

























































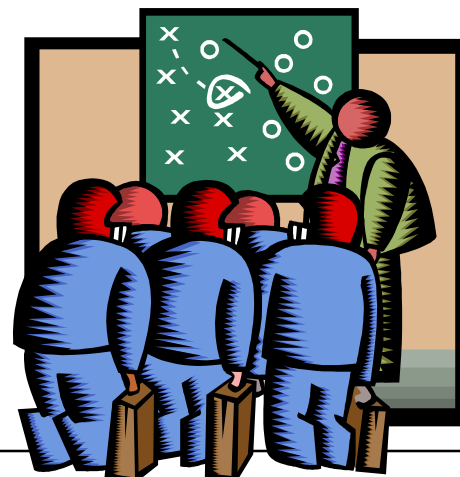


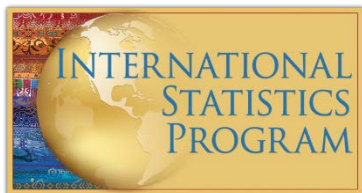




# Professional/Technical Meetings

- **Good communication with data users is essential, especially for:**
  - Data released in electronic format
  - Special tabulations
- **Periodic meetings to discuss data with users**
  - Content of data files
  - Limitations of data
  - Best uses of data

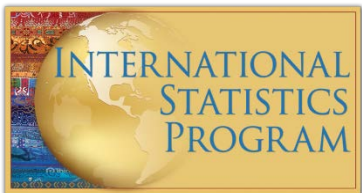




# Professional/Technical Meetings

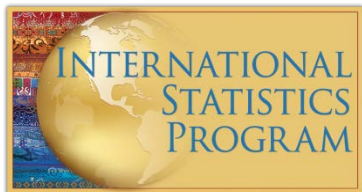
- **Reduce questions for office**
- **Help frequent users of vital statistics info**
- **Forum to solicit direct user input to stay attuned to needed changes**
- **Announce widely**
- **Address media needs**





# Professional/Technical Meetings in [COUNTRY]

- List professional or technical meetings that are hosted in [COUNTRY] to help users better understand the country's vital statistics data.



# Using Vital Statistics: International Comparisons

## Data Quality

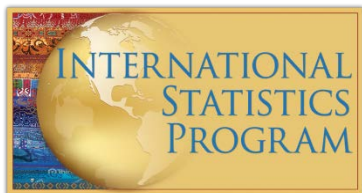
- Consistency
- Methodology
- Coverage
- Time period

## Presentation & Interpretation

- Presentation
- Explanation
- Underlying differentials
- Context

## Choice of Countries

- Comparability



# Using Vital Statistics: International Comparisons

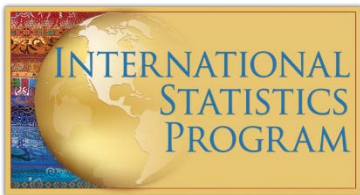
## Data Quality

- **Consistency:** *Are the data defined consistently across countries?*

**EXAMPLE:** Enumeration of live births in OECD countries

Include very premature babies	Minimum gest. age = 12 weeks	Minimum gest. age = 22 weeks and/or 500 grams birthwt.	No minimum gest. age or birthweight
<ul style="list-style-type: none"> <li>• Canada</li> <li>• Japan</li> <li>• Norway</li> <li>• United States</li> </ul>	<ul style="list-style-type: none"> <li>• Norway</li> </ul>	<ul style="list-style-type: none"> <li>• Czech Republic</li> <li>• France</li> <li>• the Netherlands</li> <li>• Poland</li> </ul>	<ul style="list-style-type: none"> <li>• Australia</li> </ul>

