

regular bag with a feeding tube inserted through a puncture hole at the top of the bag serves as a satisfactory substitute. However, take care to empty the bag as soon as the infant urinates to prevent leakage and loss of contents. An indwelling catheter may also be placed for the collection period.

## **Bladder Catheterization and Other Techniques**

Bladder catheterization or suprapubic aspiration is used when a specimen is urgently needed or a child is unable to void or otherwise provide an adequate specimen. The American Academy of Pediatrics recommends that a urine specimen be obtained by bladder catheterization or suprapubic aspiration in ill-appearing febrile infants with no apparent source of infection prior to antimicrobial administration and to confirm a positive screen for infection ([American Academy of Pediatrics, Subcommittee on Urinary Tract Infections, Steering Committee on Quality Improvement and Management, and Roberts, 2011](#)).

Preparation for catheterization includes instruction on pelvic muscle relaxation whenever possible. The toddler, preschooler, or younger child should blow on a pinwheel and press the hips against the bed or procedure table during catheterization to relax the pelvic and periurethral muscles. The nurse describes the location and function of the pelvic muscles briefly to the older child or adolescent. The patient then contracts and relaxes the pelvic muscles, and the relaxation procedure is repeated during catheter insertion. If the patient vigorously contracts the pelvic muscles when the catheter reaches the striated sphincter (proximal urethra in boys and midurethra in girls), catheter insertion is temporarily stopped. The catheter is neither removed nor advanced; instead, the child is helped to press the hips against the bed or examining table and relax the pelvic muscles. The catheter is then gently advanced into the bladder ([Gray, 1996](#)).

Catheterization is a sterile procedure, and standard precautions for body substance protection should be followed. If the catheter is to remain in place, a Foley catheter is used. [Table 20-5](#) gives guidelines for choosing the appropriate-size catheter and length of insertion. The supplies needed for this procedure include sterile gloves, sterile lubricant anesthetic, the appropriate-size catheter, povidone/iodine (Betadine) swabs or an alternative cleansing agent