	7.99	13
Macedonia	74	6	7.73	141	9	8.09	17	16	9.09	5.70	6	9.64	30	7	9.42	5.9	4	11.82	9.30	7
Moldova	68	20	4.06	222	22	4.92	28	20	8.21	4.20	13	6.94	138	26	4.01	126.7	24	8.98	6.19	20
Montenegro	73	9	7.12	132	5	8.43	10	10	9.65	7.30	1	12.52	33	8	9.27	13.8	10	11.63	9.77	4
Poland	75	4	8.35	143	10	8.00	8	5	9.81	4.30	12	7.12	26	6	9.62	16.9	13	11.56	9.08	9
Romania	72	16	6.51	165	14	7.13	19	19	8.93	3.40	19	5.50	134	25	4.21	9.4	6	11.74	7.34	15
Russia	65	26	2.22	322	28	1.00	14	13	9.33	3.70	17	6.04	119	23	4.96	247.1	27	6.16	4.95	25
Serbia	73	9	7.12	145	11	7.95	10		9.65	7.30	1	12.52	33	8	9.27	13.8	10	11.63	9.69	5
Slovakia	74	6	7.73	139	8	8.18	9	7	9.73	5.30	8	8.92	17	3	10.07	3.9	3	11.87	9.42	6
Slovenia	78	1	10.18	110	1	9.30	4	1	10.13	6.60	3	11.26	15	2	10.17	18.3	14	11.53	10.43	1
Tajikistan	64	27	1.61	178	16	6.64	71	25	4.77	1.00	27	1.18	198	28	1.00	29	17	11.28	4.41	27
Turkmenistan	63	28	1.00	240	24	4.22	104	28	2.12	3.30	20	5.32	70	17	7.41	n/a	1		4.02	28
Ukraine	68	20	4.06	271	26	3.00	17	16	9.09	3.70	17	6.04	99	21	5.96	242.5	26	6.27	5.74	22
Uzbekistan	67	24	3.45	188	18	6.24	68	24	5.01	2.40	22	3.70	113	22	5.26	82.7	23	10.02	5.61	23
Standard Deviation	3.8			57.1			32.3			1.8			47.1			100.7				
Average	71.3		6.07	235.8		4.37	25.6		8.40	4.1		6.72	92.6		6.28	130.1		8.90		
E&E Worst	63.0			321.6			118.0			0.9			198.0			467.0				
EU-25 Average**	77.7		10.00	92.3		10.00	5.7		10.00	5.9		10.00	18.4		10.00	83.4		10.00		
United States	78.0			108.0			8			6.9			5.0			202.0				

FINAL OUTCOMES	
Rank	Country
1	Slovenia
2	Czech Republic
3	Croatia
4	Montenegro
5	Serbia
6	Slovakia
7	Macedonia
8	Hungary
9	Poland
10	Bulgaria
11	Bosnia & Herzegovina
12	Albania
13	Lithuania
14	Latvia
15	Romania
16	Belarus
17	Armenia
18	Georgia
19	Estonia
20	Moldova
21	Azerbaijan
22	Ukraine
23	Uzbekistan
24	Kyrgyzstan
25	Russia
26	Kazakhstan
27	Tajikistan
28	Turkmenistan

1=least vulnerable, 28=most vulnerable

\*Estonia's and Turkmenistan's HIV infection rates are for 2002. The U.S. rate is estimated based upon the number of new infections reported by the CDC for 2004, divided by the 2004 mid-year populations of the 37 states included in surveillance. The E.U. rate excludes France, Malta and Spain.  
 \*\*EU-25 mean is for the European Union-25, excluding Malta for lack of data.  
 \*\*\* Total adult mortality is not reported by the WHO or the World Bank. For sections of this analysis dealing only with E&E countries, total adult mortality was calculated by weighting male and female adult mortality statistics by the ratio of males to females in the population.

