

## **Abstract**

The major improvements in health status, as well as in the status of women, since the founding of the People's Republic of China have been widely recognized. Nevertheless, major differences in health status remain between women living in urban and rural areas and those in economically developed and underdeveloped provinces. Analyses of statistics compiled by the Ministry of Public Health, based on five geographical groups of urban and rural areas, show interesting patterns of health status differentials for women. Cause-specific and age-specific analyses suggest that access to and quality of medical care remain a significant problem in rural China. In addition, services for preventable cancer (i.e. cervical and breast) should be receiving greater attention. Of most significant concern are (1) the prominence of suicide as the major cause of death among women aged 15 to 44 and (2) the high rate of death due to drowning, suffocation, and homicide among girls below the age of one year. These two patterns suggest that the status of women in society remains problematic, especially in rural areas, and that women's health needs to be analyzed and addressed within the social and economic context of their lives.

## **About the Author**

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## **Women's Health Status Differentials in China**

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# WOMEN'S HEALTH STATUS DIFFERENTIALS IN CHINA

## Introduction

The major improvements in health status and health services in the People's Republic of China during the past four decades have been widely recognized (Sidel and Sidel 1982; World Bank 1990). A comprehensive network of health services has been established and epidemic and endemic diseases, such as cholera, malaria, and small pox, have been eradicated or reduced to very low levels. Life expectancy increased from approximately 35 to 70 years in the 40 years after "liberation" in 1949 and the overall death rate declined from 20 percent to 6 percent of the population during this same period (Ministry of Public Health 1991).

Despite these improvements, major differences remain in health status between urban and rural areas and between economically developed and underdeveloped provinces (Lawson and Lin 1994). Deaths due to various causes are from ten to one hundred percent higher for specific age groups in rural populations. Deaths due to infectious diseases remain high in many provinces.

Lawson and Lin's (1994) analysis of available statistics focused largely on differentials for males across localities in China. In contrast, this paper focuses on women's health. The aim is to illustrate similar regional differences, to describe the health of women at key points in the life cycle, and to suggest key issues affecting women's health status. It is argued that some health differentials can be decreased through improved access to and quality of health care but that others will depend on improvement in women's position in society.

### **The Context: Women's Status and Health Services in China**

The Confucian ethical code as well as legal codes entrenched women's subordinate position in China through the dynastic period (Min 1995). One of the main platforms of the Communist Party called for equality for women. Article 48 of the Chinese Constitution stipulated that women in the People's Republic should enjoy equal rights with men in all spheres of life and receive equal pay for equal work. The Marriage Law of 1950 further broke tradition, giving a woman the right to choose her spouse and to seek divorce.

Investment in health care facilities and services also was considered a priority by the government and, since 1940, has received considerable attention (Sidel and Sidel 1973). Throughout urban and rural China the government established a three-tier network, offering basic primary care at the local level and special referral services at urban centers. Public health campaigns were undertaken to eradicate a range of infectious diseases, including sexually transmitted diseases. Despite urban-rural disparities in service availability, these actions laid the foundation for the improvement in health status, in the aggregate, in China. China's approach had been the basis for the World Health Organization's Declaration of

Health for All by the year 2000 and the adoption of primary health care as the key strategy to achieve this goal.

Women's participation and position in all aspects of society has undoubtedly improved since 1949, as has their health status. Education levels and labor force participation rates have increased while the proportion of arranged marriages have significantly decreased (Min 1995). Nevertheless, inequalities between women and men persist, and a significant differential exists in education levels and working positions (Pearson 1995). The pressure to bear sons and low rates of literacy are particularly evident in rural areas.

Recent economic reforms, in particular the return to rural household production and the introduction of market economy, have led to changes in both the health care system (Yang, Lin, and Lawson 1991) and women's status (Gilmartin et al. 1994; Min 1995; Pearson 1995). Under the collective production system of people's communes, health services were financed through the commune's earnings. This was equivalent to a deduction on the wages that peasants received, through which health services were made available. Access to health services has decreased in rural areas as local cooperative health insurance systems collapsed with the demise of people's communes, since peasants were no longer wage earners, no administrative mechanisms existed to finance and organize health care. The rise in fee-for-service medicine has shifted incentives in the health care system from provision of preventive services to high technology treatments. Financial barriers to access now exist for antenatal care, immunization, and other primary care services. In addition to these changes in the health care system, women's status has been affected by discriminatory practices against women which are reported in university enrollment, vocational training, and employment.

