Demography Special Lecture (6) 22nd May 2014 Mortality and life tables

R codes and data for today's class can be obtained as http://minato.sip21c.org/demography-special/deaths.txt http://minato.sip21c.org/demography-special/code20140522.R (age-standardization) http://minato.sip21c.org/demography-special/code-chap6.R http://minato.sip21c.org/demography-special/tables-6.xls http://minato.sip21c.org/demography-special/answer6e.R (for Exercises) http://minato.sip21c.org/demography-special/table6e.xls (for Exercises)

Additional explanation is available as http://minato.sip21c.org/demography-special/mortality-suppl.pdf

Crude Death Rate (CDR) for general mortality level (but ignoring age structure)

Infant Mortality Rate (IMR) for sanitation level (Pay attention to the difference between the populations of numerator and denominator), Neonatal Mortality Rate (NMR), Early Neonatal Mortality Rate (ENMR), Stillbirth Rate (Note: Pay attention to the definition of stillbirth/spontaneous abortion, in current Japan, 22 weeks as gestational period is critical) and Perinatal Mortality Rate for medical standards and maternal health level (Note: Maternal Mortality Rate is not explained in the text.) (see, Supplementary material on the backside of this handout)

Explanation for "Specific Death Rates" and "Standardization": As Sweden and Kazakhstan's population and death data by age show, CDR is largely affected by age-structure and ASDRs are difficult to see.

Age-standardized mortality rates are useful (amongst, SMR is an important measure, especially for developing countries with poor data quality).

Lifetable functions are very important in demography. Needed information is basically ASDR.