FIGURE 1. Population Growth Trends by National Income Levels and for EU-25 and E&E  
(Annual % Change)

	European Monetary Union	Low-Income Economies	Middle Income Economies	High Income Economies	Europe and Eurasia
1981-85	0.2	2.3	1.6	0.7	0.8
1986-90	0.3	2.3	1.6	0.7	0.7
1991-94	0.4	2.1	1.3	0.7	0.1
1995-98	0.3	2.1	1.2	0.8	-0.1
1999-02	0.3	1.8	0.9	0.7	-0.2
1991-02	0.3	2	1.1	0.7	-0.1

FIGURE 2. Life Expectancy, 2005  
Age (in years)

	<b>Average LE</b>
Afghanistan	42
Albania	71
Algeria	71
Andorra	81
Angola	40
Antigua and Barbuda	73
Argentina	75
Armenia	69
Australia	82
Austria	80
Azerbaijan	66
Bahamas	73
Bahrain	75
Bangladesh	63
Barbados	75
Belarus	69
Belgium	79
Belize	71
Benin	53
Bhutan	64
Bolivia	65
Bosnia and Herzegovina	74
Botswana	42
Brazil	72
Brunei Darussalam	78
Bulgaria	73
Burkina Faso	49
Burundi	47
Cambodia	54
Cameroon	51
Canada	81
Cape Verde	70
Central African Republic	42
Chad	47
Chile	78
China	73
Colombia	75
Comoros	65
Congo	55
Cook Islands	73
Costa Rica	78
Côte d'Ivoire	45
Croatia	76
Cuba	77

Cyprus	80
Czech Republic	76
Democratic People's Republic of Korea	67
Democratic Republic of the Congo	46
Denmark	78
Djibouti	55
Dominica	74
Dominican Republic	69
Ecuador	73
Egypt	68
El Salvador	72
Equatorial Guinea	46
Eritrea	61
Estonia	73
Ethiopia	52
Fiji	69
Finland	79
France	81
Gabon	56
Gambia	55
Georgia	72
Germany	79
Ghana	57
Greece	80
Grenada	68
Guatemala	68
Guinea	54
Guinea-Bissau	47
Guyana	64
Haiti	55
Honduras	68
Hungary	73
Iceland	81
India	63
Indonesia	68
Iran (Islamic Republic of)	71
Iraq	
Ireland	79
Israel	80
Italy	81
Jamaica	72
Japan	83
Jordan	71
Kazakhstan	64
Kenya	51
Kiribati	65
Kuwait	78
Kyrgyzstan	65

Lao People's Democratic Republic	60
Latvia	71
Lebanon	71
Lesotho	42
Liberia	43
Libyan Arab Jamahiriya	73
Lithuania	71
Luxembourg	79
Madagascar	58
Malawi	47
Malaysia	72
Maldives	68
Mali	46
Malta	79
Marshall Islands	62
Mauritania	58
Mauritius	73
Mexico	75
Micronesia (Federated States of)	69
Monaco	82
Mongolia	66
Morocco	71
Mozambique	46
Myanmar	59
Namibia	52
Nauru	62
Nepal	61
Netherlands	79
New Zealand	80
Nicaragua	71
Niger	42
Nigeria	48
Niue	71
Norway	80
Oman	74
Pakistan	62
Palau	70
Panama	76
Papua New Guinea	61
Paraguay	73
Peru	72
Philippines	68
Poland	75
Portugal	78
Qatar	78
Republic of Korea	79
Republic of Moldova	69
Romania	72

Russian Federation	66
Rwanda	46
Saint Kitts and Nevis	71
Saint Lucia	75
Saint Vincent and the Grenadines	70
Samoa	68
San Marino	82
Sao Tome and Principe	59
Saudi Arabia	71
Senegal	56
Serbia and Montenegro	73
Sierra Leone	39
Singapore	80
Slovakia	74
Slovenia	78
Solomon Islands	70
Somalia	45
South Africa	51
Spain	81
Sri Lanka	72
Sudan	60
Suriname	69
Swaziland	38
Sweden	81
Switzerland	82
Syrian Arab Republic	73
Tajikistan	65
Thailand	70
The former Yugoslav Republic of Macedonia	74
Timor-Leste	66
Togo	54
Tonga	71
Trinidad and Tobago	71
Tunisia	73
Turkey	72
Turkmenistan	61
Tuvalu	62
Uganda	50
Ukraine	67
United Arab Emirates	78
United Kingdom	79
United Republic of Tanzania	49
United States of America	78
Uruguay	75
Uzbekistan	66
Vanuatu	69
Venezuela (Bolivarian Republic of)	75
Viet Nam	72