While the health statuses of women will be slow to reflect changing trends in society and the economy, they reflect the condition of social and working life. As such, differentials in health status are indicative of gender differences and urban-rural differences. While disparities have always existed--and indeed have narrowed since 1949--their persistence means continued policy attention will be required.

### **Sources of Data**

The analysis below is based on official statistics compiled by the Ministry of Public Health for 1988. Death rates are reported for gender and age groups by ICD (International Classification of Disease) categories, adjusted by the second national census (1964) and according to a classification of urban and rural areas developed by the Chinese. The geographical classifications are:

- (1) Large Cities: 16 cities including Beijing, Tianjin, Shanghai, Nanjing, Guangzhou, Sian, and Wuhan;

- (2) Medium and small cities: 25 cities including Suzhou, Hefei, Xiamen, Guilin, and Taiyuan;
- (3) Class I rural areas: 35 localities including "rural" suburbs of Beijing, Tianjin, and Shanghai and selected cities and counties of Zhejiang and Jiangsu provinces;
- (4) Class II rural areas: 35 counties in Jiangxi, Hubei, Hunan, Guangdong, Fujian, and Sichuan provinces;
- (5) Class III rural areas: 9 counties selected from Guizhou, Anhui, and Gansu provinces.

While formal statistics about levels of income and education in these areas have not been evaluated, it is clear to most observers of China that these areas reflect different levels of socioeconomic development. At one end are the commercial, administrative and cultural centers of China (groups 1 and 3 in particular) while at the other end are the poor and mountainous hinterland provinces (group 5 in particular). Health service availability also reflects levels of economic development. In 1988, urban districts had 4.17 hospital beds and 6.74 health professionals per 1000 population in contrast to rural areas that had 1.59 beds and 2.16 health professionals per 1000 population (MOPH 1991).

A number of points need to be made about the nature and quality of this data source. First, there are some differences in diagnostic and classification approaches in China, despite the use of ICD codes. Second, standardization to the third national census (1981) was not possible at the time these statistics were compiled.<sup>1</sup> Third, local capacity for quality control in collection and reporting of statistics is likely to vary, and the localities included probably reflect an above standard of statistical reporting and quality control. Nonetheless, the data source represents the most reliable and comprehensive data available to non-Chinese persons. Further, the classification of localities does reflect distinct levels of socioeconomic development.

### Overall Death Rates

Like their male counterparts, women in China die due to diseases of industrial societies. The major causes of death are, in rank order, cerebrovascular diseases; malignant neoplasms; heart disease; respiratory diseases; injuries and poisoning.

Aggregate statistics, however, hide the variation which exists across the country. The data in Table 1 give the unadjusted death rate per 100,000 females by major ICD codes for the five geographical groupings. Of particular interest are:

- (1) the geographical gradient upward from urban to rural areas in rates of infectious diseases, respiratory diseases digestive diseases, pregnancy and conditions of the puerperium, conditions of the perinatal period, and injuries and poisoning. Among these, infectious diseases, pregnancy, and respiratory disease exhibit the most striking differences.

- (2) the geographical gradient downward from rural to urban areas in rates of neoplasms, cerebrovascular diseases, and mental disorders.

Of note, too, is the convergence of rates in neoplasms and cerebrovascular diseases for rural class I (e.g., suburbs of major cities) and large urban centers.

The urban-rural gradients are quite characteristic of different levels of socioeconomic development. In other parts of the world, it is quite common for more developed regions and countries to exhibit a higher rate of non-communicable and chronic diseases, a phenomenon known as the epidemiological transition. The convergence of rates probably reflects the gradual integration of fringe rural communities into large cities. With economic development, urban areas have expanded to absorb neighboring rural communities. Alternately, farming communities have become transformed into industrial areas. Thus, large urban centers and rural class I share common health experiences.

### Major Causes of Death by Life Cycle

Tables 2, 3, and 4 show the major causes of death (and the age-specific death rate) for girls below the age of one year and women ages 25-29 and ages 60-64 years by geographical classification. Respiratory diseases, injuries, infections, and digestive diseases are the major killers of girls under one year of age (see Table 2). While the rank order of the major causes of death do not differ significantly for these girl children, the magnitude of difference is dramatic. The gradient upward for rural areas of deaths due to respiratory diseases, injuries and infectious diseases is not surprising, but it is noteworthy that rates in rural class III communities are six to ten times higher than those in large cities.