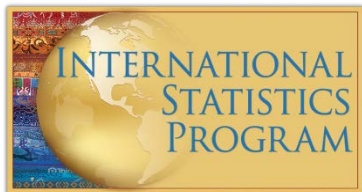




# Using Vital Statistics: International Comparisons

## Data Quality

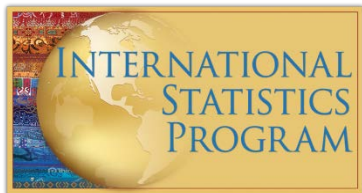
- **Methodology:** *Do all countries use the same method to collect the data?*
  - Birth and death certificates/registries
  - Mortality data
  - National disease registries
  - Hospital utilisation data
  - Household surveys



# Using Vital Statistics: International Comparisons

## Data Quality

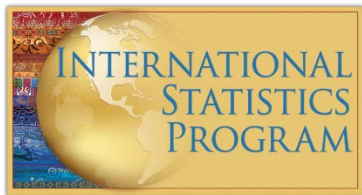
- **Coverage:** *Do the data cover similar parts of the population?*
  - **Legislation**
  - **Geography**
  - **Information systems**
  - **Population surveys of “broader” population**



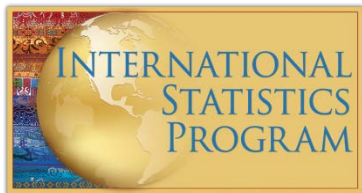
# Using Vital Statistics: International Comparisons

## Data Quality

- **Time period:** *Do the data refer to the same time period?*