Yemen	61
Zambia	40
Zimbabwe	43



Figure 3. Life Expectancy by Gender  
Age (in years)

	Male	Female	Gender Gap
Baltics	66	77	11
RUMB	62	73	11
Caucasus	66	72	6
CAR	61	68	7
E&E Region	66	74	8
EU-25	75	81	6
World	64	68	4

Figure 4. Primary Causes of Adult Mortality in E&E Region, 2003

Circulatory System	57.2%
Cancer	11.7%
Respiratory System	4.9%
Injury/Poisoning	11.4%
Metabolic Disease	0.9%
Infectious/Parasitic Disease	1.7%
All Other	12.3%

FIGURE 5. External-Cause Deaths by Injury and Poisoning and Total Alcohol Consumption in Russia  
(per 100,000 people)

	Total Alcohol Consumption	External Cause Mortality
1984	10.45	178.69
1985	8.8	224.91
1986	5.17	175.56
1987	3.9	171.89
1988	4.4	190.72
1989	5.3	219.77
1990	5.46	233.76
1991	5.88	249.14
1992	5.14	307.95
1993	6.19	412.42
1994	6.82	457.37
1995	8.91	424.84
1996	7.38	368.12
1997	7.46	323.65
1998	8.02	319.68
1999	8.78	350.32
2000	8.78	373.78
2001	8.72	390.59
2002		400.86

FIGURE 6. Age-Specific Under-5 Mortality Rates in E&E Region, 2005  
(Neonatal Mortality, 2004)

Neonatal Mortality	21%
Infant Mortality	35%
Child Mortality	44%

FIGURE 7. Under-5 Mortality Rates, Country Comparisons, 1990 and 2005

	<b>1990</b>	<b>2005</b>
Tajikistan	128	71
Bangladesh	149	73
Kazakhstan	63	73
India	123	74
Azerbaijan	105	89
Gabon	92	91
Turkmenistan	97	104
Congo	110	108

FIGURE 8. Estimated TB Incidence Rates, 2005  
(New Infections per 100,000 population)

Afghanistan	168
Albania	20
Algeria	55
Andorra	18
Angola	269
Antigua and Barbuda	7
Argentina	41
Armenia	71
Australia	6
Austria	11
Azerbaijan	76
Bahamas	38
Bahrain	40
Bangladesh	227
Barbados	11
Belarus	62
Belgium	13
Belize	49
Benin	88
Bhutan	103
Bolivia	211
Bosnia and Herzegovina	52
Botswana	654
Brazil	60
Brunei Darussalam	54
Bulgaria	39
Burkina Faso	223
Burundi	334
Cambodia	506
Cameroon	174
Canada	5
Cape Verde	174
Central African Republic	314
Chad	272
Chile	15
China	100
Colombia	45
Comoros	45
Congo	367
Cook Islands	16
Costa Rica	14
Côte d'Ivoire	382
Croatia	41
Cuba	9
Cyprus	4

Czech Republic	10
Democratic People's Republic of Korea	178
Democratic Republic of the Congo	356
Denmark	7
Djibouti	762
Dominica	16
Dominican Republic	91
Ecuador	131
Egypt	25
El Salvador	51
Equatorial Guinea	233
Eritrea	282
Estonia	43
Ethiopia	344
Fiji	23
Finland	6
France	13
Gabon	308
Gambia	242
Georgia	83
Germany	7
Ghana	205
Greece	17
Grenada	5
Guatemala	78
Guinea	236
Guinea-Bissau	206
Guyana	149
Haiti	305
Honduras	78
Hungary	22
Iceland	3
India	168
Indonesia	239
Iran (Islamic Republic of)	23
Iraq	56
Ireland	12
Israel	8
Italy	7
Jamaica	7
Japan	28
Jordan	5
Kazakhstan	144
Kenya	641
Kiribati	380
Kuwait	24
Kyrgyzstan	121
Lao People's Democratic Republic	155

