

in honey can also contribute to caries and may be a potential source of botulism. As the sweet liquid pools in the mouth, the teeth are bathed for several hours in this cariogenic environment. Prolonged bottle feeding well into toddler years in some cultures may contribute to significant ECC ([Brotanek, Schroer, Valentyn, et al, 2009](#)). The maxillary (upper) incisors and molars are affected most because the mandibular (lower) incisors are protected by the lower lip, tongue, and saliva. Severely decayed teeth may require the application of stainless steel bands to preserve the spacing until the permanent teeth erupt.



**FIG 11-8** Early childhood caries (ECC). (Courtesy of Bruce Carter, DDS, Texas Children's Hospital, Houston, TX.)

ECC is now considered to be an infectious disease of childhood. There is evidence that *Streptococcus mutans* is a highly cariogenic bacteria ([American Academy of Pediatric Dentistry, 2014b](#)). One of the early origins of *S. mutans* is the mother's saliva; infants of mothers with high counts of the bacteria have a greater incidence of ECC. Therefore, it is important to discuss oral hygiene with pregnant women because of its impact on their children's tooth development.

Prevention involves eliminating the bedtime bottle completely, feeding the last bottle before bedtime, substituting a bottle of water for milk or juice, not using the bottle as a pacifier, and never coating pacifiers in sweet substances. Juice in bottles, especially commercially available ready-to-use bottles, is discouraged; these beverages are especially damaging because the sugar is more readily converted to acid. Juice should always be offered in a cup to