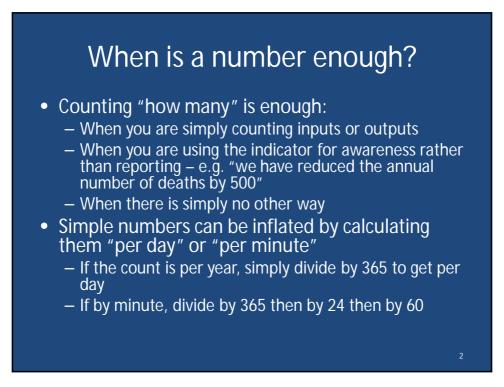
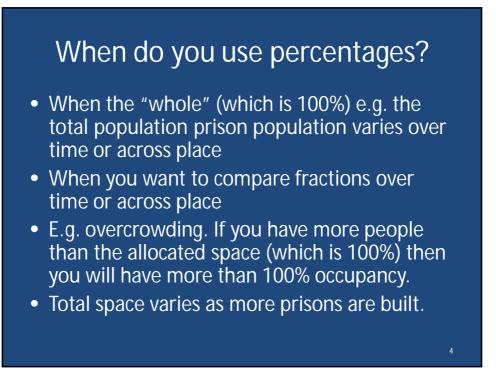
## **Constructing Indicators**

Technical details 21 May 2015



### What are percentages?

- A percentage is simply an "easy-to-understand" fraction "out of 100"
- Sometimes fractions are more understandable or easier for advocacy
  - 1 in 8 adults is arrested each year = 12.5%
- The percentage of the prison population which is pre-trial is the often called (slightly incorrectly) the pre-trial rate or ratio
- To calculate it:
  - number of pre-trial prisoners divided by total number prisoners; multiply the answer by 100.



#### What are rates?

- Rates are very similar to percentages, except instead of "per 100" you use "per 100 000 people in the country" or something similar
- So the pre-trial rate "per 100 000" is simply the number of pre-trial detainees, divided by the total population of the country and then multiplied by 100 000
- Rates per 100 000 population shows how common pretrial detention is amongst the country's population
- Using rates you can compare countries and within countries over long time periods

#### Why and how do we sample?

- Lack of data about the whole population (all prisoners, all claimants) means we must often use sample data
- We can sample
  - people in prison as at a date ("snapshot")
  - admissions to prisons
  - releases from prisons
- Each kind of sample tells us something slightly different as it refers to a different population

# Ideally we want a representative sample

- This is an unbiased (representative) sample chosen from the total population we want to know about
- We need to use a selection process that is random
- This means no part of the population has a greater chance of being selected than any other part – this should make the sample representative
- If we have a representative sample of data, we can make population estimates about the whole population
- For each record selected for the sample, we note all the details we are interested in e.g. duration of detention

#### Measuring duration of detention

 Usually prisons at least keep the date of admission of a detainee

- If you have today's date and the date of admission then you can calculate the duration
- Excel will do it for you as long as you specify each column as a date
- The duration column is then the one date subtracted from the other
- If you can record for all prisoners great
- Otherwise draw a sample
- Sort the data from biggest to smallest to get median