Latvia	63
Lebanon	11
Lesotho	696
Liberia	301
Libyan Arab Jamahiriya	18
Lithuania	63
Luxembourg	11
Madagascar	234
Malawi	409
Malaysia	102
Maldives	47
Mali	278
Malta	6
Marshall Islands	
Mauritania	298
Mauritius	62
Mexico	23
Micronesia (Federated States of)	105
Monaco	2
Mongolia	191
Morocco	89
Mozambique	447
Myanmar	171
Namibia	697
Nauru	108
Nepal	180
Netherlands	7
New Zealand	9
Nicaragua	58
Niger	164
Nigeria	283
Niue	44
Norway	5
Oman	11
Pakistan	181
Palau	
Panama	45
Papua New Guinea	250
Paraguay	68
Peru	172
Philippines	291
Poland	26
Portugal	33
Qatar	55
Republic of Korea	96
Republic of Moldova	138
Romania	134
Russian Federation	119

Rwanda	361
Saint Kitts and Nevis	11
Saint Lucia	17
Saint Vincent and the Grenadines	29
Samoa	20
San Marino	6
Sao Tome and Principe	105
Saudi Arabia	41
Senegal	255
Serbia and Montenegro	34
Sierra Leone	475
Singapore	29
Slovakia	17
Slovenia	15
Solomon Islands	142
Somalia	224
South Africa	600
Spain	27
Sri Lanka	60
Sudan	228
Suriname	65
Swaziland	1,262
Sweden	6
Switzerland	7
Syrian Arab Republic	37
Tajikistan	198
Thailand	142
The former Yugoslav Republic of Macedonia	30
Timor-Leste	556
Togo	373
Tonga	25
Trinidad and Tobago	9
Tunisia	24
Turkey	29
Turkmenistan	70
Tuvalu	305
Uganda	369
Ukraine	99
United Arab Emirates	16
United Kingdom	14
United Republic of Tanzania	342
United States of America	5
Uruguay	28
Uzbekistan	113
Vanuatu	60
Venezuela (Bolivarian Republic of)	42
Viet Nam	175
Yemen	82



Zambia	600
Zimbabwe	601

FIGURE 9. WHO Regional Comparison of Outcomes for TB Patients Not Successfully Treated with DOTS, 2004

	Died	Failed	Defaulted	Transferred	Not evaluated
Africa	7.0	1.3	9.4	4.9	3.1
Americas	5.0	1.1	6.1	3.2	5.0
East Mediterranean	2.9	1.2	7.7	2.7	2.8
Europe	6.7	6.6	6.5	2.9	3.4
Southeast Asia	4.2	2.0	5.9	1.1	0.3
West Pacific	2.3	1.0	1.7	1.4	2.5

FIGURE 10. Average New TB Cases, All Forms (Subregional), 2005

RUMB	57,109.25
CAR	14,822.6
E&E Region	14,268.23
Southeast Europe	5,320.00
Caucasus	4,066.33
Northern Tier	2,905.2
Baltics	1,386.00

FIGURE 11. Progress Toward WHO Treatment and Detection (70/85) Targets, Country Comparisons, 2005

	<b>X-axis SS+ Case Detection Rate % (2005)</b>	<b>Y-axis Treatment Success Rate %</b>
Tajikistan	22	84
Nigeria	22	73
Ghana	37	72
Russia	30	59
Turkmenistan	43	86
Uzbekistan	39	78
Belarus	46	74
Cote d'Ivoire	38	71
Cambodia	66	91
Kyrgyz	67	85
Kazakhstan	72	72
Armenia	60	70
Estonia	64	71
Azerbaijan	55	60
Moldova	65	62
Botswana	69	65
Romania	82	82
Latvia	83	73
Peru	86	90
Georgia	91	68
Namibia	90	68
Senegal	51	74
Brazil	53	81
Lithuania	100	72

FIGURE 12. DOTS TB Detection Rate for Selected E&E Countries, 2003–2005  
Cases Detected (%)

	2003	2004	2005
Albania	28	41	29
Moldova	18	69	77
Russia	12	19	45
Armenia	53	65	93
Azerbaijan	25	54	74
Kyrgyzstan	25	88	91
Tajikistan	0	14	26
Uzbekistan	48	46	48
Kazakhstan	32	41	55

FIGURE 13. DOTS TB Treatment Success Rate for Selected E&E Countries, 2003–2004  
Cases Successfully Treated (%)

