

Module 01 Lecture 01

Introduction to the course

Impact of foodborne disease

<i>Country</i>	<i>Number of Cases / yr.</i>	<i>Costs (US\$)</i>	<i>Source</i>
	99 x 10 ⁶	23 x 10 ⁹	Garthwright (1988)
USA	24-81 x 10 ⁶	“high”	Archer and Kvenberg (1985)
USA	33 x 10 ⁶	7.7 x 10 ⁹	Kvenberg and Archer (1987)
CAN	12.6 x 10 ⁶	8.4 x 10 ⁹	Todd (1989)
	6.3 x 10 ⁶	4.8 x 10 ⁹	Roberts (1989)

Annual morbidity and mortality from diarrhoea

Estimates for global morbidity

2.6 episodes / child / year 1980 - 1990 Bern et al (1992)

2.2 episodes / child / year —————> 1982 Snyder and Merson (1982)

Estimates for global mortality

3.3 million 1990 Bern et al (1992)

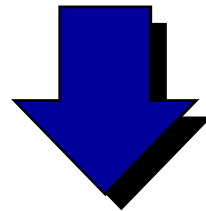
4.6 million 1982 Snyder and Merson (1982)

The structure of the course

Modular

10 modules

- **nature of microorganisms**



- **application of knowledge to prevention of FBD**

Modules

- 1. Basic food and water microbiology**
nature of microorganisms, ecology, safety of potable water
- 2. Foodborne pathogens**
- 3. Significance of foodborne disease**
impact of diarrhoea on nutritional status and health, social and economic implications of foodborne diseases
- 4. Hazards associated with chemical contamination in foods**
chemical hazards, physical hazards; allergens

Modules

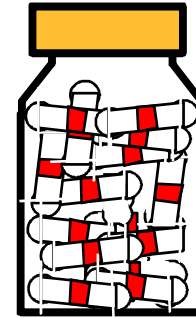
5. **Factors affecting survival, growth and control of microorganisms**
6. **Epidemiology and prevention of FBD**
7. **Potential local problems**
8. **Food hygiene**

Modules

- 9. Application of the Hazard Analysis and Critical Control Point System**
The system, definitions, identification of hazards and their control- a practical exercise, biotechnology
- 10. Biotechnology and food safety**
- 11. Running the food safety course**
- 12. Appendices**
Course timing, the road map. glossary of terms, planning, evaluation, incident summaries, suggested reading

Practical work

- **interactive exercises - 'Morning Vitamins'**
- **observations in the field**
- **syndicate groups - discussion and reporting**



Good Luck