**C14\_***VITAL\_STATISTICS*

After studying this chapter, the student will

1. understand the basic concepts and methodologies of epidemiology and vital  
      
   statistics and how they are used by professionals in the health sciences field.
2. be able to describe the differences between a rate and a ratio, and to explain  
      
   when the use of each is appropriate.
3. understand the concepts of mortality, morbidity, and fertility.
4. know how to calculate useful measures from mortality, morbidity, and fertility  
      
   data.

**14.1 INTRODUCTION**

The private physician arrives at a diagnosis and treatment plan for an individual patient by means of a case history, a physical examination, and various laboratory tests.

El médico privado llega a un plan de diagnóstico y tratamiento para un paciente individual mediante un historial de casos, un examen físico y varias pruebas de laboratorio.

may be thought - puede ser pensado

physician - médico

Traditionally, these tools and techniques have consisted of the community’s vital statistics, which include the counts of births, deaths, illnesses, and the various rates and ratios that may be computed from them.

*epidemiology*

Epidemiologists study the mechanisms by which diseases and other health-related conditions arise and how they are distributed among populations.

illness - enfermedad

*prevalence*

Before proceeding, however, let us distinguish between the terms *rate* and *ratio* by defining each as follows.

**14.2 DEATH RATES AND RATIOS**

**14.3 MEASURES OF FERTILITY**

**14.4 MEASURES OF MORBIDITY**