	2003	2004
Albania	91	78
Moldova	65	62
Russia	61	59
Armenia	77	70
Azerbaijan	70	60
Kyrgyzstan	84	85
Tajikistan	86	84
Uzbekistan	81	78
Kazakhstan	75	72

FIGURE 14. HIV Incidence Rates in E&E Region (Subregional), 1998–2005  
New Infections per 100,000 population

	1998	1999	2000	2001	2002	2003	2004	2005
Northern Tier	7.1	6.5	7.3	7.4	8.2	7.5	9.4	11.8
Southeast Europe	9.1	6.8	6.2	7.8	7.9	7.6	8.8	9.6
Baltics	29.7	42.9	166.8	483.2	337.6	277	245	210.5
Caucasus	5.4	9.5	11.3	15	15.6	15.1	22.3	34.7
CAR	4.2	3.1	6.7	13	24.3	30.7	37	41.8
Russia	26.9	134.2	401.1	596.9	328.3	251.6	236.1	247.1
E&E Region	23.4	24.7	58.3	122.5	91.6	79.5	79.5	80.3
E&E Avg w/o Russia	20.7	16.8	32.8	72.7	60.5	54.8	56.8	58.4
UMB	104.2	61.2	68.5	79.4	98.4	101.8	127.4	148.7

FIGURE 15. Reported HIV Transmission Pathways in the E&E Region (Subregional),  
2005

	Northern Tier	Southeast Europe	Baltics	RUMB	Caucasus	CAR
Mother-child	0.60%	1.80%	0.4%	1.6%	2.3%	0.7%
Heterosexual	24.40%	61.10%	16.0%	41.5%	36.2%	22.8%
Men sex with men	47.00%	18.90%	2.5%	0.4%	2.0%	0.2%
IDU	5.90%	8.60%	36.0%	41.1%	55.5%	63.7%

FIGURE 16. Reported New HIV Infections in E&E Region, 2001–2005

	2001	2002	2003	2004	2005
Russia and Ukraine	93,230	55,100	44,558	44,187	46,651
Other E&E	6,684	6,366	6,579	7,141	7,804

FIGURE 17. HIV Incidence Rates in CAR Subregion, 1996–2005  
New Infections per 100,000 population

	1998	1999	2000	2001	2002	2003	2004	2005
Kazakhstan	19.5	12.2	23.1	7.6	46.6	50.3	47.1	65.0
Kyrgyzstan	1.3	2.1	3.2	29.7	31.9	25.3	30.2	32.5
Tajikistan	0.2	0.0	1.1	5.9	4.6	6.6	30.8	29.0
Turkmenistan	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Uzbekistan	0.1	1.1	6.2	21.9	38.5	71.1	76.9	82.7

FIGURE 18. HIV Incidence Rates in Caucasus Subregion, 1996–2005  
New Infections per 100,000 population

	1998	1999	2000	2001	2002	2003	2004	2005
Armenia	2.9	11.3	9.4	9.5	13.4	9.5	16.2	24.9
Azerbaijan	8.2	10.0	7.9	15.6	12.7	13.9	14.6	25.0
Georgia	5.2	7.3	16.7	19.9	20.6	21.9	36.1	54.1

FIGURE 20. Per Capita Government Expenditure on Health (Subregional), 2000–2004 (in US\$)

	2000	2001	2002	2003	2004
Northern Tier	318.84	352.54	417.92	527.20	609.20
Southeast Europe	102.67	106.70	119.93	157.32	178.78
Baltics	141.00	147.03	175.67	234.30	302.17
RUMB	35.20	42.65	51.30	64.65	84.20
Caucasus	6.70	8.67	9.20	10.53	14.07
CAR	17.04	18.56	20.08	26.32	34.90
E&E Average	103.57	112.69	132.35	170.05	203.89

FIGURE 21. Primary Sources of Health Financing, High-Burden Countries  
Percent of Health Financing

2004	OOP	Private	Public	Percent
Azerbaijan	70.20%	25.00%	4.80%	100%
Bangladesh	63.49%	8.67%	27.70%	100%
India	77.57%	5.23%	17.20%	100%
Sudan	63.37%	1.41%	35.22%	100%
Tajikistan	76.28%	2.44%	21.27%	100%
EU-25	20.60%	5.72%	73.68%	100%
E&E	39.18%	6.00%	54.82%	100%