Injuries are the leading cause of death among women 25-29 years of age in all areas, with neoplasms, infections, and pregnancy being major contributors (see Table 3). The differential across socioeconomic areas remains significant though less dramatic. While differences for neoplasms are minimal, deaths due to injuries are three times higher and deaths due to infectious diseases are six times higher when the most disadvantaged area (rural class III) is compared to the most advantaged (large cities). Of particular note is the fact that conditions of pregnancy and puerperium rank second as the major cause of death in rural class III areas but are not within the top ranking in large cities. Additionally, deaths due to pregnancy in rural class III areas, are seven times higher than they are in small cities.

Circulatory diseases are the leading cause of death among women 60-64 years of age (see Table 4). The geographical differential diminishes considerably in this age group. The rates of chronic diseases, such as neoplasms and circulatory disease, are fairly comparable across all areas. The only two causes of death that vary significantly across areas are infectious diseases and injuries. Infectious diseases are not a major cause of death for women in large cities.

## Cause-Specific and Age-Specific Analyses

Injuries, infectious diseases, neoplasms, and conditions of pregnancy and puerperium are major causes of death at various ages, and they are groupings which include diverse (and often preventable) conditions. Thus, an analysis was carried out of deaths due to these diseases at major points in the life cycle.

### Infants

Conditions of the perinatal period are an important cause of death among girls below the age of one year and the data in Table 5 show the geographical differential. The significance of birth asphyxia and tetanus neonatorum in the less developed localities--four and 25 times higher, respectively than elsewhere--suggests the quality of medical care varies greatly across areas.

Table 6 shows the major infectious diseases causing deaths to girls who are under one year of age. The significance of dysentery, hepatitis, and septicemia and the degree of difference (e.g. dysentery rate in rural III is four times higher than small cities and 23 times higher than large cities) between urban and rural areas suggests the continued need to improve hygiene and basic medical care outside China's cities. It is curious that, while other such vaccine preventable diseases as measles and whooping cough are apparently successfully controlled, the incidence of tetanus in rural class III communities is still high.

Table 7 gives death rates for the major causes of injury among infant girls. The fact that rural areas experience high injury rates is not surprising because drowning and poisoning are most likely to occur in agricultural areas. Nevertheless, the magnitude of difference is dramatic: 18 times higher for poisoning in rural class III compared to large cities. The high rates of mechanical suffocation the leading cause of injury in all locations--with a 30-fold differential, also raise concern.

### Young Women

Injuries are the leading cause of death among women ages 25-29. Suicide is the major form of injury and thus the major cause of death for all women, with its age-specific rate for women ages 25-29 out-ranking other causes of injury two to three times in rural areas. Table 8 gives the rate of suicide in relation to total age-specific death rates due to injuries.

Death rates due to complications of labor and delivery for women aged 25-29 are shown in Table 9. The magnitude of difference across socioeconomic areas (a 20-fold difference between large cities and rural class III communities) suggests that quality of obstetrical management is still a serious issue in poor rural areas. In particular, it is of concern that the death rate due to postpartum hemorrhage is 89 times higher in rural class III communities and that of infection is 25 times higher than it is elsewhere.

## Older Women

Neoplasms are a major cause of death among women 60-64 years of age. The rank order (and age specific rates) for major types of cancers in each of the five geographical areas is given in Table 10. Note the prominence of cancers of the digestive system (i.e. stomach, esophageal, nasopharyngeal, colorectal) as the major cause of death in all areas. At the same time, there is no geographical gradient for these conditions, thus giving support to theories that these cancers are related to diet. Breast cancer is an important cause of death for older women in large cities, while cervical cancer is a leading cause of death for them in areas except in large cities. Lung cancer appears to be the only major cause of death which shows a gradient downward toward rural areas. Whether this pattern is related to levels of smoking, air pollution, factory employment, or other factors in urban environments requires further investigation.

Suicide remains the most significant cause of injury among women in the 60-64 age group as in the 25-29 age group. It accounts for one-third to two-thirds of all deaths due to injury, as Table 11 illustrates. In urban and suburban areas, the suicide rate is two to three times higher than other causes of injury; in some rural areas, that rate is approximately seven times higher.

Table 12 shows the major infectious diseases as causes of death for women aged 60-64. While tuberculosis is a negligible cause of death overall in China, it is the major infectious disease causing death for women in the older age group, accounting for one-half to three-quarters of deaths due to infectious diseases. Its prominence as a cause of death is particularly significant in poor rural areas, with a death rate 4.5 times higher than that in large cities.

