# **Syncope: Diagnosis and Management**

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Abstract: Syncope is defined as transient loss of consciousness due to global cerebral hypoperfusion. It is characterized by having a relatively rapid onset, brief duration with spontaneous and full recovery. The major challenge in the evaluation of patients with syncope is that most patients are asymptomatic at the time of their presentation. A thorough history and physical examination including orthostatic assessment are crucial for making the diagnosis. After initial evaluation, shortterm risk assessment should be performed to determine the need for admission. If the short-term risk is high. inpatient evaluation is needed. If the short-term risk is low, outpatient evaluation is recommended. In patients with suspected cardiac syncope, monitoring is indicated until a diagnosis is made. In patients with suspected reflex syncope or orthostatic hypotension, outpatient evaluation with tilt-table testing is appropriate. Syncope units have been shown to improve the rate of diagnosis while reducing cost and thus are highly recommended. (Curr Probl Cardiol 2015;40:51–86.)

#### **Definition**

ransient loss of consciousness (T-LOC) or "faint" is a broad term that includes all disorders characterized by transient, self-limited loss of consciousness (LOC). The causes of T-LOC include syncope, epileptic seizures, metabolic disorders, and psychogenic causes. Syncope is defined as a form of T-LOC where the mechanism is transient

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## **Epidemiology**

Syncope is common in the general population. The first episode presents at characteristic ages in a bimodal distribution with a high incidence in patients between the ages of 10 and 30 years, relatively uncommon in middle-aged adults, and peaking again in patients older than 65 years. <sup>1,2</sup> In the Framingham Heart Study, the overall incidence rate of a first report of syncope was 6.2 per 1000 person-years. The incidence rates increased with age, with a sharp rise at 70 years. The 10-year cumulative incidence was 6%. In another study by Malasana et al, the prevalence of faint over a 1-year period was estimated at 9.5 per 1000 inhabitants, with women having a higher prevalence at the ages of 10-49 years when compared with males and similar prevalence at ages greater than 50 years (Fig. 1). <sup>4</sup> Variations in the reported prevalence of syncope in different studies are likely due to differences in definition, diagnostic methods, and study populations. Nevertheless, approximately one-third of individuals are likely to have a syncopal episode during their lifetime. <sup>5-7</sup>

Syncope is a common problem in the emergency department (ED). Several reports found that 3%-5% of all ED visits and 1%-6% of all hospital admissions were due to syncope. <sup>8-11</sup> The prognosis in patients with syncope depends on the etiology and underlying cardiovascular condition. In the Framingham study, the risk of death was doubled among participants with cardiac syncope compared with those without syncope. Vasovagal syncope

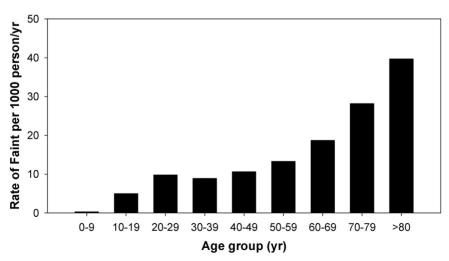


FIG 1. Prevalence of faint in the State of Utah. (Adapted with permission from Malasana et al. 4)

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