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Trends in neonatal and infant mortality in five continents

Summary

Trends in the mortality rates for the periods 0–6, 7–27, 28–365 and 0–365 days after birth have been analysed in 48 European, American, African, Asian and Australian countries included in the World Health Organization (WHO) mortality database. From the late 1960s to the early 1990s infant mortality rates declined steadily and markedly in most countries worldwide. Only three countries (Bulgaria, Dominican Republic and Ecuador) showed some increase in rates in the late 1980s after, however, appreciable decreasing trends in earlier calendar periods. In the late 1980s or early 1990s three Latin American countries (Ecuador, Colombia and Dominican Republic) showed the highest rates in all the indicators considered, with the exception of 0–6 days of life mortality, where Sri Lanka ranked second in mortality rates. Intermediate rates (around 10–25/1000 live births for 0–365 days of life mortality) were reported by a number of Latin American, Asian and Central European countries. Rates lower than 10/1000 live births for the 0–365 days of life mortality were reported from the USA, Canada, most western European countries and four Asian countries (Israel, HongKong, Singapore and Japan, which registered the lowest rate). The major decreases were observed in the 0–6 days mortality rates. The proportional reductions were comparable for the period 7–27 and 28–365 days of life in several countries, and generally did not show a consistent pattern, some countries showing greater reduction for 7–27 days of life mortality rates and others vice versa. Thus, in the late 1960s in most countries the large majority of infant deaths occurred in the first month of life, but in the early 1990s this proportion had declined, and the 0–6/7–365 days of life rates ratios were below unity in most countries. In most South American countries, however, the ratio was generally close to unity in both calendar periods.

Over the last three decades, a reduction in infant mortality (i.e. mortality during the first year of life) has been described in many areas of the world. Marked differences, however, still exist in infant mortality rates both between and within countries[1,2]. Likewise, the patterns of trends over time in neonatal, post-neonatal and infant mortality still differ appreciably in various areas of the world.

Data on infant mortality are available for many countries, but there is no complete and systematic report of trends, even in those areas for which data are available covering the last few decades.

The aim of the present report is to describe trends in infant mortality in 46 European, American, Asian and Australasian countries using data from the World Health Organization (WHO) mortality database. The description of these trends in a large and heterogeneous group of countries from four continents offers an opportunity to epidemiologists, pediatricians and public health workers for comparative analysis.

Materials and methods

Number of deaths from 1 to 365 days of life over the period 1965–1992, and estimates of the resident population were derived from the official WHO database, including data on day of death (0–6, 7–27, 28–365 days of life) in individual calendar years. There were 48 countries for which reliable and comprehensive data on

infant mortality had been collected. (The study excluded very small countries.)

Europe

Data were available for the 24 major European countries. Excluded were former Soviet Union, Albania and a few small countries such as Andorra, Liechtenstein, etc.

The Americas

The WHO database contains data on mortality and population for 49 American countries or territories. Excluded were all countries with populations of less than 2'000'000, and of the 24 countries left, only those with age-stratified mortallity and population figures in sufficient detail were retained: 10 countries (Bolivia, Brazil, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Nicaragua, Paraguay and Peru) were excluded at this stage. The analysis is thus based on data from Canada, the United States, and 12 latin American Countries: Argentina, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Mexico, Panama, Puerto Rico (a self-governing commonwealth, but not an independent country), Uruguay and Venezuela.

Asia, Africa and Oceania

Ten countries provided mortality data: Hong Kong (not an independent country but a self-governing commonwealth), Israel, Japan, Kuwait, Singapore, Sri Lanka, Thailand and Mauritius, Australia and New Zealand.

Estimates of the resident population in the first year of life, based on official censuses, were obtained from the same WHO database.

From the matrices of certified deaths and resident population mortality rates for 0–6, 7–27, 28–365 and the total 0–365 days of life were computed for subsequent calendar quinquennia, and presented in tabular and in graphical form for each country considered.

In a few countries data were missing for part of one or more calendar periods.

Table 1 shows the calendar years for which data were missing for each country considered. When a single year was missing within a quinquennium, numerators and denominators were interpolated linearly from the previous and subsequent calendar years. No extrapolation was made for missing data at the beginning or the end of the calendar period considered, or when data on one or more quinquennia were not available. To provide as far as possible uniform presentation for various countries, while maintaining visual information on the trends over time, a limited number of scales (15, 20, 30, 40, 50, 60 and 90/1000 live-births) were adopted.

Further, the annual percentual change in the 0–6, 7–27, 28–365 and 0–365 mortality rates was estimated as 100% difference in death rate between the last and the first calendar period divided by the number of years for which data were available.

Results

The 0–6, 7–27, 28–365 and 0–365 days of life mortality rates are presented for each country and calendar quinquennium in Figures 1–3.

From the late 1960s to early 1990s infant mortality rates declined steadily and markedly in most of the countries considered. Only three countries (Bulgaria, Dominican Republic and Ecuador) showed some increasing rates in the late 1980s. However, these followed appreciable downward trends from the 1960s to the early 1980s.

Despite these favourable trends over the last few decades, large differences in infant mortality rates still persist between countries, and appreciable variations are also evident between countries in similar geographic areas.

Figure 4 gives the histogram of 0–6, 7–27, 28–365 and 0–365 days of life mortality in each country over the most recent calendar period (generally 1990–1992, unless otherwise specified).

A few Latin American countries (Ecuador, Colombia and Dominican Republic) showed the highest rates in all the indicators considered, with the exception of mortality in the period 0–6 days, where Sri Lanka ranked second. Intermediate rates (around 10–25/1000 live births for 0–365 days of life mortality) were reported by a number of Southern American, Asian and Central European countries. Rates lower than 10/1000 live births for 0–365 days of life mortality are reported from the USA, Canada, most of the European countries and four Asian ones (Israel, Hong Kong, Singapore, and Japan, which registered the lowest rate worldwide).

Over the last three decades, most trends in rates were relatively linear, but a few peculiar patterns should be noted (Figures 1–3). In central Europe (Austria, Germany, Hungary and Czechoslovakia), infant mortality rates did not show any appreciable reduction in the late 1960s or early 1970s, but from the 1970s onwards the decrease was marked and consistent. Likewise, in the U.K. the reduction was less marked in the late 1960s and 1970s than thereafter. In Scandinavian countries, which showed some of the lowest rates worldwide in the late 1960s, the reduction was consistent till the mid-1980s, but in the late 1980s – early 1990s the decreasing trends showed some indication of levelling off, although these countries maintain comparatively low infant mortality rates.

In Southern European countries (Italy, France, Greece, Spain), the

Country	Percent change/year* 0–365 days	7–27 days	28–365 days	0–6 days	Calendar years for which data were missing
Americas					
Argentina	3.6	1.3	4.2	5.3	1965–1968, 1971–1976, 1980–1981, 1991–1992
Canada	4.2	5.0	2.5	3.5	1965–1968, 1979, 1980–1985, 1992
Chile	7.4	4.9	8.7	8.6	1965–1967, 1983–1985, 1990–1992
Colombia	3.2	3.3	3.5	3.1	1965–1968, 1970–1971, 1973, 1978, 1980–1992
Costa Rica	5.9	3.8	6.8	7.5	1965–1974, 1977–1979, 1981, 1992
Cuba	5.6	5.2	5.7	5.9	1965–1967, 1991–1992
Dominican Republic	1.1	3.8	0.4	0.4	1965–1969, 1973, 1986–1992
Ecuador	2.9	–	4.3	3.5	1965–1968, 1974–1976, 1979–1983, 1987–1992
Mexico	4.3	–	–	–	1965–1967, 1977–1986, 1992
Panama	3.3	1.6	4.7	4.4	1965–1967, 1977–1978, 1987–1992
Puerto Rico	3.9	4.0	4.1	3.3	1965–1969, 1971–1974, 1978–1979, 1992
USA	3.4	4.4	1.5	1.9	1965–1967, 1991–1992
Uruguay	3.7	–	–	–	1965–1969, 1973–1975, 1977–1986, 1991–1992
Venezuela	3.0	1.6	3.9	4.1	1965–1969, 1973–1976, 1978–1984,1990–1992
Asia, Oceania					
Hong Kong	5.4	5.4	4.7	5.6	1965–1971, 1976–1984, 1987–1992
Israel	3.5	3.6	2.0	4.0	1965–1979, 1991–1992
Japan	4.8	5.4	5.2	3.9	1965–1967
Kuwait	5.5	1.3	8.8	8.8	1965–1971, 1973–1984, 1988–1992
Singapore	5.3	6.0	3.5	5.1	1965–1967, 1992
Sri Lanka	5.7	4.0	6.3	7.9	1965–1979, 1982, 1984, 1987–1992
Thailand	4.7	1.1	5.7	5.5	1965–1968, 1987–1992
Australia	3.6	4.6	1.9	2.3	1965–1967
New Zealand	3.0	4.4	1.5	1.8	1965–1967, 1992
Europe					
Austria	4.8	6.6	1.7	3.1	1965–1968
Belgium	4.2	5.8	2.7	2.5	1965–1967, 1985, 1990–1992
Bulgaria	2.5	1.9	2.2	2.9	1965–1967
Czechoslovakia	2.8	3.2	0.6	2.8	1965–1967, 1975–1986, 1992
Denmark	3.0	4.6	1.5	0.5	1965–1968, 1978
Finland	3.8	4.5	3.0	2.5	1965–1968
France	3.3	4.8	3.4	1.9	1965–1967, 1992
Germany	4.8	7.2	2.6	1.9	1965–1967, 1992
Greece	5.0	4.8	5.1	5.4	1965–1967, 1992
Hungary	3.5	4.0	2.3	2.9	1965–1968
Iceland	4.8	6.5	3.3	0.8	1965–1970, 1987–1992
Ireland	4.1	4.8	3.2	3.5	1965–1975, 1992
Italy	5.5	4.8	5.3	7.1	1965–1967, 1991–1992
Malta	4.2	5.0	0.2	5.0	1965–1969, 1973–1977, 1987–1992
Netherlands	2.7	3.2	4.2	1.5	1965–1968, 1970, 1992
Norway	2.9	4.6	1.4	0.5	1965–1968, 1992
Poland	3.3	2.0	2.7	5.1	1965–1968
Portugal	7.2	5.2	7.5	9.0	1965–1970
Romania	3.2	3.2	3.9	3.0	1965–1968, 1975, 1979

Table 1. *Percentual annual decrease in 0–6, 7–27, 28–365, 0–365 days of life mortality.*

Country	Percent change/year* 0–365 days	7–27 days	28–365 days	0–6 days	Calendar years for which data were missing
Spain	5.0	5.9	3.4	4.4	1965–1974, 1991–1992
Sweden	2.7	4.1	3.1	0.5	1965–1968, 1991–1992
Switzerland	3.4	4.7	2.7	1.5	1965–1968
UK, England and Wales	3.3	4.4	2.7	1.8	1965–1967, 1987–1992
UK, Northern Ireland	4.5	5.1	4.2	3.6	1965–1967, 1978, 1987–1992
UK, Scotland	4.2	4.8	3.8	3.5	1965–1967, 1974–1978, 1987–1992
Yugoslavia	3.8	2.7	2.9	5.1	1965–1976, 1991–1992

* The percentual annual decrease was based on period for which data were available, see also Table 1.

