**Supplementary Table 1: Description for data of reviewed reports ordered by monthly number of exposed subjects within each category**

|  |  |  |  |
| --- | --- | --- | --- |
| **Data Source** | **Recruitment Methods** | **Sample Size** | **Provincial Mortality During Famine#** |
| **National surveys** |
| Chinese National Disability Sample Survey (CNDSS) 1987 | Multistage sampling | 1,579,316 | 6 Extreme, 3 High, 10 Medium, 9 Low, and 1 Unknown |
| China National Nutrition and Health Survey (CNNHS) 2002 | Multistage sampling | 243,479 | 6 Extreme, 3 High, 10 Medium, 9 Low, and 2 Unknown |
| **Multi-province surveys** |
| China-U.S. Collaborative Project for Neural Tube Defect Prevention 1993-1996 | Pregnancy monitoring system | 285,536 Females | 2 Medium and 1 Low |
| Four-province mental disorders survey in China 2001-2005 | Multistage sampling | 63,004 | 2 Extreme, 1 Medium, and 1 Low |
| Survey on Prevalence in East China for Metabolic Diseases and Risk Factors (SPECT-China) 2014 | Multistage sampling | 7,927 | 1 Medium and 2 Low |
| China Health and Nutrition Survey (CHNS) 1989-2011 | Multistage sampling | 26,000\* | 2 Extreme, 2 High, 3 Medium, and 2 Low |
| **Regional surveys** |
| Liuzhou medical recordings of the psychiatric hospital 1971-2001 | Birth registration and hospital records | 1,188,233 | High |
| Wuhu medical recordings of the psychiatric hospital 1971-2001 | Birth registration and hospital records | 561,695 | Extreme |
| Zhaoyuan retrospective survey and death registration 1970-2009 | Multistage sampling and death registration | 2,858,275 | High |
| Nanhai and Zhongshan health survey 2010 | Multistage sampling | 12,247 | Medium |
| Suihua Beilin rural region retrospective family cohort 2012 | Household registration system | 2,124 | Low |
| China Health and Retirement Longitudinal Study (CHARLS) 2008 | Multistage sampling | 2,685 | 1 Extreme and 1 Low |
| Tangshan city resident health survey 2009 | Multistage sampling | 6,720 | Medium |
| Qingji and Shanghai dental observation surveys in 1990s | Local sampling | 3,014 | 1 Extreme and 1 Low |
| **Local studies** |
| Kailuan Group employee annual physical examination 2006-2007 | Hospital records | 101,510 | Medium |
| Chongqing First Affiliated Hospital annual physical examination 2005-2008 | Hospital records | Around 17000 | Extreme |
| Bengbu First Affiliated Hospital annual physical examination 2011 | Hospital records | Around 4000 | Extreme |
| Hefei health center physical examination and survey 2011 | Hospital records and questionnaires | 847 | Extreme |
| Chongqing Gangtie Group employee annual physical examination 2001 | Hospital records | 293 | Extreme |

\*Numbers vary across nine CHNS panels

# Provincial mortality level: extreme, high, medium, and low mortality level as defined in Methods and S1 Figure.