### Suicide and Cancer: Further Analysis

The above age-specific and cause-specific analyses suggest that suicide and cancer are two causes of death which warrant further consideration. Suicide is the leading cause of death for women from ages 15-39. An examination of age-specific death rates due to suicide in Table 13 shows that the rate is highest among women ages 20-24 years in all geographical areas and that the gradient upward to rural areas is significant at all ages between 15-44. The differential is five-fold between rural areas and large cities, and nine-fold among women ages 20 to 24. The high level of suicide probably reflects the social acceptability of such a form of escape when a situation becomes unbearable. Others have speculated that marriage and family problems are the major causes of suicide among women (Li and Baker 1991; Wolf 1975).

Tables 14 and 15 show age-specific rates for deaths due to cervical and breast cancer, respectively, for women ages 40-74. As suggested above, the breast cancer death rate is consistently two to three times higher in larger cities than elsewhere, while cervical cancer death rates are consistently lower until age 60 when it seems to "catch up." Cervical cancer



death rates are significantly higher for rural women in their middle years than for women living elsewhere. This may be attributable to early sexual experiences and to poor access to preventive health care.

Examination of age-specific death rates among women ages 40 to 64 for lung, liver, stomach and oesophageal cancers show

- higher rates of lung cancer at all ages in more urbanized areas;
- higher rates of stomach cancer in more rural areas; and
- higher rates of liver and esophageal cancers in small cities and rural class I localities.

Clearly, more specific investigations of cancer epidemiology is required.

### **Conclusion: Being Female**

In China, as in most places, girls and women experience lower death rates, from most causes of death and at most ages (except, of course, from female specific causes of death such as pregnancy and breast and cervical cancers) than do men. There are, however, a number of exceptions for China.

Patterns of health among women in China, like those of their male counterparts, reflect patterns of socioeconomic development in China. Chinese women experience the problems both of industrialized societies and those of less developed countries. Despite significant achievements, especially increases in life expectancy and decreases in maternal and infant mortality, improvements in hygiene and better access to health services remain important goals for rural areas. High rates of morbidity, but low bed occupancy as well as low rates of prenatal examinations and outpatient visits continue in rural areas (MOPH 1991). Further, both education and prevention efforts need to be implemented to decrease injury, to improve nutrition and diet, and to lower rates of death from other chronic diseases.

As China further industrializes, chronic diseases, especially cancer, can be expected to rise. Rates for colorectal cancers in urban areas, for nasopharyngeal cancer in rural areas, and for leukemia (in all areas) are comparable for men and women. The significance of cancers related to the digestive system as a cause of death for both men and women suggest that diet-related factors need to be addressed. Equally important, techniques for the early detection of breast and cervical cancers should be adopted in all parts of China.

The most significant issue for Chinese women is injury. Below the age of one year, girls have comparable, if not higher rates of death than do boys, due to drowning, mechanical suffocation and homicide. The pattern appears to support anecdotal reports

about female infanticide, especially in light of China's one-child population policy. At subsequent ages, the high rate of suicide suggests that women's quality of life, especially the social pressures they face, is poorer than men's, and that "women's liberation" is more rhetoric than reality. Suicide has traditionally been an acceptable means for Chinese women to resolve problems which have no solutions (Wolf 1975). Analysis of deaths due to suicide between 1985-89 among women in Australia also show that women of Chinese origins (i.e. born in China, Hong Kong, Singapore, and Taiwan) have a suicide rate that is twice as high as that of Australian-born women. This suggests that women's high rate of suicide is not necessarily a new phenomenon but rather is a culturally-produced phenomenon. A time series analysis could be valuable.

Compared with women in developed countries, such as Japan, the United States, and Australia, Chinese women carry a significant burden of ill health, especially relative to Chinese men, as Table 16 illustrates. As citizens of a less developed country, it is not surprising that the Chinese experience high rates of infectious diseases. Nevertheless, the male to female ratios in China are striking, when compared with those in other countries for circulatory diseases, bronchitis/emphysema, accidents, and suicides. In fact, in China, women's suicide rates actually exceed those of men. Is this an element of equality?

The need to examine and address all aspects of social policy is evident, particularly in rural areas. Women in China have rightly observed that their situation and the conditions under which they perform their productive and reproductive work have changed and improved since 1949 (Croll 1983). At the same time, however, they have unfulfilled aspirations and are aware of tensions (Johnson 1980). Despite significant achievements, the status of women is still far from equal to that of men, and women remain concerned about gender divisions of labor, patriarchal family relations, and violence against women (Honig and Hershatter 1988).