Table 1. *(continued).*

decrease was substantial and constant during the whole period considered, although most of these countries started with high rates.

Among the few Asian countries providing data, the favourable rate of Japan should be noted, where the decrease was constant during the whole period. Trends were extremely favourable also in Singapore (which registered a rate of 6.1/1000 livebirths in the early 1990s), Hong Kong (7.6) and Thailand (10.1). In the early 1990s Japan had the lowest infant mortality rate worldwide (4.5/1000 livebirths).

The U.S. and Canada showed comparable rates in the late 1960s, but in the late 1980s and early 1990s Canada showed a considerably more favourable infant mortality (6.7 vs. 9.2/1000).

In most Latin American countries, the reduction in infant mortality was appreciable and constant, with the exception of Argentina, where infant mortality rate tended to level off in the late 1980s and early 1990s. More marked proportional reductions were observed in Chile (from 82 to 19/1000 livebirths). In the early 1990s the lowest rates were observed in Cuba, with a value comparable to that of the United States. Cuba had relatively

	1965–1969	1990–1994
Americas		
Argentina	0.4	1.0
Canada	1.8	1.2
Chile	0.3	0.7*
Colombia	0.4	0.3°
Costa Rica	0.5°	0.9
Cuba	0.6	0.8
Dominican Republic	0.4§	0.7**
Ecuador	0.2	0.3″
Mexico	0.3	0.5*
Panama	0.5	0.9″
Puerto Rico	1.6§	1.5
USA	2.1	1.1
Uruguay	0.7§	–
Venezuela	0.5	0.9*
Asia, Oceania		
Hong Kong	1.1§	1.1″
Israel	1.0^	1.0
Japan	0.9	0.7
Kuwait	0.5§	1.4′
Singapore	1.3	0.9
Sri Lanka	0.8°	1.2″
Thailand	0.1	0.3″
Australia	1.9	1.0
New Zealand	1.2	0.7
Mauritius	0.5	1.9

Table 2. *0–6/7–365 days of life mortality rate ratios in selected calendar periods and countries.*

	1965–1969	1990–1994
Europe		
Austria	1.9	0.7
Belgium	1.5	0.8*
Bulgaria	0.5	0.6
Czechoslovakia	1.5	1.1
Denmark	2.3	0.9
Finland	2.1	1.3
France	1.0	0.5
Germany	2.2	0.6
Greece	0.8	0.9
Hungary	1.9	1.4
Iceland	3.0§	1.0″
Ireland	1.2°	1.0
Italy	1.1	1.6
Malta	2.0§	1.5″
Netherlands	1.9	1.5
Norway	2.1	0.8
Poland	0.7	1.2
Portugal	0.5§	1.0
Romania	0.3	0.3
Spain	1.2°	0.9
Sweden	0.4	1.1
Switzerland	1.9	0.9
UK, England and Wales	1.4	0.8″
UK, Northern Ireland	1.3	1.0″
UK, Scotland	1.2	0.9″
Yugoslavia	0.6°	0.8

§ 1970–1974; ° 1975–1979; ^ 1980–1984; ″1985–1986; ´1985–1987; * 1985–1989.

Table 2. *(continued).*

low mortality rates in the late 1960s, too.

Australia and New Zealand registered comparable rates during the whole period considered. In these countries, the reductions were constant, the rates being about 18/1000 livebirths in the late 1960s and about 7 to 8/1000 livebirths in the early 1990s.

Considering separately mortality at 0–6, 7–27 and 28–365 days or life, different trends emerged across countries. For example Romania, which registered one of the highest 0–365 days mortality rates, showed a 0–6 days of life mortality rates comparable to that in most other European countries. In Romania, however, the 28–365 days mortality was about threefold higher than that in the 0–6 day period, while in most other European countries the 28–365 days mortality was similar, or more frequently lower, than the 0–6 one.

Table 1 shows the annual percent decrease in the mortality rates for the periods 0–6, 7–27, 28–365 and 0–365 days. Considering the 0–365 days infant mortality, the annual percentage decrease ranged from 2.7% in Sweden and the Netherlands to 7.2% in Portugal for European countries, from 3.1% in Venezuela to 7.4% in Chile for the Americas and from 3.0% in New Zealand to 5.7% in Sri Lanka among Australasian and Asian countries. These figures, however, have to be related to the initial values, and reflect a systematic tendency for the rates to level off towards lower values in several areas of the world.

The major decreases were generally observed in the 0–6 day mortality rates. The percent reductions were comparable for the periods 7–27 and 28–365 days of life in several countries, and generally did not show consistent patterns, some countries showing greater reduction for 7–27 days of life mortality rates, and others vice versa. Thus, in the late 1960s, in most countries of the world the large majority of infant deaths occurred in the first month of life, but in the early 1990s this proportion has declined, and the ratio of the rates for 0–6/7–365 days of life were generally less than unity (Table 2). In South American countries, however, the ratio was generally close to unity in both calendar periods.

The percent decrease was similar in most areas of the world, but countries with lower 0–365 days of life mortality rates in the early 1960s registered systematically smaller decreases in proportional terms for the 28–365 days of life mortality.

Comment

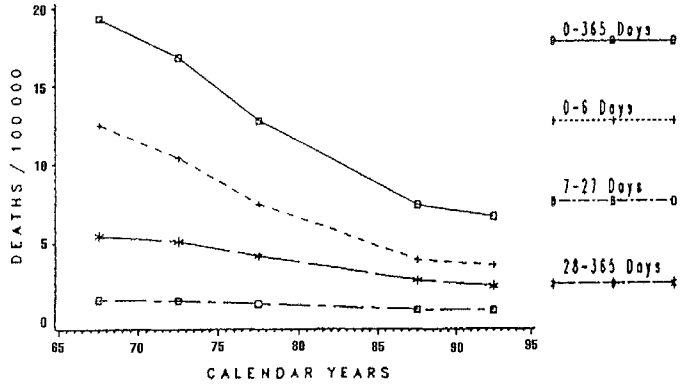
Infant mortality is not only a major public health and social issue, but also a standard and well-recognized indicator of the health status of a population[3]. Thus, the general decrease in mortality gives evidence of a generalized improvement in health status of infants, in those countries providing data for the WHO datasets.

It must be borne in mind that trends in those countries providing complete statistics do not necessarily reflect trends in other countries in the same continent. There is inevitably a certain amount of selec-

CANADA

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	12.48	1.42	5.44	7149	19.34
70–74	10.38	1.38	5.09	29826	16.85
75–79*	7.42	1.17	4.17	18347	12.75
80–84					
85–89*	3.93	0.80	2.65	11144	7.38
90–94*	3.58	0.76	2.27	5337	6.61

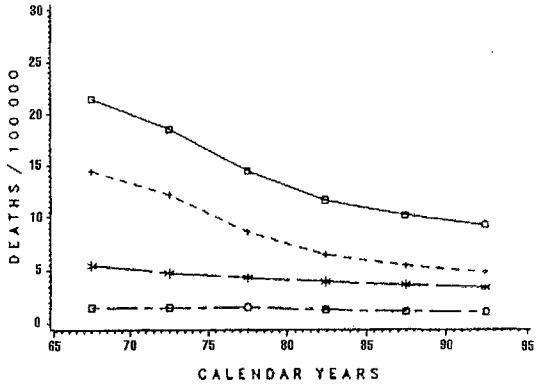
* Information is missing for one or more years



UNITES STATES OF AMERICA

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	14.42	1.49	5.49	151336	21.40
70–74	12.20	1.49	4.78	311187	18.48
75–79	8.59	1.52	4.31	237375	14.42
80–84	6.45	1.25	3.91	211439	11.61
85–89	5.43	1.10	3.63	195894	10.15
90–94*	4.81	1.03	3.38	38351	9.22

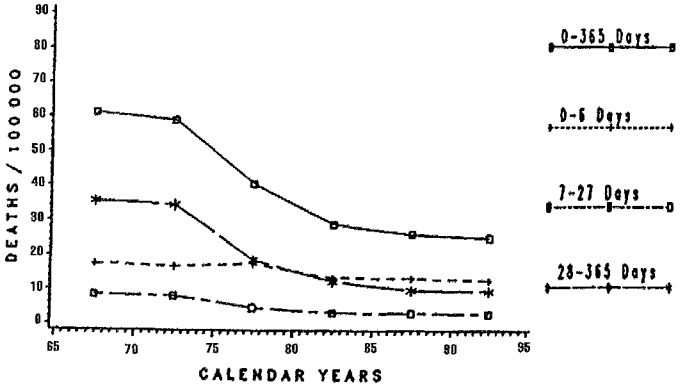
* Information is missing for one or more years



ARGENTINA

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	17.31	8.39	35.41	30025	61.11
70–74*	16.54	8.04	34.27	32044	58.85
75–79*	17.19	4.62	18.40	81551	40.21
80–84*	13.27	3.29	12.15	58858	28.71
85–89	13.08	3.09	9.65	87136	25.82
90–94*	12.45	2.91	9.36	17304	24.72

* Information is missing for one or more years



CHILE

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	19.96	11.40	49.74	43963	81.10
70–74	18.49	9.78	41.54	94753	69.79
75–79	15.17	6.13	25.34	57014	46.63
80–84*	10.87	3.01	13.51	21582	27.40
85–89*	7.47	2.01	8.89	21183	18.37
90–94					

* Information is missing for one or more years

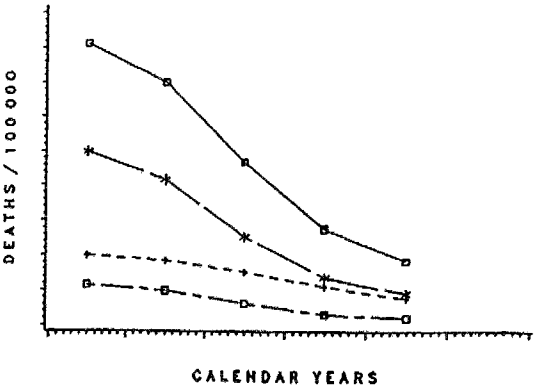
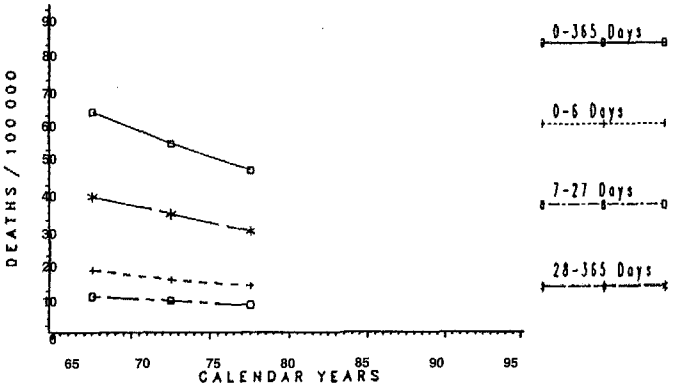