  - Should cover approximate same year/range of years
  - If comparable years not available:
    - Clearly label years covered by each country
    - May use latest available data
    - May only use countries whose data meet a particular range (e.g. the last 5 years)



**Review the table comparing maternal mortality ratio across European countries. What issues with data quality are noted?**



# Using Vital Statistics: International Comparisons

## Choice of Countries

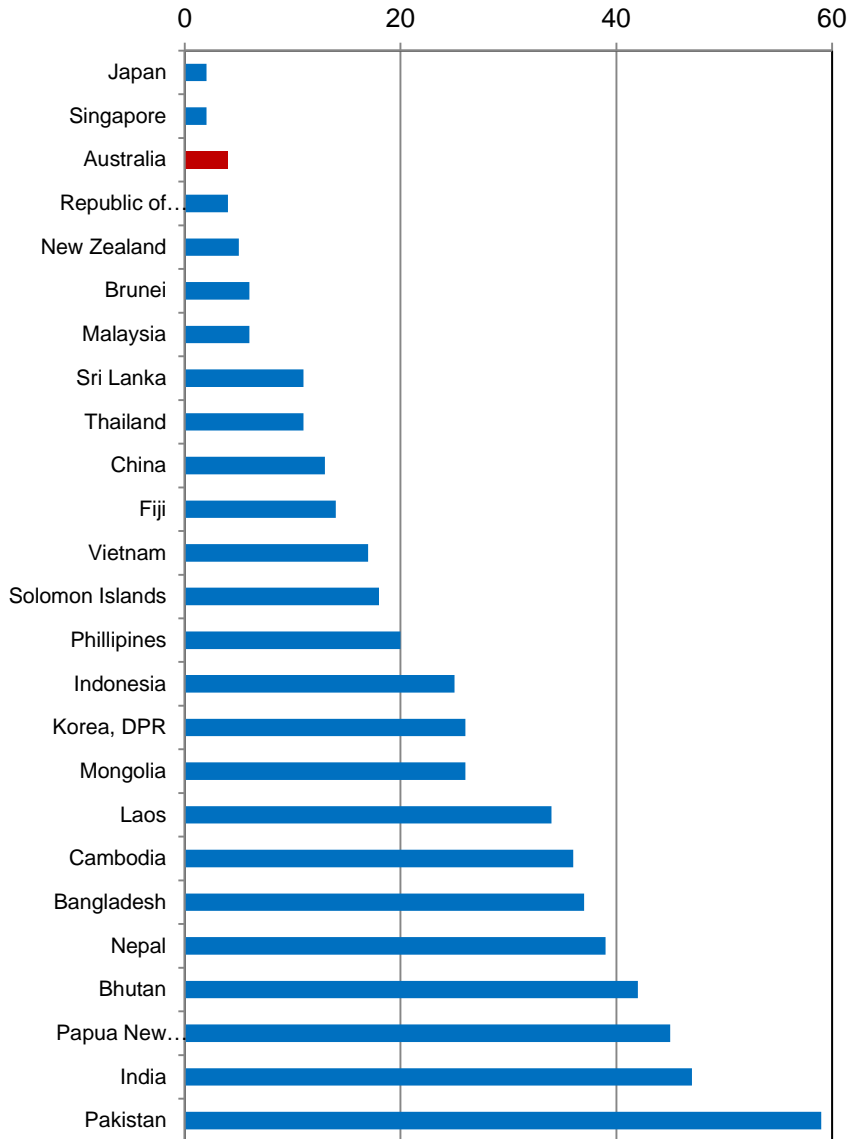
- **Comparability:** *Are countries sufficiently similar to support comparison?*
  - **Economic status / income per capita**
  - **Population size**
  - **Geographical land mass**
  - **Geographic proximity**