FIGURE 22: Low Public Health Expenditures, Country Comparisons, 2000–2004  
Public Health Expenditure (% of GDP)

	2000	2004
Bangladesh	0.8	0.9
Azerbaijan	0.9	0.9
Indonesia	0.7	1.0
Tajikistan	0.9	1.0
Congo	1.2	1.1
Armenia	1.0	1.4
Georgia	1.2	1.5
E&E Region	3.5	3.7

Severity and Magnitude Index 2007: Country Ranking																					
	Total Pop. (millions)	GDP(\$ mil)	Public Exp. on Health (%GDP)	Public. Exp. Log Score	Life Exp.	Life Exp. (<77.7)	LE Log Score	New HIV Infections (per 1 mil)	# of people HIV positive per 100,000	HIV Log Score	TB Incidence (per 100,000 population- all cases)	#TB Cases (incidence rate per 100,000)	TB Log Score	U5MR	U5MR (>5.7)	U5MR Log Score	AMR	AMR (>92.3)	AMR Log Score	Severity and Magnitude Index	Rank
Albania	3.6	8380	3.00	82.67	75	1.74	19.46	9.9	0.36	3.69	20	0.72	6.79	18	8.72	31.78	135	1.02	9.92	25.7	10
Armenia	3	4903	1.40	90.41	73	2.42	23.45	24.9	0.75	8.08	71	2.13	18.95	29	11.37	36.02	175	1.74	15.67	32.1	14
Azerbaijan	8.1	12561	0.90	75.43	72	1.03	14.09	25	2.03	17.60	76	6.16	35.75	89	12.38	37.40	152	3.26	24.08	34.1	16
Belarus	9.7	29566	4.60	61.47	68	11.24	46.27	77.0	7.47	35.45	62	6.01	35.34	9	7.59	29.61	246	1.07	10.41	36.4	18
Bosnia & Herzegovina	4.5	9949	4.10	80.20	74	0.95	13.41	3.3	0.15	0.80	52	2.34	20.27	15	2.89	15.69	138	1.45	13.60	24.0	8
Bulgaria	7.3	26648	4.60	63.34	73	4.23	31.07	10.7	0.78	8.41	39	2.85	23.14	15	10.10	34.12	151	2.94	22.59	30.4	13
Croatia	4.5	38506	6.10	57.14	76	0.88	12.69	14.5	0.65	7.11	41	1.85	17.01	7	2.57	14.21	115	0.68	6.45	19.1	4
Czech Republic	10.2	124365	6.50	35.43	76	1.97	20.92	8.8	0.90	9.51	10	1.02	10.06	4	3.09	16.58	113	1.53	14.15	17.8	3
Estonia	1.3	13101	4.00	75.59	67	1.38	16.94	467	6.07	32.32	43	0.56	4.80	7	0.64	0.57	197	0.94	9.14	23.2	7
Georgia	4.6	6395	1.50	86.50	73	3.02	26.36	54.1	2.49	20.07	83	3.82	27.71	45	22.22	47.07	122	0.91	8.88	36.1	17
Hungary	9.9	109239	5.70	37.61	73	6.05	36.40	10.9	1.08	11.09	22	2.18	19.26	8	7.43	29.29	180	6.04	33.63	27.9	12
Kazakhstan	15.3	57124	2.30	48.66	66	30.12	62.98	65	9.95	39.89	144	22.03	59.49	73	144.86	79.34	311	23.20	57.09	57.9	25
Kyrgyzstan	5.3	2441	2.30	99.63	68	12.48	48.01	32.5	1.72	15.77	121	6.41	36.47	67	66.43	65.80	235	4.71	29.64	49.2	22
Latvia	2.2	15826	4.00	72.36	71	1.72	19.38	129.6	2.85	21.78	63	1.39	13.44	10	1.89	10.47	211	1.89	16.73	25.7	9
Lithuania	3.6	25625	4.90	64.14	71	2.59	24.30	35	1.26	12.54	63	2.27	19.83	9	2.53	14.00	215	3.07	23.20	26.3	11
Macedonia	2	5766	5.70	89.11	74	0.95	13.41	5.9	0.12	0.34	30	0.60	5.32	17	3.29	17.41	141	0.68	6.41	22.0	6
Moldova	4.3	2917	7.30	98.56	68	6.24	36.88	126.7	5.45	30.72	138	5.93	35.11	16	7.72	29.87	222	4.01	27.17	43.1	20
Montenegro	0.7	26215	4.30	63.54	73	0.42	7.76	13.8	0.10	0.00	33	0.23	0.00	9	0.59	0.00	132	0.20	0.00	11.9	2
Poland	38.5	303229	4.30	17.80	75	13.90	49.79	16.9	6.51	33.36	26	10.01	44.50	8	29.72	51.99	143	13.93	47.91	40.9	19
Romania	22.2	98565	3.40	38.80	72	14.67	50.70	9.4	2.09	17.95	134	29.75	65.36	19	36.86	55.66	165	11.34	44.30	45.5	21
Russia	141.4	763720	3.70	0.00	65	245.17	100.00	247.1	349.40	100.00	119	168.27	100.00	14	201.45	85.10	322	230.49	100.00	80.8	28
Serbia	10.1	26215	7.30	64.49	73	6.05	36.40	13.9	1.40	13.61	33	3.33	25.56	10	9.43	33.03	145	3.55	25.35	33.1	15
Slovakia	5.4	46412	5.30	53.45	74	2.86	25.60	3.9	0.21	1.71	17	0.92	9.01	9	5.06	23.49	139	1.81	16.15	21.6	5
Slovenia	2	34354	6.60	59.38	78	-0.08	0.00	18.3	0.37	3.81	15	0.30	1.11	4	0.69	1.03	110	0.25	0.76	11.0	1
Tajikistan	7.1	2312	1.00	100.00	64	35.26	65.72	29	2.06	17.79	198	14.06	50.86	71	140.86	78.85	178	3.68	25.89	56.5	24
Turkmenistan	5.1	8067	3.30	83.35	63	18.92	54.99	-	-	-	70	3.57	26.64	104	103.43	73.48	240	4.56	29.16	53.5	23
Ukraine	46.3	82876	3.70	42.15	68	49.94	71.80	242.5	112.28	80.42	99	45.84	73.91	17	65.72	65.61	271	57.40	73.83	68.0	26
Uzbekistan	27.8	13951	2.40	74.06	67	96.40	83.40	82.7	22.99	53.50	113	31.41	66.43	68	472.01	100.00	188	16.66	51.11	71.4	27
		EU-25 Average	6.27		EU-25 Average	77.7								EU-25 Average	5.7		EU-25 Average	5.7			