Research further suggests that the sources of ill-health and stress differ for urban and rural women. The social organization of urban China around work units emphasizes the importance of work-related stressors (events and conflict) as causes of distress and decreased psychological well-being (Lin and Lai 1995). In rural China, however, women's health is intertwined with their dual roles and the harsh environmental conditions and oppressive poverty in which they live (Wong et al. 1995). The burden of heavy physical work and domestic responsibilities leave them exhausted, with little time to be concerned about personal health and hygiene. The economic reforms initiated in the 1980s will have differential impact on rural and urban women.

Much of the government's efforts of the past 40 years has been devoted (successfully) to the health problems of women that are treatable and/or preventable. While this effort needs to be continued, women's health now needs to be more firmly analyzed and addressed within the social and economic context of women's lives, especially given the rapid changes brought by recent reforms. Dyches and Rushing's study (1993) of women's health status in 142 countries confirms that the level of economic development is of overriding importance

in women's health, with the effect of health services provision being secondary and linked to economic development. The recent World Bank World Development Report *Investing in Health* (1993) suggests that investment in women's education is the most important factor in improved health status in society. Although these two studies offer competing explanations for improvements in women's health, they suggest that for China, while technical and managerial reforms in the health care delivery system may contribute to further improvements in women's health status, the underlying issues of women's position in the social and economic development process remain critical.

## Note

1. The technical quality of the second census in 1964 is not known, and systematic errors could exist, such as under reporting or misreporting of some age groups.

**Table 1: Unadjusted Death Rate Per 100,000 Women in China by Cause and Area**

CAUSE	LARGE CITIES	SMALL CITIES	RURAL I	RURAL II	RURAL III
Infectious Diseases	11.29	20.06	17.60	38.18	47.61
Neoplasm	107.21	78.25	103.35	58.46	42.74
Endocrine, Nutrition, and Metabolic	12.52	6.96	4.70	5.65	9.40
Blood	1.80	1.56	1.39	1.52	2.06
Mental Disorder	6.84	5.60	6.83	3.28	1.89
Central Nervous System	4.75	3.37	3.39	3.47	2.14
Heart Disease	104.57	57.34	94.69	54.87	95.23
Cerebrovascular	127.77	81.99	121.83	84.07	54.05
Respiratory System	86.83	97.21	137.55	175.86	200.61
Digestive System	21.66	23.61	22.59	34.13	48.27
Genito Urinary System	9.87	6.89	7.44	6.84	9.97
Pregnancy and Conditions of Puerperium	19.43	40.47	43.22	87.95	225.85
Musculo-Skeletal	2.77	1.74	1.18	1.04	0.41
Congenital	6.01	6.38	6.91	4.24	3.30
Perinatal Conditions	573.95	539.01	812.66	618.23	1243.13
Injuries	38.93	46.00	50.66	77.40	66.10
<b>TOTAL</b>	<b>576.33</b>	<b>462.10</b>	<b>615.42</b>	<b>608.37</b>	<b>630.88</b>

Source: Ministry of Public Health, China 1988

**Table 2: Death Rate per 100,000 Girls Below One Year of Age by Major Causes of Death and Area\***

<b>RANK ORDER</b>	<b>LARGE CITIES</b>	<b>SMALL CITIES</b>	<b>RURAL I</b>	<b>RURAL II</b>	<b>RURAL III</b>
1	Respiratory (153.42)	Respiratory (295.89)	Respiratory (393.22)	Respiratory (806.70)	Respiratory (2100.63)
2	Injury (36.42)	Injury (127.25)	Injury (230.83)	Injury (237.26)	Injury (255.05)
3	Digestive (33.84)	Infection (83.80)	Infection (63.35)	Digestive (162.95)	E/N/M <sup>1</sup> (244.99)
4	Infection (28.69)	Digestive (63.10)	Digestive (34.95)	Infection (89.08)	Infection (199.62)
5	CNS <sup>2</sup> (19.49)	E/N/M (30.00)	CNS (19.66)	E/N/M (70.73)	Digestive (190.55)