# INTERNATIONAL COMPARISON OF COUNTRIES

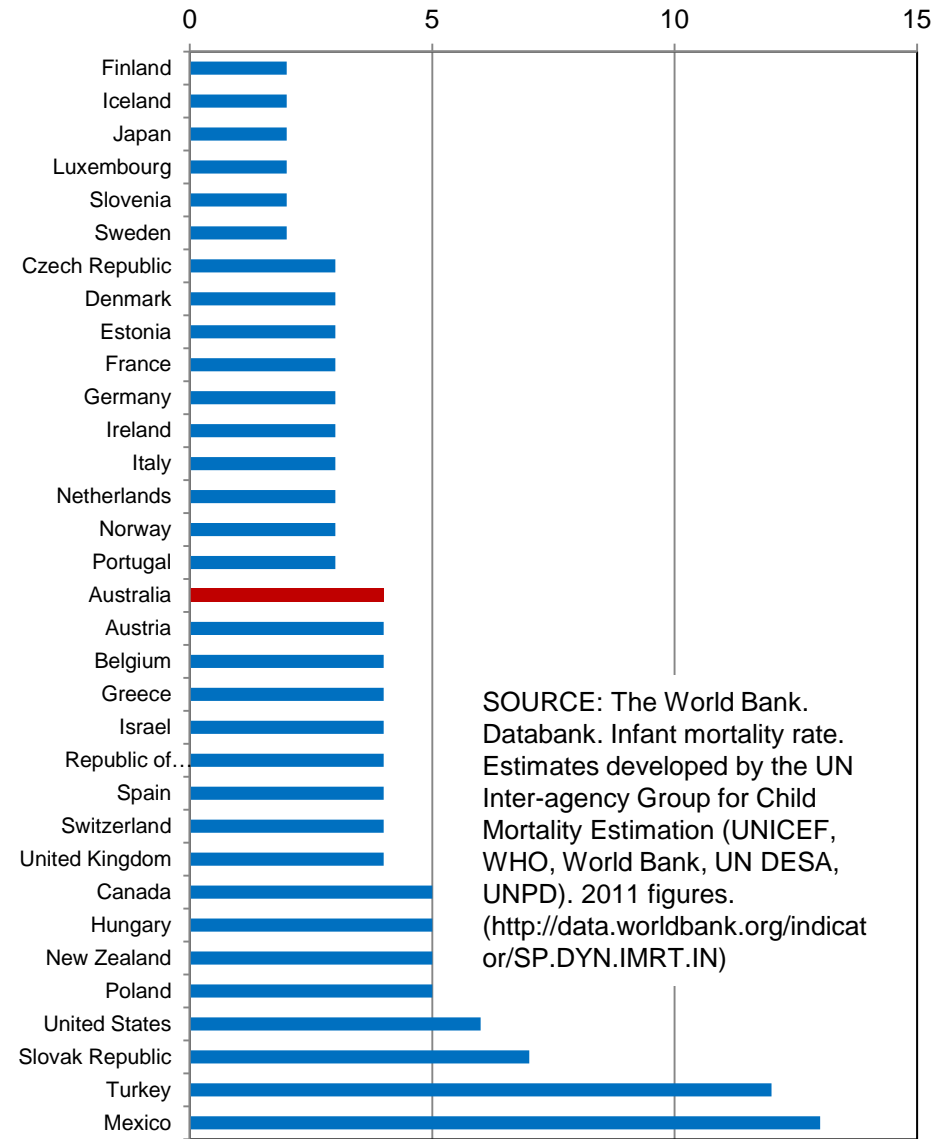
## Asia-Pacific Countries

Infant Mortality Rate, per 1,000 live births

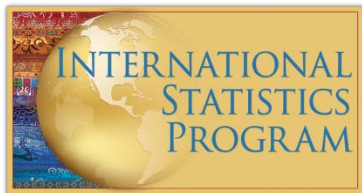


## OECD Countries

Infant Mortality Rate, per 1,000 live births



SOURCE: The World Bank. Databank. Infant mortality rate. Estimates developed by the UN Inter-agency Group for Child Mortality Estimation (UNICEF, WHO, World Bank, UN DESA, UNPD). 2011 figures. (<http://data.worldbank.org/indicator/SP.DYN.IMRT.IN>)