Figure 1. *Trends in infant mortality (rate/1000 livebirths) in American countries, 1965–1994.*

COLOMBIA

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	15.88	8.42	36.66	42131	60.97
70–74*	12.99	7.11	31.71	76945	51.82
75–79*	11.39	5.94	26.81	100342	44.14
80–84					
85–89					
90–94					

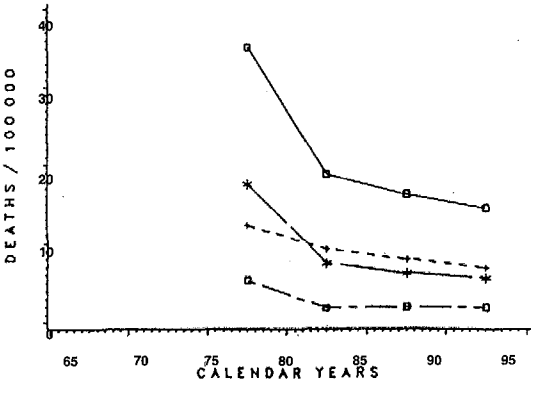
* Information is missing for one or more years



COSTA RICA

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69					
70–74					
75–79*	12.29	5.32	17.57	4189	35.18
80–84*	9.39	1.89	7.58	5529	18.86
85–89	8.07	1.96	6.27	6723	16.29
90–94*	6.96	1.91	5.67	2372	14.55

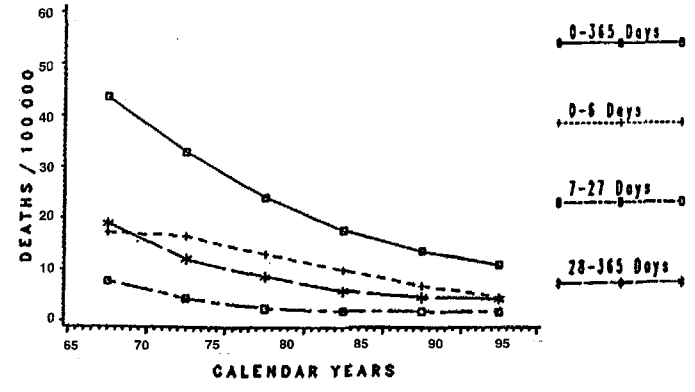
* Information is missing for one or more years



CUBA

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	17.09	7.66	18.83	21135	43.59
70–74	16.35	4.41	11.94	38268	32.70
75–79	12.82	2.45	8.50	19957	23.77
80–84	9.69	1.91	5.72	13237	17.31
85–89	6.75	1.91	4.59	11930	13.25
90–94*	4.62	1.83	4.29	2004	10.74

* Information is missing for one or more years



DOMINICAN REPUBLIC

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69					
70–74*	13.34	7.94	26.69	32059	47.97
75–79	11.40	6.96	18.47	32192	36.82
80–84	11.78	5.52	14.98	30437	32.28
85–89*	23.67	7.99	24.97	6411	56.63
90–94					

* Information is missing for one or more years

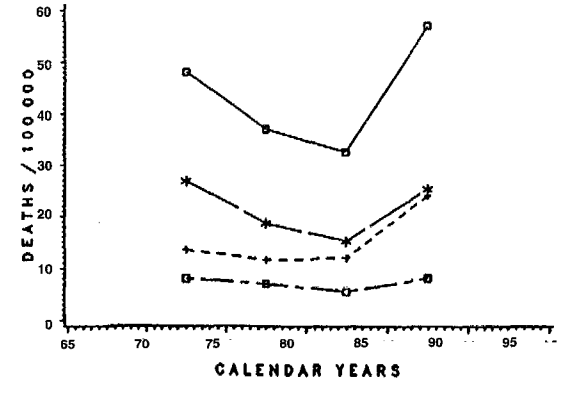
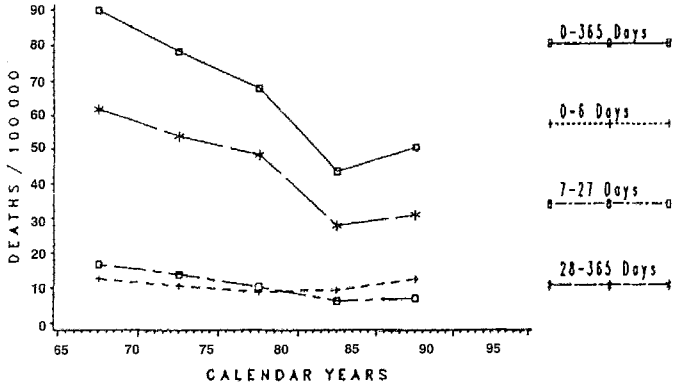


Figure 1. *(continued).*

ECUADOR

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	12.63	16.72	61.65	20076	91.01
70–74*	10.57	13.89	53.77	75178	78.23
75–79*	8.92	10.38	48.29	30681	67.59
80–84*	9.44	6.22	27.76	11161	43.42
85–89*	12.57	7.02	30.89	20987	50.48
90–94					

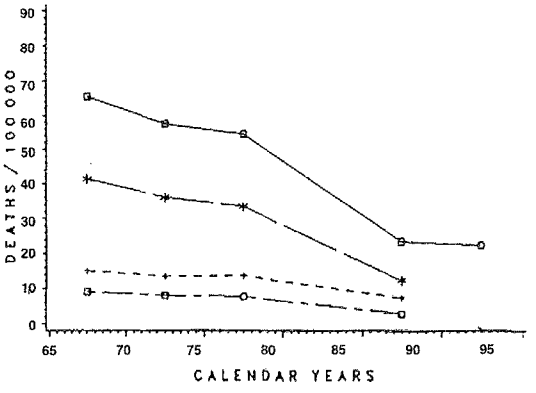
* Information is missing for one or more years



MEXICO

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	15.03	9.09	41.36	271564	65.48
70–74	13.44	8.02	36.06	685679	57.52
75–79*	13.61	7.65	33.40	241065	54.65
80–84					
85–89*	7.31	2.75	12.36	187831	23.43
90–94*	0.00	0.00	0.00	122012	22.39

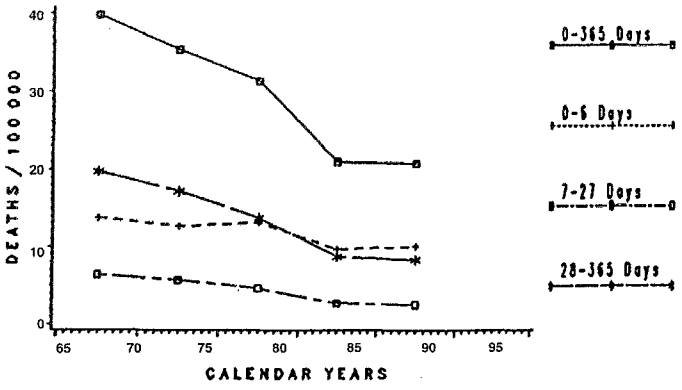
* Information is missing for one or more years



PANAMA

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	13.73	6.34	19.69	4187	39.77
70–74	12.60	5.62	17.14	9475	35.36
75–79*	13.02	4.55	13.62	4982	31.19
80–84	9.59	2.63	8.65	5695	20.87
85–89*	9.94	2.45	8.19	2381	20.58
90–94					

* Information is missing for one or more years



PUERTO RICO

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69					
70–74*	17.50	4.43	6.72	1932	28.65
75–79*	13.63	2.38	4.36	4434	20.37
80–84	12.02	2.01	3.43	5985	17.46
85–89	8.53	2.25	3.15	4488	13.93
90–94*	7.83	1.94	3.44	1731	13.21

* Information is missing for one or more years

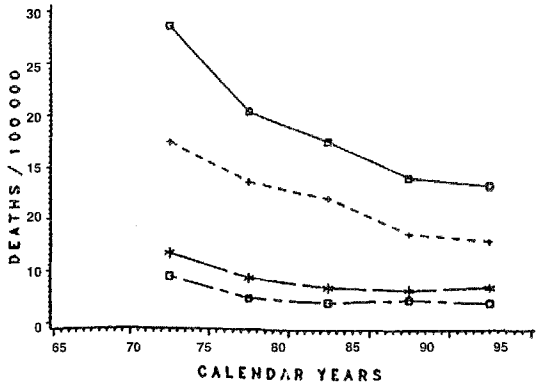


Figure 1. *(continued).*

URUGUAY

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69					
70–74*	17.07	5.82	19.85	8218	42.73
75–79*	18.13	4.41	18.21	2715	40.76
80–84					
85–89*	0.00	0.00	0.00	3607	21.95
90–94*	0.00	0.00	0.00	1148	20.31

* Information is missing for one or more years

VENEZUELA

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	16.17	6.62	23.15	17669	45.93
70–74*	16.44	7.04	27.05	60874	50.53
75–79*	14.46	4.80	20.28	18391	39.53
80–84					
85–89	11.72	3.02	10.19	64211	24.94
90–94					

* Information is missing for one or more years

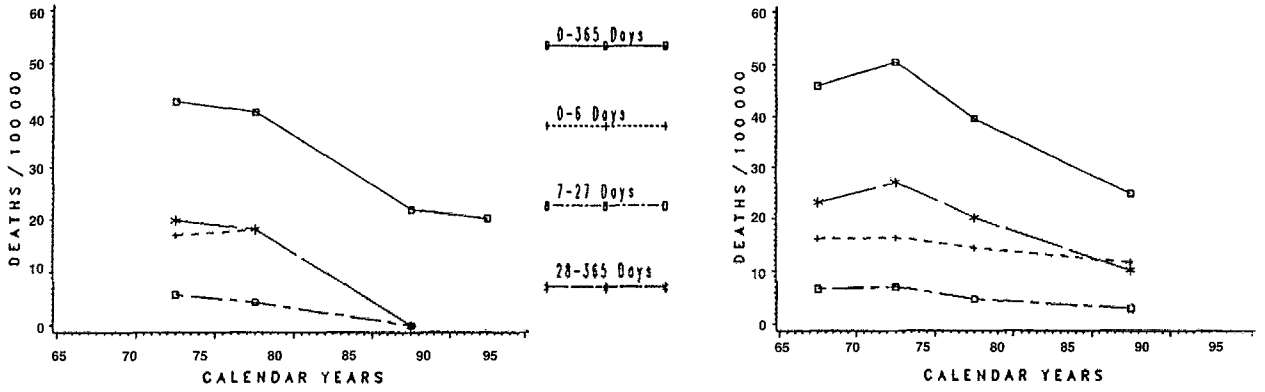


Figure 1. *(continued).*

tion: for example no African country (except Mauritius) is included. One might add that those countries reporting complete data are likely to be those with a well-functioning health system, which may reflect a generally high socio-economic level. However, in the analysis presented here substantial differences persisted also among these countries.