\*Conditions of perinatal period not included

<sup>1</sup>Endocrine/Nutrition/Metabolic

<sup>2</sup>Central Nervous System

Source: Ministry of Public Health, China 1988

**Table 3: Death Rate per 100,000 Women Ages 25-29 Years by Major Causes of Death and Area**

RANK ORDER	LARGE CITIES	SMALL CITIES	RURAL I	RURAL II	RURAL III
1	Injury (16.24)	Injury (26.47)	Injury (33.34)	Injury (66.01)	Injury (48.65)
2	Neoplasm (10.12)	Neoplasm (11.16)	Neoplasm (9.77)	Circulatory (15.60)	Pregnancy (28.74)
3	Circulatory (5.74)	Circulatory (9.72)	Circulatory (9.36)	Infectious (12.98)	Infectious (23.21)
4	Infectious (3.60)	Infectious (5.22)	Pregnancy (4.73)	Pregnancy (10.72)	Neoplasm & Circulatory (15.74) <sup>1</sup>
5	CNS <sup>2</sup> + mental (2.30)	Pregnancy (3.96)	Infectious (4.32)	Neoplasm (10.36)	

<sup>1</sup>Equal rank

<sup>2</sup>Central Nervous System

Source: Ministry of Public Health, China 1988

**Table 4: Death Rate per 100,000 Women Ages 60-64 Years by Major Causes of Death and Area**

<b>RANK ORDER</b>	<b>LARGE CITIES</b>	<b>SMALL CITIES</b>	<b>RURAL I</b>	<b>RURAL II</b>	<b>RURAL III</b>
1	Circulatory (544.97)	Circulatory (374.88)	Circulatory (443.08)	Circulatory (575.13)	Circulatory (568.89)
2	Neoplasm (377.12)	Neoplasm (364.97)	Neoplasm (379.33)	Respiratory (512.42)	Respiratory (474.60)
3	Respiratory (301.11)	Respiratory (236.70)	Respiratory (236.33)	Neoplasm (310.01)	Neoplasm (220.01)
4	Digestive (113.68)	Injury (64.71)	Digestive (166.55)	Infectious (127.80)	Digestive (128.86)
5	Injury (42.36)	Digestive (55.38)	Injury (62.60)	Injury (126.02)	Infectious (94.29)
6	E/N/M <sup>1</sup> (40.35)	Infectious (47.80)	Infectious (33.59)	Digestive (123.64)	Injury (75.43)

<sup>1</sup>Endocrine/Nutrition/Metabolism

Source: Ministry of Public Health, China 1988



**Table 5: Death Rate per 100,000 Girls Below One Year of Age by Causes of Death and Area**

CAUSE	LARGE CITIES	SMALL CITIES	RURAL I	RURAL II	RURAL III
Immaturity/Preterm	175.13	146.91	251.95	186.23	195.09
Birth Asphyxia	201.98	212.09	340.79	239.05	789.43
Tetanus Neonatorium	5.15	32.07	6.55	70.73	131.57
Hemolytic Disease	6.62	3.10	13.10	8.95	9.07
<b>TOTAL</b>	<b>573.95</b>	<b>539.01</b>	<b>812.66</b>	<b>618.23</b>	<b>1,243.13</b>

Source: Ministry of Public Health, China 1988

**Table 6: Death Rate per 100,000 Girls Below One Year of Age by Type of Infectious Diseases and Area**

CAUSE	LARGE CITIES	SMALL CITIES	RURAL I	RURAL II	RURAL III
Dysentery	2.57	15.51	21.11	25.96	59.98
Pulmonary Tuberculosis	-	-	-	0.44	-
Whooping Cough	-	-	-	0.89	-
Meningitis	4.78	1.03	0.72	1.34	9.07
Tetanus	-	2.06	0.72	2.68	31.75
Septicemia	10.30	42.41	21.84	30.44	68.05
Measles	1.10	1.03	0.72	1.34	-
Encephalitis	1.10	-	2.18	7.61	4.53
Hepatitis	3.31	7.24	4.36	4.02	18.14
<b>TOTAL</b>	<b>28.69</b>	<b>83.80</b>	<b>63.35</b>	<b>89.08</b>	<b>199.62</b>

Source: Ministry of Public Health, China 1988

**Table 7: Death Rate per 100,000 Girls Below One Year of Age by Cause of Injury and Area**

<b>CAUSE OF INJURY</b>	<b>LARGE CITIES</b>	<b>SMALL CITIES</b>	<b>RURAL I</b>	<b>RURAL II</b>	<b>RURAL III</b>
Poisoning	0.73	2.06	6.55	3.13	18.14
Falls	2.20	2.06	5.82	6.71	4.53
Drowning	0.73	5.17	4.36	13.87	9.07
Suffocation	16.55	93.11	177.67	173.69	471.84
Electrocution	-	-	-	-	-
Homicide	1.47	-	0.72	0.44	-
MVA <sup>1</sup>	1.47	-	3.64	1.34	-
<b>TOTAL</b>	<b>36.42</b>	<b>127.25</b>	<b>230.83</b>	<b>237.26</b>	<b>558.05</b>