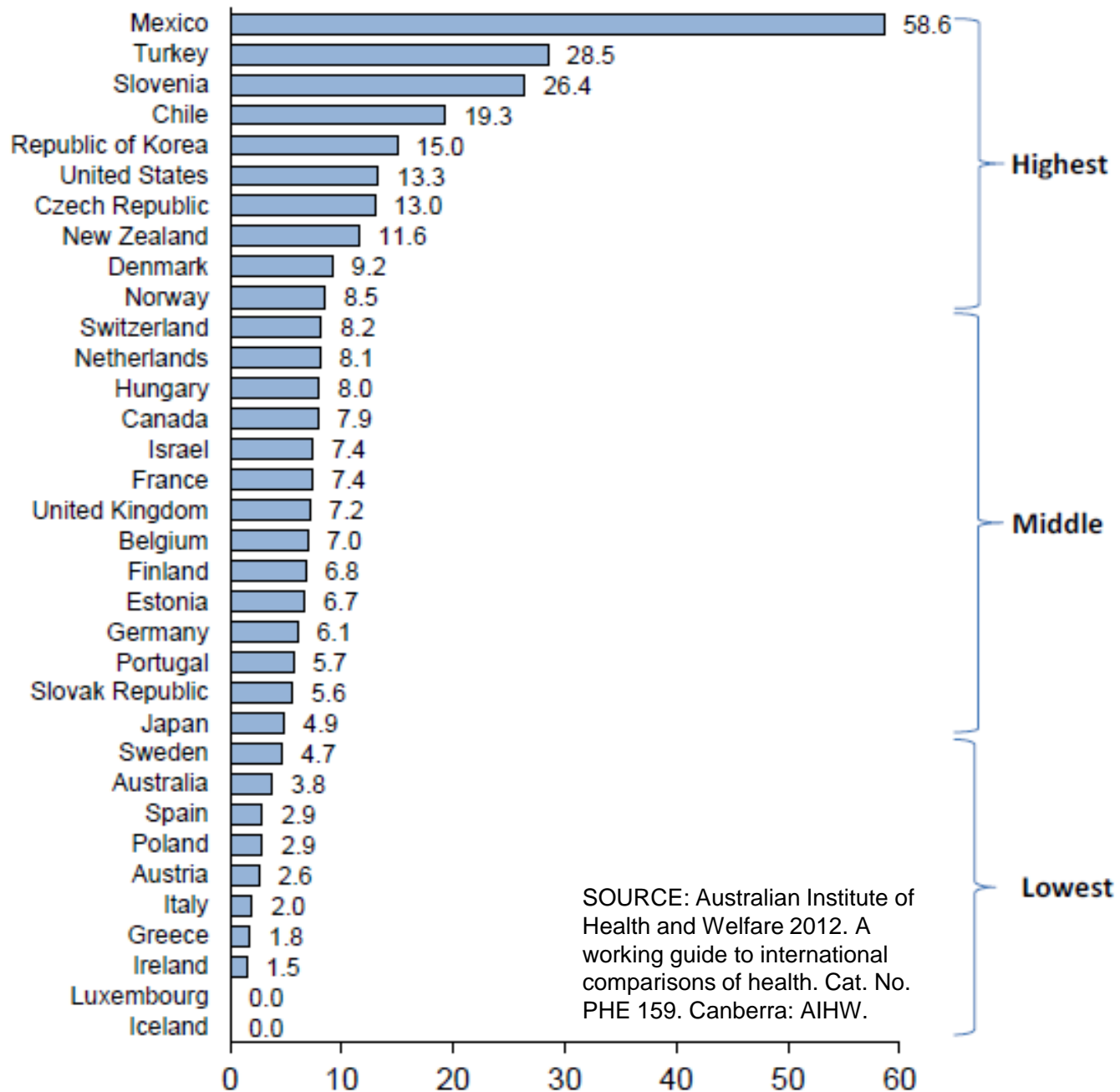


# Using Vital Statistics: International Comparisons

## Presentation & Interpretation

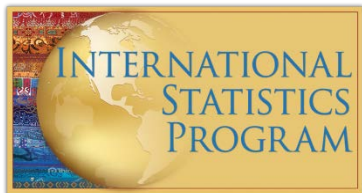
- **Presentation:** *Are the data presented appropriately?*
  - **Can (and should) the data be ranked from best to worst?**
  - **Is there agreement on which indicator is best?**
  - **What size are the differences separating country ranks?**
  - **Has the country's performance been considered independently of the international context?**

# MATERNAL DEATHS PER 100,000 LIVE BIRTHS



SOURCE: Australian Institute of Health and Welfare 2012. A working guide to international comparisons of health. Cat. No. PHE 159. Canberra: AIHW.





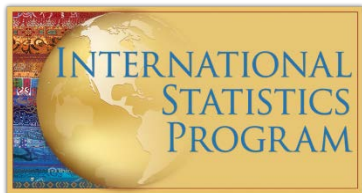
# Using Vital Statistics: International Comparisons

## Presentation & Interpretation

- **Explanation:** *Is the variation between countries adequately explained?*

- Genetic
- Cultural
- Economic
- Political
- Environmental

- **Focus on *what* differences are present rather than *why* the differences are present**