The main purpose of this paper is descriptive, since it offers a systematic overview of trend in infant mortality over the last few decades in several countries, and provides material for further analysis. The present analysis provides some quantification for the differences in infant health status that still exist. The decline in infant mortality rate is largely consistent with the reduction registered in the same calendar period and in the same countries for most other indicators of maternal and perinatal mortality[4–6].

Most of the reductions in infant mortality are attributable to a reduction in mortality during the first 0–6 days of life: in fact, if in the 1960s about two thirds of infant deaths occurred in most countries in the first week of life, in the 1980s this proportion was less than 50%. The only exception was in some areas of South America, where the 0–6/7–365 mortality rates ratio was close to unity both in the earliest and in the most recent calendar period. In the interpretation of the differences among countries and in the temporal trends of 0–6 day of life mortality, the problem of different methods of registering stillbirths should be always taken into account. For example, in Denmark about half of all first-day deaths in liveborn babies occurred during the first 4 hours of life, thus differences in the system for registration of early deaths could affect the stillbirth and first day of life rates[7].

It is difficult to interpret the favourable trends observed in the 48 countries considered in terms of specific technical or socio-economic improvements. The decline has been generally constant in most countries, and no marked reduction in mortality rates was observed in the 1980s, when neonatal assistance registered substantial improvements. This suggests that improvements in socio-economic and cultural conditions and general medical assistance, rather than specific advances and technical changes may explain the reduction in infant mortality. This is confirmed by the observation that the few countries showing unfavourable infant mortality trends over the last few decades (including the Dominican Republic, and especially Romania) suffered substantial

HONG KONG

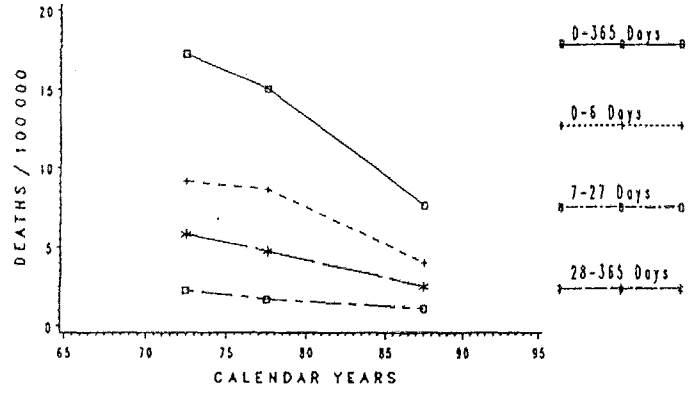
Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69					
70–74*	9.13	2.24	5.82	4146	17.20
75–79*	8.61	1.68	4.72	1173	15.00
80–84					
85–89*	4.03	1.10	2.50	1134	7.63
90–94					

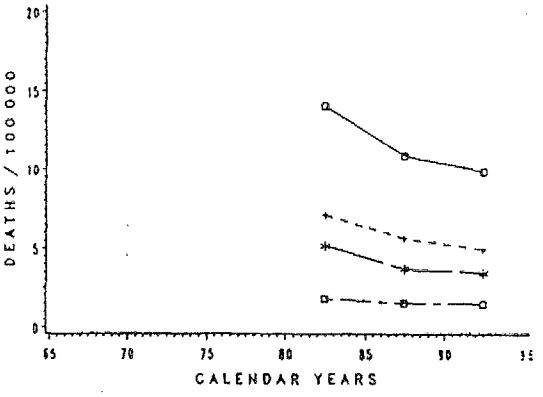
* Information is missing for one or more years

ISRAEL

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69					
70–74					
75–79					
80–84	7.10	1.80	5.18	6770	14.08
85–89	5.68	1.51	3.71	5435	10.89
90–94*	4.97	1.48	3.47	1026	9.93

* Information is missing for one or more years





JAPAN

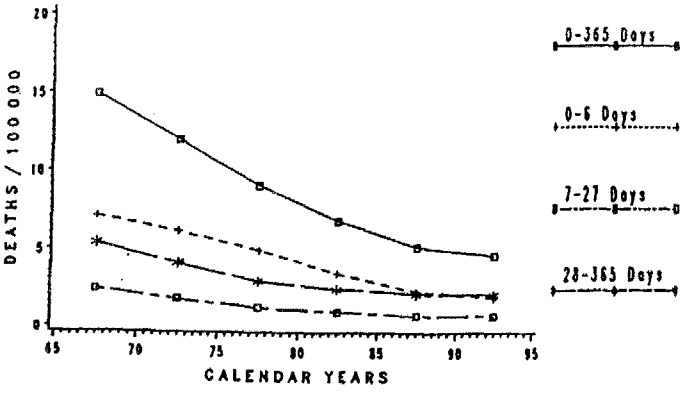
Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	7.09	2.39	5.36	55474	14.85
70–74	8.10	1.74	4.03	119561	11.88
75–79	4.86	1.20	2.89	79124	8.95
80–84	3.37	0.94	2.39	51027	6.70
85–89	2.26	0.71	2.07	33850	5.04
90–94*	1.82	0.66	2.04	16511	4.52

* Information is missing for one or more years

KUWAIT

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69					
70–74*	12.10	6.34	20.06	1451	38.50
75–79					
80–84					
85–89*	9.91	1.69	5.39	2731	16.98
90–94					

* Information is missing for one or more years



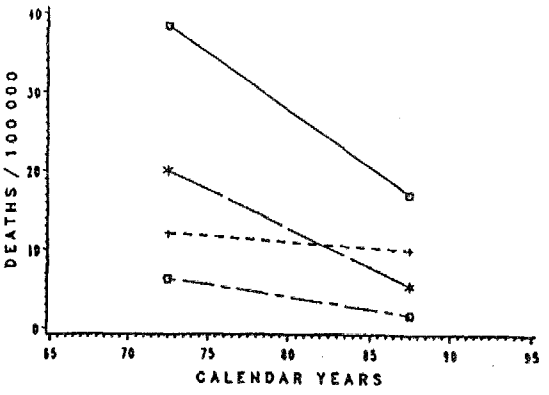
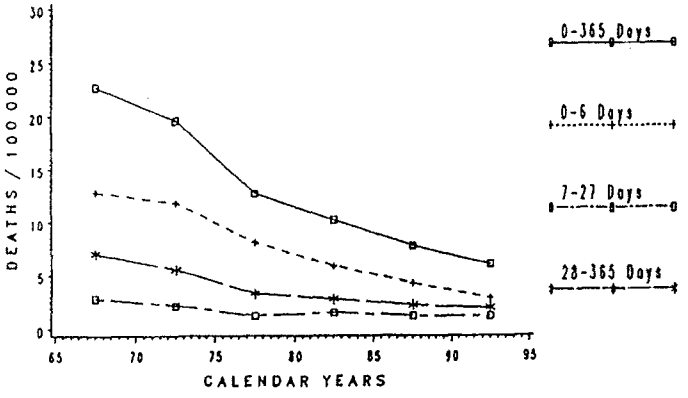


Figure 2. *Trends in infant mortality (rate/1000 livebirths) in Asian and Oceanian countries, 1965–1994.*

SINGAPORE

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	12.83	2.85	7.07	2089	22.76
70–74	11.83	2.19	5.57	4590	19.60
75–79	8.13	1.26	3.32	2560	12.72
80–84	5.90	1.55	2.78	2130	10.23
85–89	4.28	1.24	2.24	1748	7.77
90–94*	2.87	1.20	1.99	608	6.06

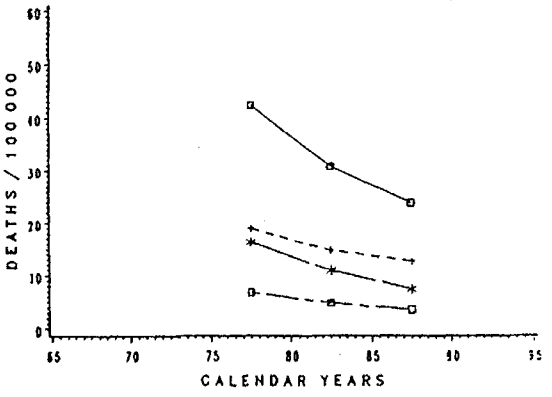
* Information is missing for one or more years



SRI LANKA

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69					
70–74					
75–79*	19.06	6.85	16.48	16513	42.39
80–84*	14.87	4.88	11.06	38390	30.81
85–89*	12.82	3.64	7.49	17816	23.95
90–94					

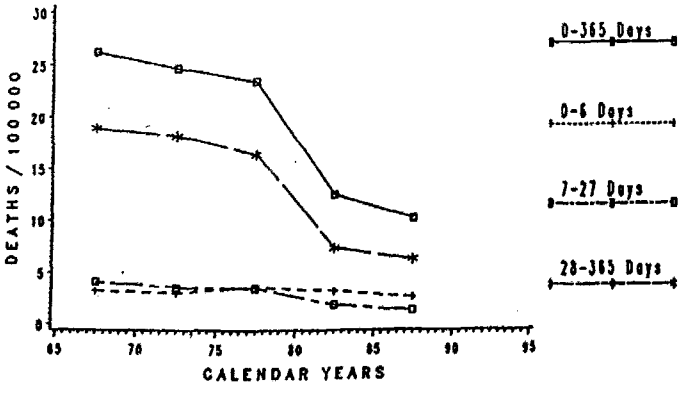
* Information is missing for one or more years



THAILAND

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	3.23	4.07	18.91	29705	26.21
70–74	3.00	3.52	18.05	145242	24.58
75–79	3.57	3.46	16.22	130987	23.26
80–84	3.20	1.85	7.31	64793	12.36
85–89*	2.61	1.31	6.25	19524	10.17
90–94					

* Information is missing for one or more years



MAURITIUS

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	23.02	8.20	39.14	1528	70.35
70–74	21.07	7.35	27.47	5862	55.90
75–79	18.41	4.14	17.33	4616	39.87
80–84	14.17	3.84	11.16	3182	29.17
85–89	13.54	3.37	6.58	2277	23.50
90–94*	12.40	1.85	4.56	1230	18.81