<sup>1</sup>Motor Vehicle Accident

Source: Ministry of Public Health, China 1988

**Table 8: Death Rate per 100,000 Women Ages 25-29 by Type of Injury and Area**

	<b>LARGE CITIES</b>	<b>SMALL CITIES</b>	<b>RURAL I</b>	<b>RURAL II</b>	<b>RURAL III</b>
Total Injury	16.24	26.47	33.34	66.01	48.65
Suicide	6.38	15.30	22.63	48.49	34.27
Other Injury	9.84	11.17	10.71	17.52	14.38

Source: Ministry of Public Health, China 1988

**Table 9: Death Rate per 100,000 Women Ages 25-29 by Complications of Labour and Delivery and Area**

CAUSE	LARGE CITIES	SMALL CITIES	RURAL I	RURAL II	RURAL III
Abortive Outcome	0.04	0.36	0.41	0.95	1.10
Hypertensive Complication	0.43	0.54	0.72	1.07	1.10
Postpartum Hemorrhage	0.21	1.80	1.64	4.64	18.79
Infection	0.13	0.18	0.10	1.19	3.31
Obstretical Trauma	-	-	0.41	0.35	1.10
<b>TOTAL</b>	<b>1.30</b>	<b>3.24</b>	<b>4.32</b>	<b>9.05</b>	<b>25.43</b>

Source: Ministry of Public Health, China 1988

**Table 10: Death Rate per 100,000 Women Ages 60-64 by Type of Major Neoplasm and Area**

<b>RANK ORDER</b>	<b>LARGE CITIES</b>	<b>SMALL CITIES</b>	<b>RURAL I</b>	<b>RURAL II</b>	<b>RURAL III</b>
1	Lung (95.32)	Esophageal (82.20)	Esophageal (85.28)	Stomach (81.73)	Stomach (69.14)
2	Stomach (48.12)	Lung & Stomach (68.79)	Stomach (83.27)	Esophageal (77.27)	Lung & Liver (25.14)
3	Liver (44.51)	Liver (51.88)	Liver (66.33)	Liver (38.63)	Esophageal (18.85)
4	Colorectal (30.70)	Colorectal (20.40)	Lung (41.63)	Cervix (35.07)	Cervix (15.71)
5	Esophageal (23.32)	Cervix (9.91)	Colorectal (19.81)	Lung (30.02) Colorectal (12.48)	Colorectal (12.57)
6	Breast (20.10)	Nasopharyngeal (8.74)	Cervix (11.19)	Nasopharyngeal (5.64)	Breast (9.42)
<b>TOTAL</b>	<b>381.55</b>	<b>368.47</b>	<b>381.92</b>	<b>313.57</b>	<b>220.01</b>

Source: Ministry of Public Health, China 1988

**Table 11: Death Rate per 100,000 Women Ages 60-64 by Type of Injury and Area**

<b>RANK ORDER</b>	<b>LARGE CITIES</b>	<b>SMALL CITIES</b>	<b>RURAL I</b>	<b>RURAL II</b>	<b>RURAL III</b>
1	Suicide (15.01)	Suicide (26.23)	Suicide (29.86)	Suicide (85.30)	Suicide (40.85)
2	MVA <sup>1</sup> (7.37)	MVA (10.49)	MVA (9.18)	MVA (9.51)	MVA/ Electrocution (6.28)
3	Falls (5.49)	Falls (8.16)	Suffocate (5.16)	Suffocate (8.91)	Poison & Falls (6.28)
4	42.36	64.71	62.60	126.02	75.43

<sup>1</sup>Motor Vehicle Accident

Source: Ministry of Public Health, China 1988

**Table 12: Death Rate per 100,000 Women Ages 60-64 by Type of Infectious Disease and Area**

<b>RANK ORDER</b>	<b>LARGE CITIES</b>	<b>SMALL CITIES</b>	<b>RURAL I</b>	<b>RURAL II</b>	<b>RURAL III</b>
1	TB (13.54)	TB (36.14)	TB (17.80)	TB (100.16)	TB (62.86)
2	Hepatitis (8.31)	Hepatitis (2.91)	Hepatitis (7.75)	Hepatitis (8.02)	Dysentery (12.57)
3	Measles (1.74)	Measles (2.33)		Dysentery (7.43)	
<b>TOTAL</b>	<b>28.42</b>	<b>47.80</b>	<b>33.59</b>	<b>127.80</b>	<b>94.29</b>