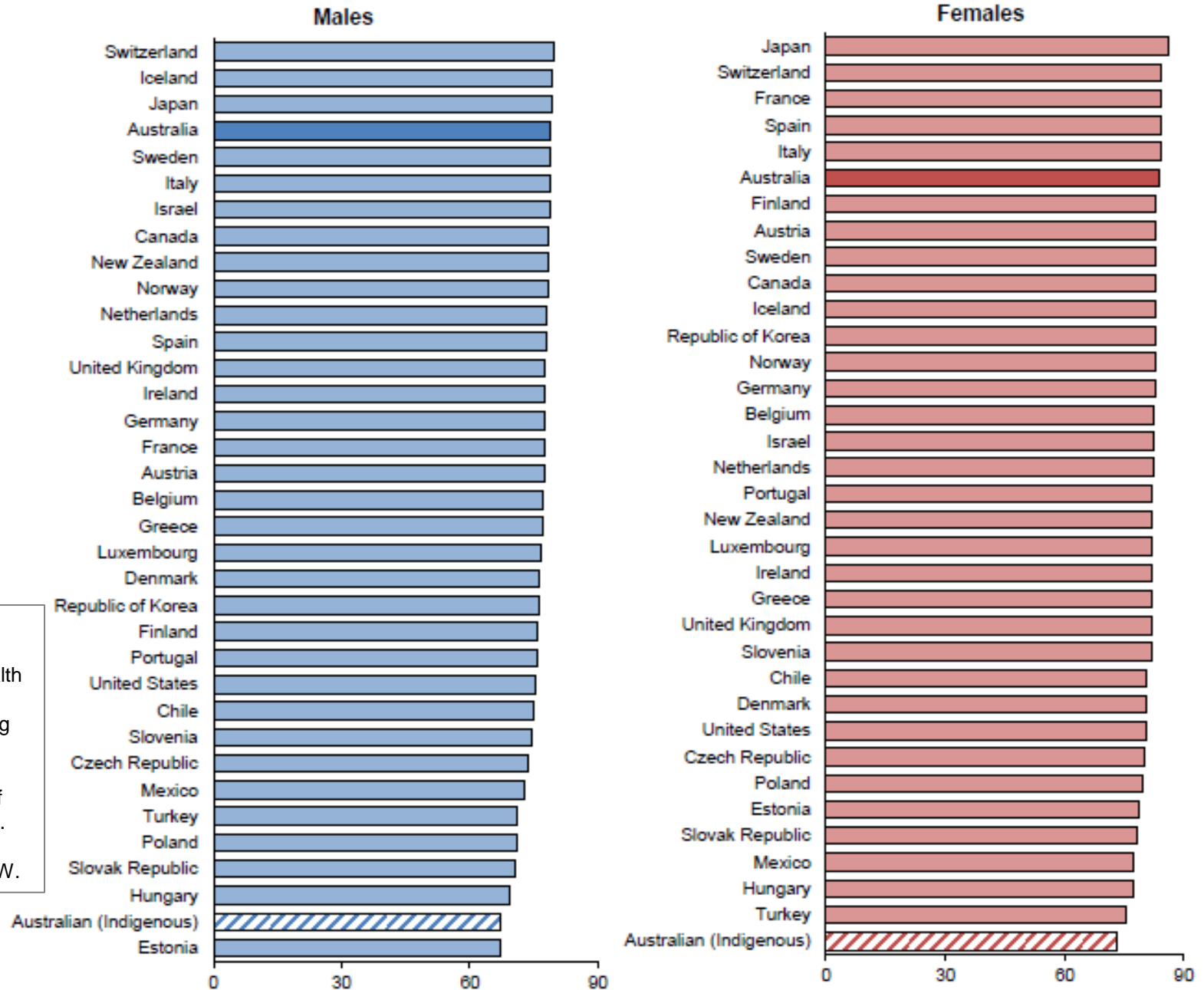


# Using Vital Statistics: International Comparisons

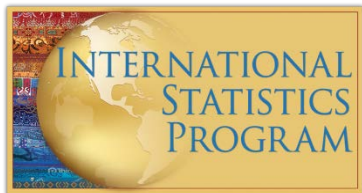
## Presentation & Interpretation

- **Underlying differentials:** *Are differences within countries considered?*
  - **Cultural groups**
  - **Administrative sectors**
  - **Socioeconomic status & income**
  - **Rural-urban divides**
  - **Literacy levels**

# LIFE EXPECTANCY AT BIRTH (YEARS)



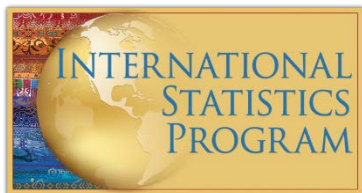
SOURCE:  
 Australian  
 Institute of Health  
 and Welfare  
 2012. A working  
 guide to  
 international  
 comparisons of  
 health. Cat. No.  
 PHE 159.  
 Canberra: AIHW.