* Information is missing for one or more years

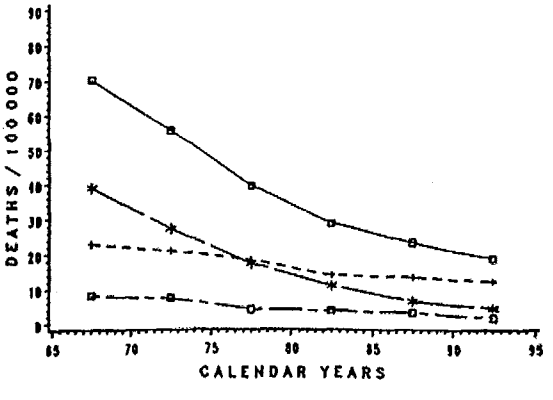


Figure 2. *(continued).*

AUSTRALIA

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	11.66	1.27	4.93	8765	17.85
70–74	10.88	1.23	4.80	21854	16.92
75–79	7.68	1.18	3.95	14563	12.81
80–84	5.31	1.07	3.62	11789	10.01
85–89	4.29	1.01	3.51	10852	8.80
90–94*	3.65	0.79	2.75	5557	7.19

* Information is missing for one or more years

NEW ZEALAND

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	9.88	1.45	6.46	2221	17.79
70–74	8.74	1.31	6.10	5006	16.15
75–79	6.76	1.25	6.20	3824	14.20
80–84	4.44	1.09	6.74	3107	12.26
85–89	3.72	0.97	6.03	2952	10.71
90–94*	3.32	0.99	4.10	1011	8.41

* Information is missing for one or more years

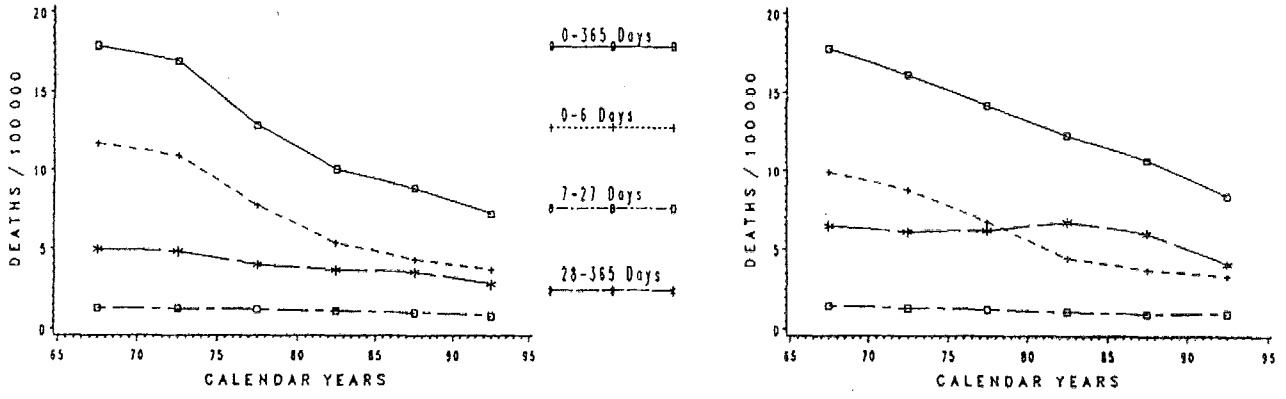


Figure 2 *(continued)*

AUSTRIA

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	16.77	1.92	6.76	3089	25.45
70–74	16.10	2.26	6.58	12978	24.94
75–79	9.89	2.04	5.19	7511	17.13
80–84	6.41	1.53	4.68	5794	12.62
85–89	4.38	1.31	3.84	4174	9.54
90–94*	3.23	1.26	3.12	2135	7.61

* Information is missing for one or more years

BELGIUM

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	12.84	1.89	6.76	6097	21.48
70–74	11.37	1.79	5.99	12886	19.14
75–79	8.22	1.45	4.45	8583	14.12
80–84	5.47	1.33	4.21	6642	11.02
85–89*	4.04	1.10	4.07	4374	9.21
90–94					

* Information is missing for one or more years

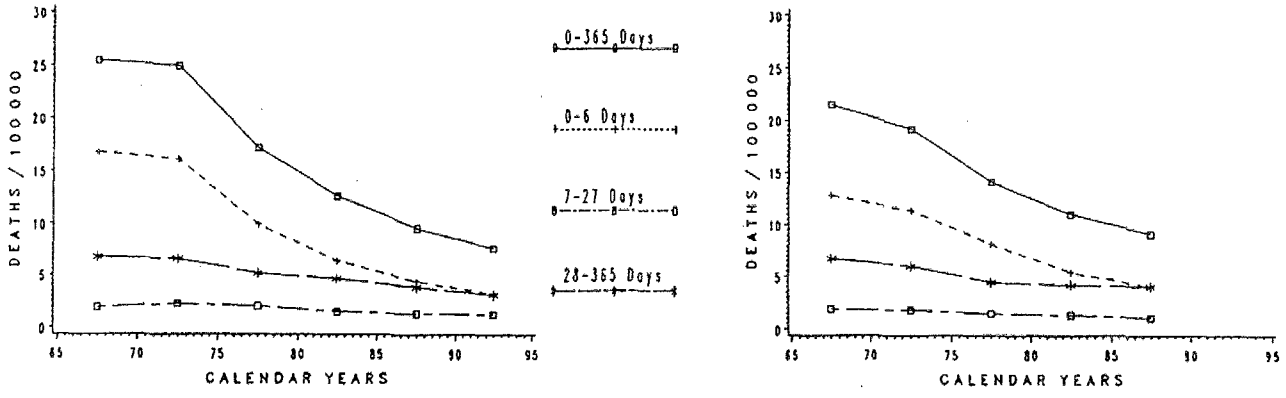
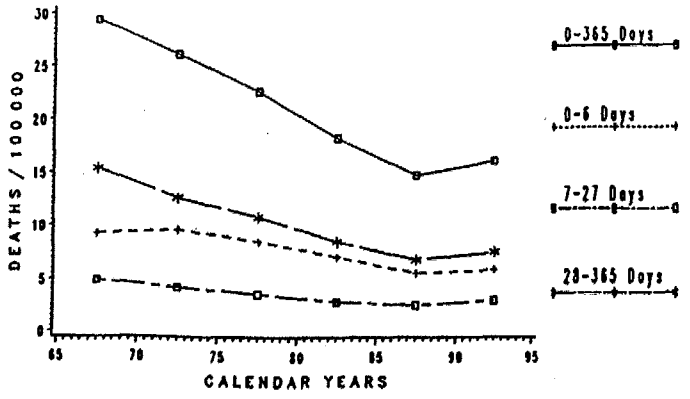


Figure 3. *Trends in infant mortality (rate/1000 livebirths) in European countries, 1965–1994.*

BULGARIA

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	9.21	4.87	15.32	8366	29.40
70–74	9.47	4.09	12.45	18053	26.00
75–79	8.38	3.49	10.60	15845	22.47
80–84	6.92	2.75	8.34	11200	18.01
85–89	5.41	2.44	6.66	8515	14.51
90–94*	5.69	2.84	7.32	4598	15.84

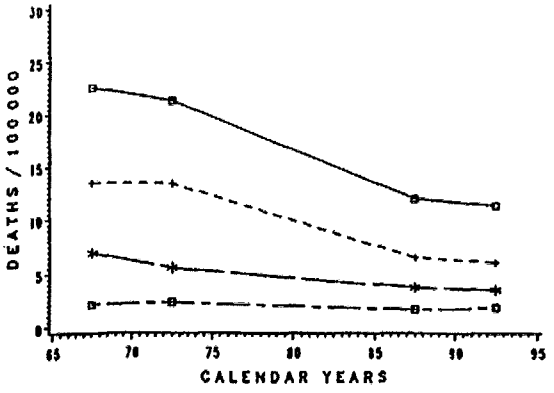
* Information is missing for one or more years



CZECHOSLOVAKIA

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	13.54	2.11	6.98	9884	22.63
70–74	13.48	2.32	5.59	27441	21.39
75–79					
80–84					
85–89*	6.60	1.67	3.77	7695	12.04
90–94*	6.06	1.80	3.49	4751	11.35

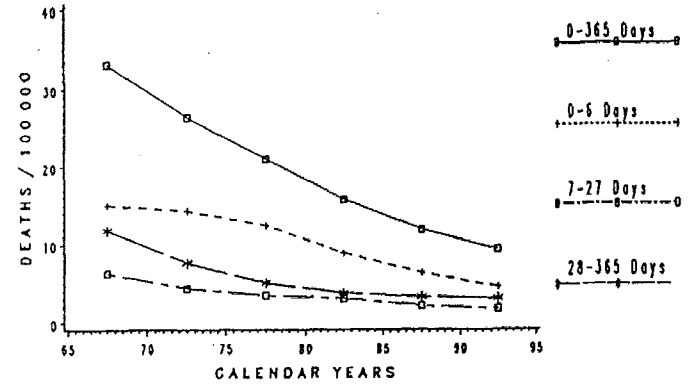
* Information is missing for one or more years



GREECE

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	15.02	6.33	11.78	10417	33.13
70–74	14.29	4.44	7.67	18706	26.40
75–79	12.38	3.48	5.10	15241	20.96
80–84	8.86	3.08	3.78	10763	15.72
85–89	6.39	2.14	3.31	6451	11.84
90–94*	4.54	1.78	3.06	1920	9.37

* Information is missing for one or more years



HUNGARY

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	23.24	4.05	8.42	5511	35.71
70–74	24.78	3.25	6.43	27511	34.45
75–79	19.42	2.73	5.52	24509	27.68
80–84	13.03	2.85	4.88	14071	20.79
85–89	10.84	2.56	4.30	11179	17.69
90–94*	8.57	2.25	4.04	5566	14.85

* Information is missing for one or more years

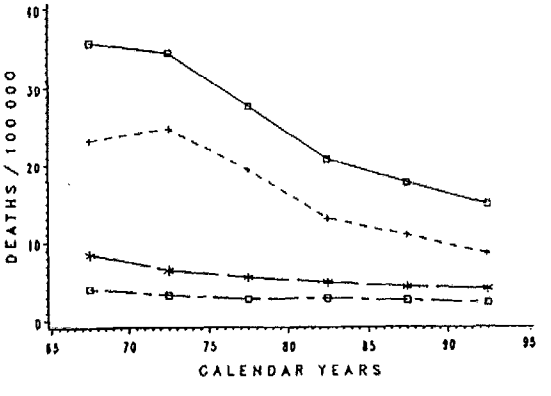
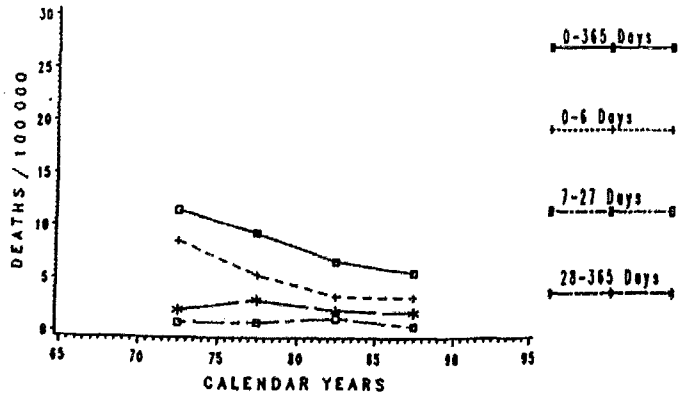