Source: Ministry of Public Health, China 1988



**Table 13: Suicide Rate per 100,000 Women by Age and Area**

<b>AGE</b>	<b>LARGE CITIES</b>	<b>SMALL CITIES</b>	<b>RURAL I</b>	<b>RURAL II</b>	<b>RURAL III</b>
15-19	8.80	14.29	15.69	42.71	37.33
20-24	10.92	32.65	35.34	92.33	93.25
25-29	6.38	15.30	22.63	48.49	34.27
30-34	7.78	12.45	21.34	35.85	24.46
35-39	7.93	21.29	21.03	40.90	34.38
40-45	6.85	14.61	18.95	33.70	21.50
<b>TOTAL<sup>1</sup></b>	<b>9.21</b>	<b>15.11</b>	<b>19.73</b>	<b>39.86</b>	<b>29.13</b>

<sup>1</sup>For all age groups (i.e., inclusive of age groups not shown in table).

Source: Ministry of Public Health, China 1988

**Table 14: Cervical Cancer Death Rate per 100,000 Women by Age and Area**

AGE	LARGE CITIES	SMALL CITIES	RURAL I	RURAL II	RURAL III
40-44	1.05	1.58	1.47	5.76	9.92
45-49	2.09	3.18	3.70	13.09	7.26
50-54	4.15	2.38	4.80	16.61	7.95
55-59	6.83	8.05	7.88	25.70	12.90
60-64	16.75	9.91	11.19	35.07	15.71
65-69	25.77	19.29	27.84	35.78	19.68
70-74	34.93	23.04	24.75	39.38	21.00
<b>TOTAL<sup>1</sup></b>	<b>4.26</b>	<b>2.41</b>	<b>3.52</b>	<b>6.23</b>	<b>3.30</b>

<sup>1</sup>For all age groups (i.e., inclusive of age groups not shown in table)

Source: Ministry of Public Health, China 1988

**Table 15: Breast Cancer Death Rate per 100,000 Women by Age and Area**

AGE	LARGE CITIES	SMALL CITIES	RURAL I	RURAL II	RURAL III
40-44	8.61	4.74	6.44	3.06	1.65
45-49	11.72	6.02	6.71	6.64	5.45
50-54	14.20	11.54	10.03	6.04	3.97
55-59	14.15	3.79	14.75	6.73	-
60-64	20.10	6.41	10.91	9.21	9.42
65-69	27.78	14.83	13.20	6.57	7.87
70-74	31.11	9.42	13.54	9.35	31.50
<b>TOTAL<sup>1</sup></b>	<b>7.18</b>	<b>2.79</b>	<b>3.72</b>	<b>2.00</b>	<b>2.06</b>

<sup>1</sup>For all age groups (i.e., inclusive of age groups not show in table).

Source: Ministry of Public Health, China 1988

**Table 16: Death Rates per 100,000 Women and Men in China, Japan, United States, and Australia by Selected Causes 1989-1990**

CAUSE	CHINA		JAPAN		U.S.A.		AUSTRALIA	
	Male	Female	Male	Female	Male	Female	Male	Female
Infections <sup>1</sup>	31	21	9	4	10	7	4	3
Cancer	129	86	150	76	163	110	164	102
Circulatory <sup>2</sup>	197	199	165	108	283	159	267	158
Cerebro-vascular Disease	112	106	64	44	34	30	47	42
Bronchitis/Emphysema	98	93	11	4	8	5	14	7
Maternal Deaths		1.6		-		-		-
Accidents	65	51	51	21	81	28	67	25
Suicide	15	20	16	9	17	4	19	5
<b>TOTAL</b>	<b>634</b>	<b>565</b>	<b>521</b>	<b>294</b>	<b>715</b>	<b>423</b>	<b>649</b>	<b>378</b>

<sup>1</sup>approximately 50 percent due to TB

<sup>2</sup>mainly Ischaemic Heart Disease

Source: World Health Statistics Annual 1991, WHO Geneva 1992

Notes: The death rates for Japan, USA, and Australia have been age-standardized using a standard "world" population age distribution. The death rates for China are not age-standardized.

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