Note: Sources of data are: Life expectancy (WDI 2005). World Bank WDI for 2007; public health expenditure, U5MR, and AMR, WHOSIS 2007. TB incidence rate, WHO Global Atlas 2005; HIV new infection rate, EuroHIV 2007.

No data on the HIV infection rate is available for Turkmenistan.

For sections of this analysis dealing only with E&E countries, total adult mortality was calculated by weighting male and female adult mortality statistics by the ratio of males to females in the population.

EU-25 average excludes France, Italy and Spain for lack of data.  
Total adult mortality is not reported by the WHO or the World Bank.



## Methods in the Index

The severity magnitude index is a way of assessing the size of the population affected for each health measure. Measure of severity are evaluated based a countries reported value above or below a certain target value. For under-five mortality, adult mortality, and life expectancy, "threshold" values were selected as a means to gauge the severity. In this exercise, the EU-25 mean is used as the threshold.

For TB and HIV incidence, any disease prevalence is assumed to be undesirable, since these are preventable disease. Therefore the prevalence rate itself is used in the log score transformation.

For public health expenditure the index seeks to estimate magnitude (commitment) and capacity of public spending on health. A country's total GDP is multiplied by the EU mean expenditure (as a % GDP) to show maximum capacity and the country's GDP times actual expenditure is subtracted. This calculation results shows the gap between what a country would be spending if was spending on par with EU-25, and what the country is actually spending. This value is converted to a log score.

Since each indicator has different denominators, the resulting weighted value for each indicator is then converted to a log score in order to keep all values, regardless of measurement, between 3 and -3. These "scores" can then be summed into an index, and countries ranked based on their total score.