Figure 3. *(continued).*

ICELAND

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69					
70–74*	8.53	0.85	2.03	202	11.42
75–79	5.36	0.89	3.01	197	9.26
80–84	3.36	1.29	1.98	144	6.64
85–89*	3.23	0.52	1.81	43	5.56
90–94					

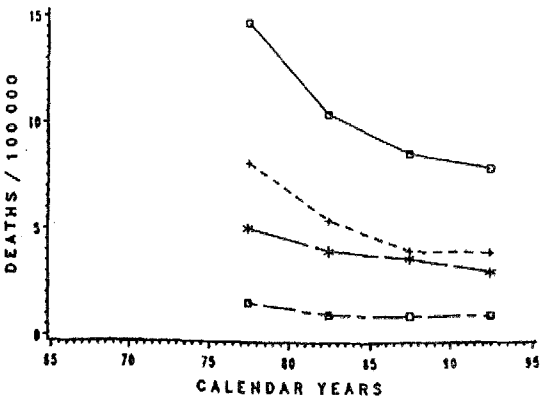
* Information is missing for one or more years



IRELAND

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69					
70–74					
75–79*	8.06	1.55	5.03	4094	14.65
80–84	5.41	0.99	3.97	3606	10.36
85–89	3.97	0.92	3.61	2457	8.51
90–94*	3.93	0.96	2.99	834	7.89

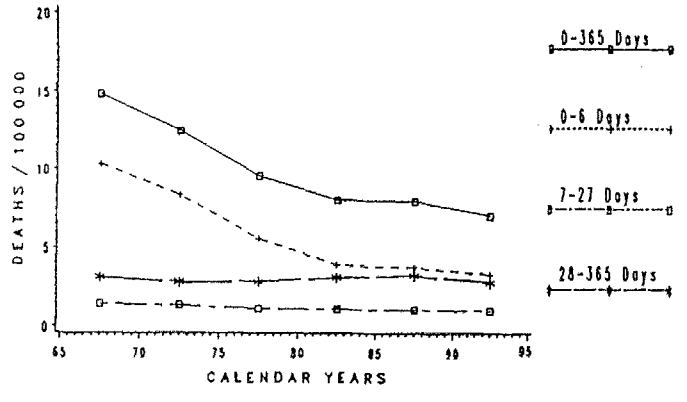
* Information is missing for one or more years



DENMARK

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	10.31	1.44	3.09	1058	14.84
70–74	8.33	1.31	2.77	4530	12.41
75–79*	5.58	1.14	2.81	2465	9.53
80–84	3.88	1.07	3.06	2125	8.00
85–89	3.72	1.04	3.19	2269	7.95
90–94*	3.27	1.00	2.75	1374	7.02

* Information is missing for one or more years



FINLAND

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	9.67	1.48	3.11	962	14.26
70–74	8.26	1.23	2.47	3628	11.96
75–79	5.59	1.01	2.08	2827	8.68
80–84	3.73	0.78	2.08	2140	6.59
85–89	3.28	0.84	1.96	1887	6.08
90–94*	3.17	0.71	1.65	1095	5.53

* Information is missing for one or more years

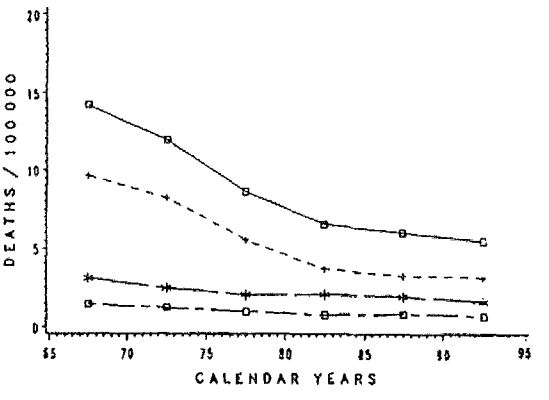


Figure 3. *(continued).*

FRANCE

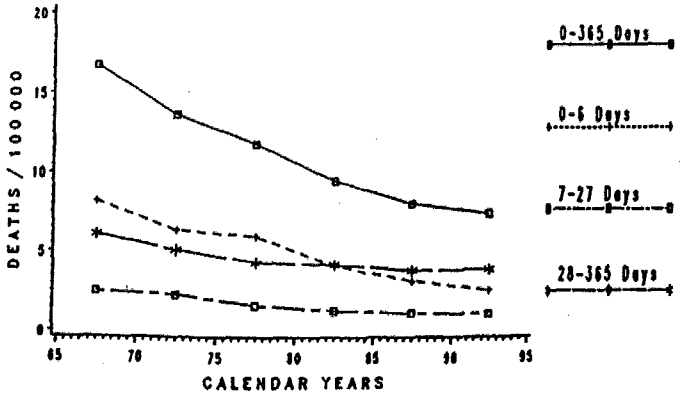
Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	8.14	2.49	6.05	27903	16.68
70–74	8.26	2.24	5.02	57540	13.52
75–79	5.86	1.59	4.23	43267	11.68
80–84	3.99	1.25	4.09	36505	9.33
85–89	3.09	1.09	3.74	30475	7.91
90–94*	2.48	1.05	3.77	11110	7.30

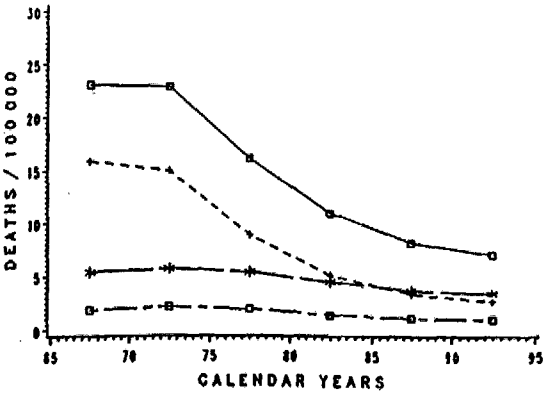
* Information is missing for one or more years

GERMANY

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	15.88	1.84	5.38	43272	23.10
70–74	15.06	2.19	5.73	81014	22.97
75–79	8.89	1.93	5.40	47741	16.22
80–84	5.10	1.42	4.51	33592	11.03
85–89	3.34	1.11	3.66	26060	8.11
90–94*	2.64	0.97	3.35	12096	6.97

* Information is missing for one or more years; 1990 includes (ex) GDR





ITALY

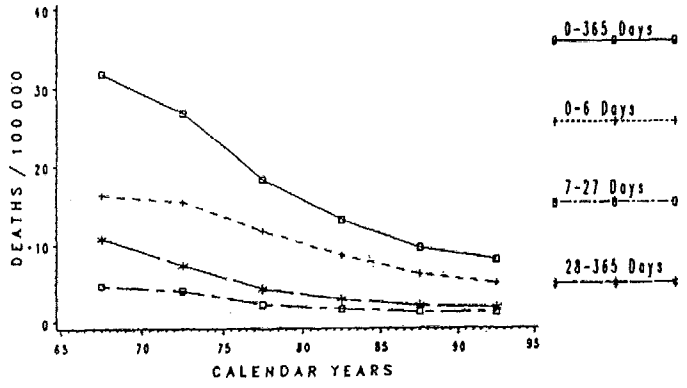
Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	16.32	4.68	10.79	59207	31.79
70–74	15.38	4.03	7.33	119243	26.74
75–79	11.72	2.26	4.27	68794	18.25
80–84	8.58	1.67	2.90	40279	13.15
85–89	6.18	1.27	2.11	27298	9.56
90–94*	4.97	1.23	1.82	4654	8.01

* Information is missing for one or more years

MALTA

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69					
70–74*	15.80	2.71	5.17	385	23.68
75–79*	10.94	2.39	3.37	287	16.70
80–84	9.17	2.03	2.46	383	13.66
85–89*	7.49	2.62	2.44	134	12.55
90–94					

* Information is missing for one or more years



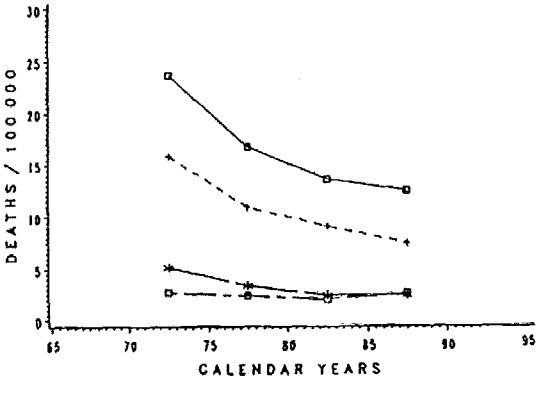
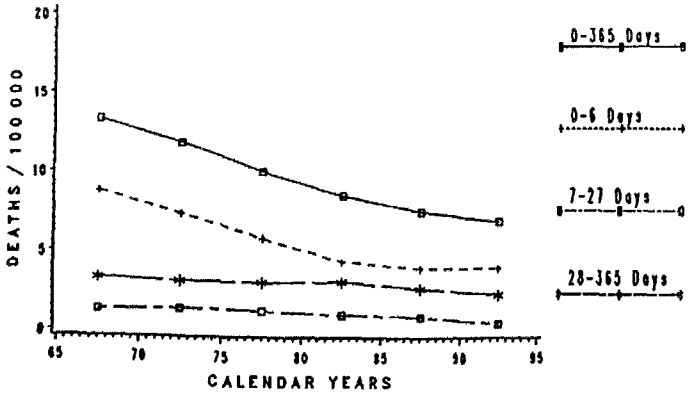


Figure 3. *(continued).*

NETHERLANDS

Years of Deaths	0–6 DAYS	7–27 DAYS	28–365 DAYS	0–365 DAYS	
	Rate	Rate	Rate	No.Deaths	Rate
65–69*	8.69	1.28	3.26	3276	13.23
70–74*	7.24	1.38	3.07	9614	11.69
75–79	5.67	1.21	2.96	8643	9.84
80–84	4.32	1.02	3.06	7358	8.39
85–89	3.88	0.88	2.64	6840	7.40
90–94*	3.92	0.45	2.26	2692	6.79

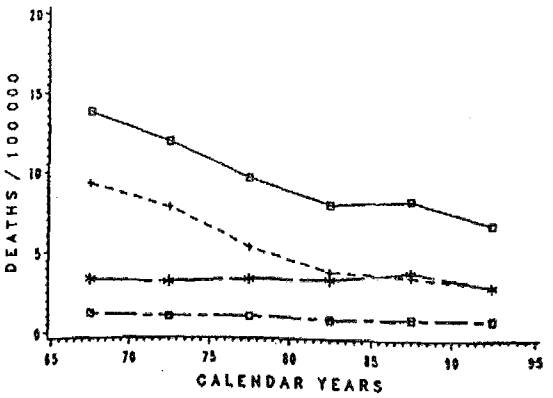
* Information is missing for one or more years; see also Methods