# Using Vital Statistics: International Comparisons

## Presentation & Interpretation

- **Context:** *Can the data be used outside of the international comparison?*
  - **Standardization of data for comparisons**
  - **Methods and definitions may differ**
    - **International comparisons**
    - **Official country estimates**



# Mortality Statistics for Australia Using Different Data Sources

Cause of death	Number of deaths		Rates (deaths per 100,000 population)	
	Australia <sup>(a)</sup>	OECD <sup>(b)</sup>	Australia <sup>(d)</sup>	OECD <sup>(e)</sup>
Breast cancer (females only)	2,618	2,505	22.1	18.5
Cerebrovascular disease	11,465	10,975	50.5	35.2
Colon and rectum cancer	3,858	3,669	17.5	14.3
Coronary heart disease	22,983	21,940	101.8	73.5
Diabetes	3,662	3,490	16.4	12.5
Lung cancer	7,348	7,054	33.6	28.7
Prostate cancer	2,952	2,826	32.3	24.3
Suicide	1,799	1,673	8.6	7.5
<b>All causes</b>	<b>133,739</b>	<b>127,632</b>	<b>600.3</b>	<b>459.3</b>

SOURCES: Australian Institute of Health and Welfare 2012. A working guide to international comparisons of health. Cat. No. PHE 159. Canberra: AIHW.

**National counts by year of registration**

**International counts from WHO mortality database, by year death occurred; age standardized**



## Presenter

Some factors can restrict the meaningfulness of data in the context of international comparisons. As mentioned before, data to be used for comparisons are often adjusted to account for population differences between countries (e.g. age-adjusting).

When data are adjusted for such comparisons, the resulting figures are only useful in the context of the comparison; they do not represent true national estimates. Another

issue affecting the use of data meant for international comparisons is that methods for defining and calculating official country estimates may differ from methods used to prepare data for international comparisons. For example, mortality statistics from the WHO mortality database are recorded by the year the death occurred, while some countries report deaths by year of registration. Each method yields different mortality numbers and rates.



Presenter

This figure shows how different results may be seen among population subgroups compared to total populations. For both males and females, life expectancy for Australia as a whole is relatively high. However, when you look at Australia's indigenous population alone, life expectancy is much lower.

(Note: The scale used in the bar graphs could be expanded to better display differences in data between 60 and 90 years life expectancy.)









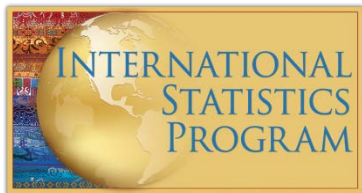


Presenter

Provide sample reports of various types to each group. Reports available electronically/via course reference package:

NVSS Births and Deaths (United States, national)  
Idaho State Vital Statistics Annual Report 2009 (United States, state)  
Utah Births and Deaths Report 2010 (United States, state)  
Statistics South Africa Mortality Report 2008

Kenya Annual Health Sector Statistics Report 2008  
Kenya Annual Civil Registration Statistics Report 2009 (Part 1 and Part 2)  
Jordan Mortality Report 2004  
Thailand Health Profile Report 2005-2007 (Chapter 5, on births and deaths)  
British Columbia Vital Statistics Annual Report 2009  
Costa Rica Basic Health Indicators Report 2007 (in Spanish)  
India Sample Registration Bulletin, December 2011  
Austrian Statistical Compendium 2010 (German; some translation)



6. Tabulation by date of (*registration / occurrence*) is faster than by (*registration / occurrence*).
7. Having a directory of users provides for (*wide / targeted*) dissemination of reports.
8. Data sets with identifiable data used for special research (*do not require / require*) approval.
9. Vital statistics information (*can / cannot*) be used for non-health purposes.
10. Good communication with data users is (*ideal / essential*).