NORWAY

Years of Deaths	0–6 DAYS	7–27 DAYS	28–365 DAYS	0–365 DAYS	
	Rate	Rate	Rate	No.Deaths	Rate
65–69*	9.27	1.18	3.32	933	13.77
70–74	7.83	0.96	3.16	3767	11.95
75–79	5.32	1.00	3.35	2553	9.67
80–84	3.84	0.83	3.31	2020	7.98
85–89	3.49	0.90	3.81	2250	8.20
90–94*	2.96	0.83	2.91	815	6.69

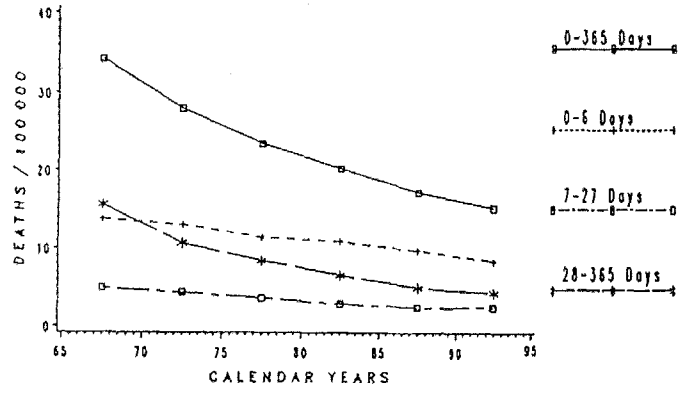
* Information is missing for one or more years



POLAND

Years of Deaths	0–6 DAYS	7–27 DAYS	28–365 DAYS	0–365 DAYS	
	Rate	Rate	Rate	No.Deaths	Rate
65–69*	13.79	4.91	15.59	18209	34.28
70–74	12.99	4.30	10.65	81111	27.93
75–79	11.37	3.59	8.38	77752	23.34
80–84	10.79	2.80	6.51	70211	20.10
85–89	9.77	2.46	4.96	52752	17.19
90–94*	8.37	2.47	4.31	24336	15.16

* Information is missing for one or more years



PORTUGAL

Years of Deaths	0–6 DAYS	7–27 DAYS	28–365 DAYS	0–365 DAYS	
	Rate	Rate	Rate	No.Deaths	Rate
65–69					
70–74*	15.00	6.11	22.51	30885	43.62
75–79	14.41	4.53	12.79	27769	31.73
80–84	11.24	2.42	6.83	15337	20.49
85–89	8.43	1.52	4.76	9138	14.71
90–94*	5.29	1.36	3.72	3606	10.37

* Information is missing for one or more years

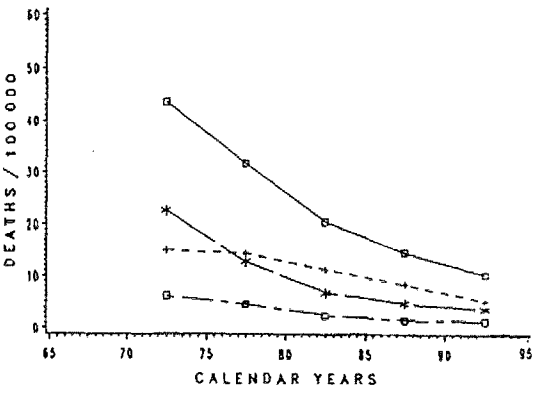
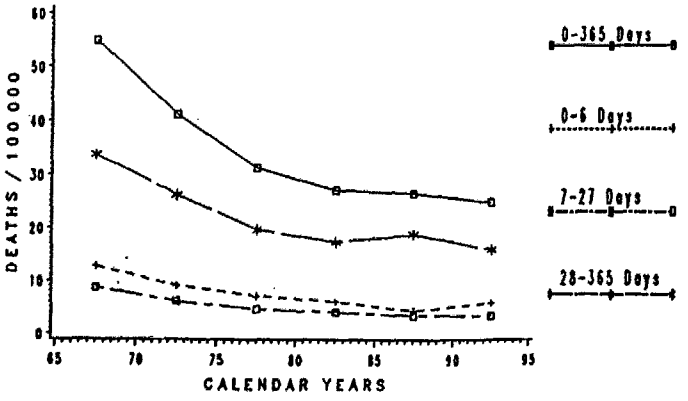


Figure 3. *(continued).*

ROMANIA

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	12.62	8.64	33.67	25583	54.93
70–74	8.99	6.03	26.03	83042	41.05
75–79*	7.00	4.49	19.44	38906	30.93
80–84	5.89	3.93	16.96	48117	26.78
85–89	4.23	3.36	18.41	48597	26.01
90–94*	5.70	3.23	15.54	20809	24.47

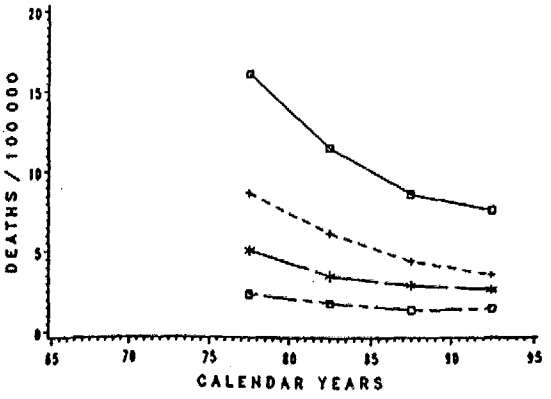
* Information is missing for one or more years



SPAIN

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69					
70–74					
75–79	8.67	2.35	5.06	53017	16.08
80–84	6.17	1.80	3.50	29439	11.47
85–89	4.35	1.34	2.89	18448	8.58
90–94*	3.55	1.42	2.62	3050	7.60

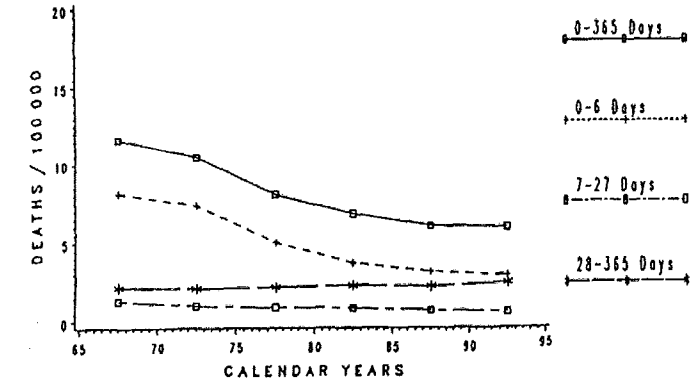
* Information is missing for one or more years



SWEDEN

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	8.12	1.32	2.18	1251	11.62
70–74	7.38	0.99	2.09	5817	10.45
75–79	4.99	0.88	2.17	3921	8.04
80–84	3.70	0.84	2.28	3202	6.82
85–89	3.14	0.70	2.21	3227	6.05
90–94*	2.90	0.60	2.46	739	5.96

* Information is missing for one or more years



SWITZERLAND

Years of Deaths	0–6 DAYS Rate	7–27 DAYS Rate	28–365 DAYS Rate	0–365 DAYS No.Deaths	0–365 DAYS Rate
65–69*	10.09	1.35	3.92	1574	15.35
70–74	8.14	1.37	4.22	6301	13.73
75–79	5.50	1.12	3.08	3577	9.70
80–84	4.10	0.90	2.81	2891	7.80
85–89	3.50	0.79	2.67	2706	6.96
90–94*	3.09	0.69	2.71	1668	6.49

* Information is missing for one or more years

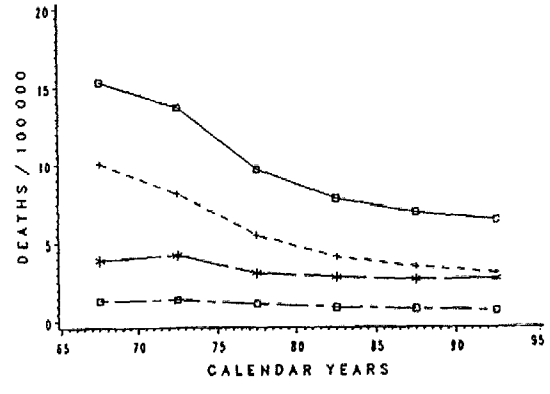
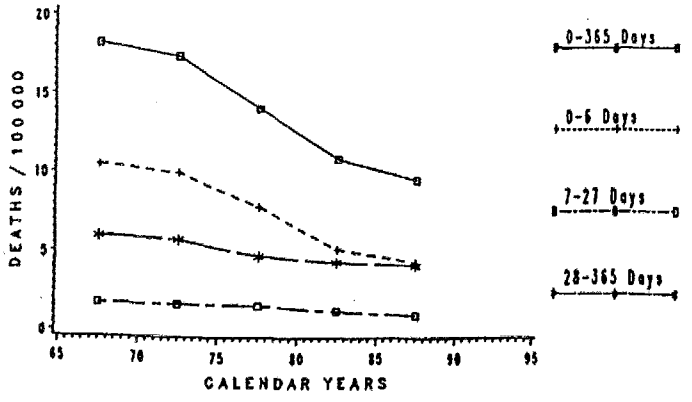


Figure 3. *(continued).*

UK, ENGLAND AND WALES

Years of Deaths	0–6 DAYS	7–27 DAYS	28–365 DAYS	0–365 DAYS	
	Rate	Rate	Rate	No.Deaths	Rate
65–69*	10.46	1.74	5.97	29373	18.17
70–74	9.88	1.69	5.71	62351	17.28
75–79	7.73	1.58	4.64	41722	13.95
80–84	5.13	1.28	4.31	34113	10.72
85–89*	4.31	1.02	4.12	12454	9.45
90–94					

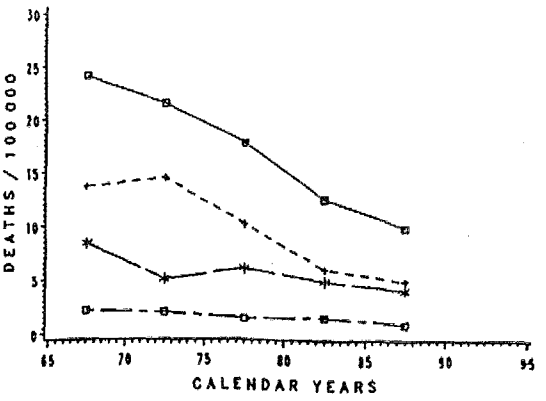
* Information is missing for one or more years



UK, NORTHERN IRELAND

Years of Deaths	0–6 DAYS	7–27 DAYS	28–365 DAYS	0–365 DAYS	
	Rate	Rate	Rate	No.Deaths	Rate
65–69*	13.66	2.13	8.38	1586	24.18
70–74	14.56	2.00	5.07	3249	21.63
75–79*	10.28	1.46	6.11	1870	17.85
80–84	6.04	1.58	4.93	1731	12.55
85–89*	4.89	0.91	4.07	551	9.88
90–94					

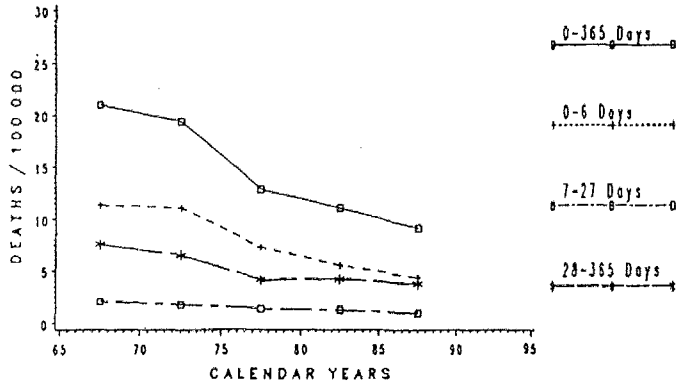
* Information is missing for one or more years



UK, SCOTLAND

Years of Deaths	0–6 DAYS	7–27 DAYS	28–365 DAYS	0–365 DAYS	
	Rate	Rate	Rate	No.Deaths	Rate
65–69*	11.32	2.07	7.53	3872	20.92
70–74*	11.05	1.79	6.50	6325	19.34
75–79*	7.28	1.40	4.15	878	12.84
80–84	5.56	1.27	4.22	3682	11.05
85–89*	4.36	0.97	3.76	1205	9.10
90–94					

* Information is missing for one or more years



YUGOSLAVIA

Years of Deaths	0–6 DAYS	7–27 DAYS	28–365 DAYS	0–365 DAYS	
	Rate	Rate	Rate	No.Deaths	Rate
65–69					
70–74					
75–79*	13.06	4.04	16.95	38983	34.05
80–84	12.27	3.58	14.32	56780	30.17
85–89	11.68	3.07	10.92	45640	25.67
90–94*	8.76	2.60	7.90	6457	19.27

* Information is missing for one or more years

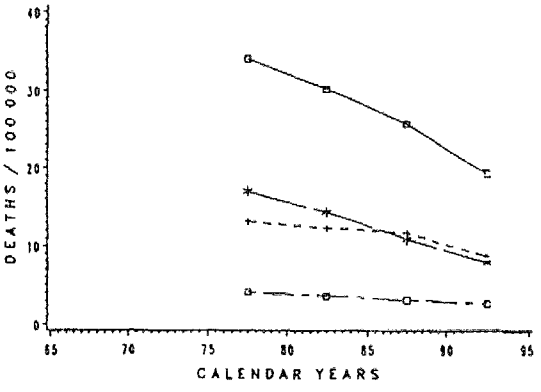


Figure 3. *(continued).*

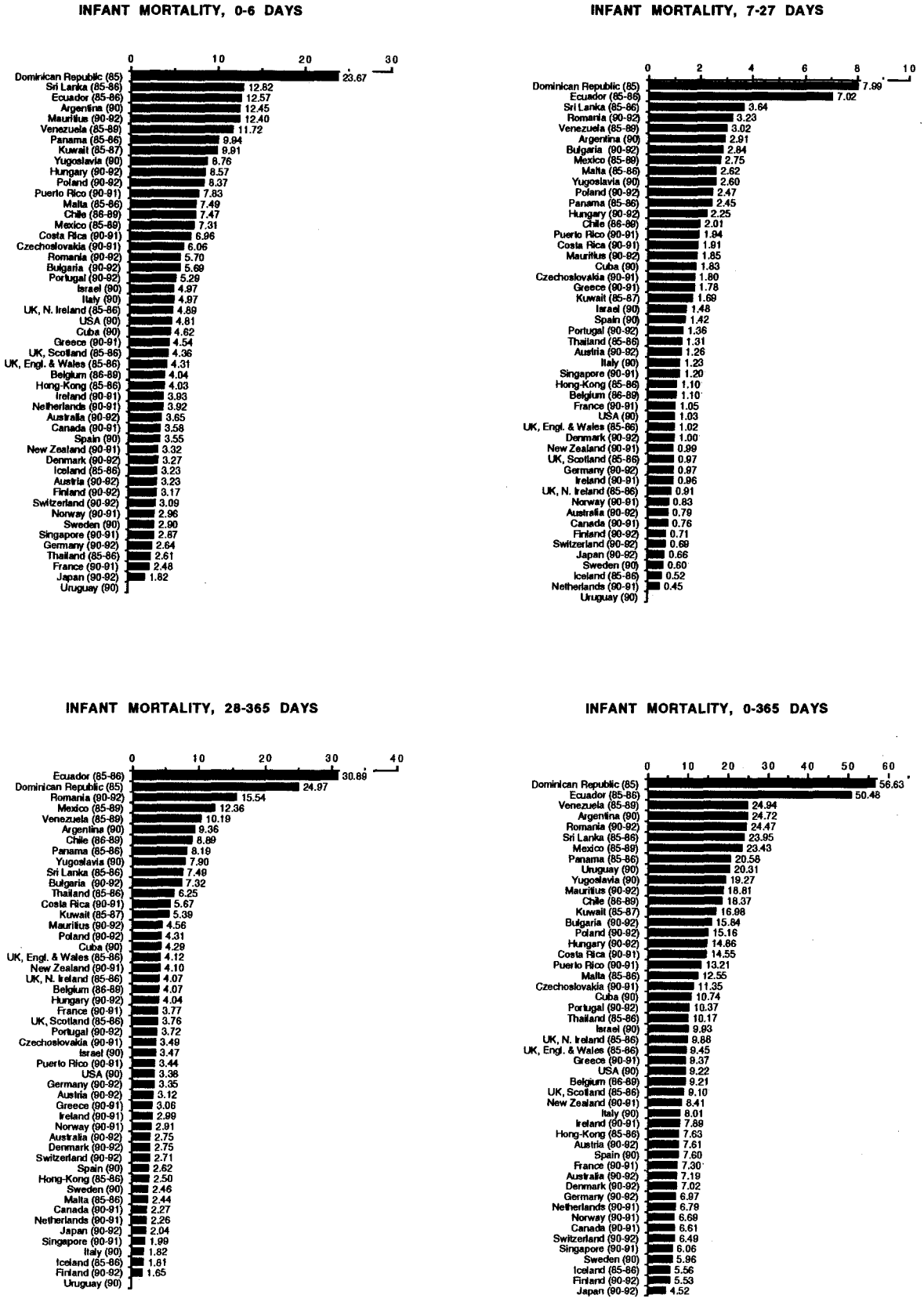


Figure 4. *Infant mortality (rate/1000 livebirths) according to periods of death in the 46 countries considered over the most recent calendar period for which date were available.*

socio-economic, cultural and political disruption over the same calendar period. The role of socio-economic factors in infant mortality has been confirmed in analyses of intra-country differences in infant mortality for example in the USA[8]. Some additional indications of the factors underlying the unfavourable levels in some countries can be derived from inspection of separate rates at various periods which show particularly high rates in these countries at 28–365 days, a period when general medical assistance and social factors may play a major role in infant health. No conclusions can be drawn about the countries for which complete data was not available, which include populous countries like India and the People's Republic of China, and the whole of the African continent.

However, this overview of trends in infant mortality shows evidence that in most of the 48 countries for which data is available there have been marked improvements in the health status of infants in several parts of the world. However, marked differences do still persist among countries, since in the early 1990s there was more than 10-fold difference between the lowest and the highest infant mortality rates registered, even among the 48 countries considered.

Zusammenfassung

Tendenzen der neonatalen und Kinder-Sterblichkeitsraten in fünf Kontinenten

Die Sterblichkeitsraten nach 0–6, 7–27, 28–365 und 0–365 Lebenstagen wurden in 46 europäischen, amerikanischen und australischen, der Datenbank der Weltgesundheitsorganisation (WHO) angehörenden, Ländern analysiert. Ab Ende der Sechziger- bis anfangs der Neunziger Jahre fielen die Sterblichkeitsraten in den meisten Ländern der Welt. Ende der Achtziger- und Anfang der Neunziger Jahre wiesen drei lateinamerikanische Länder (Ekuador, Kolumbien und die Dominikanische Republik) die höchsten Raten in allen in Betracht gezogenen Indikatoren auf, mit Ausnahme der Sterblichkeitsraten nach 0–6 Lebenstagen, wo Sri Lanka an zweiter Stelle steht. Mittelmässige Raten (zirka 10–25/1000 Lebendgeburten bei den Sterblichkeitsraten nach 0–365 Tagen) wurden von verschiedenen lateinamerikanischen, asiatischen und zentraleuropäischen Ländern gemeldet. Raten unter 10/1000 Lebendgeburten bei den Sterblichkeitsraten nach 0–365 Tagen wurden in den USA, Kanada und den meisten westeuropäischen Ländern, sowie vier asiatischen Ländern (Israel, Hong Kong, Singapore und Japan) verzeichnet. Am meisten sind die Sterblichkeitsraten bei den 0–6 Lebenstagen gesunken. Die proportionelle Senkung der Raten bei den 7–27 und 28–365 Lebenstagen waren in verschiedenen Ländern vergleichbar.

Résumé

Tendances de la mortalité neonatale et infantile dans cinq continents

La mortalité à 0–6, 7–27 et 28–365 jours de vie ont été analysées dans 46 pays d'Europe, d'Amérique, d'Asie et d'Australie qui figurent dans la banque de données de mortalité de l'Organisation Mondiale de la Santé (OMS). Entre la fin des années 60 et le début des années 90, les taux de mortalité infantile ont diminué dans la plupart des pays du globe. A la fin des années 80 ou au début des années 90, trois pays d'Amérique Latine (Equateur, Colombie et République Dominicaine) ont affiché les taux les plus élevés pour tous les indicateurs considérés, à l'exception de la mortalité à 0–6 jours de vie, pour laquelle le Sri Lanka se situe au deuxième rang des taux de mortalité. Des taux intermédiaires (compris entre 10 et 25/1000 naissances vivantes pour la mortalité à 0–365 jours) ont été rapportés par plusieurs pays d'Amérique Latine, Asie et d'Europe Centrale. Des taux inférieurs à 10/1000 naissances vivantes pour la mortalité à 0–365 jours de vie ont été relevés aux Etats-Unis, au Canada et dans la plupart des pays d'Europe de l'ouest, ainsi que dans quatre pays asiatiques (Israël, Hong Kong, Singapour, ainsi que le Japon). Les diminutions les plus importantes ont été observées pour la mortalité à 0–6 jours de vie. Proportionnellement, les réductions étaient comparables entre les périodes 7–27 et 28–365 jours de vie dans plusieurs pays.

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