Blister Management

✓ A blister is the formation of fluid between the epidermis and dermis at the site of friction
✓ Common areas are the heel, toes, and underside of foot

PREVENTION

✓ Keep foot and toes as dry as possible
✓ Gradual progression in activity level and intensity to allow skin to adapt to stresses
✓ Shoes: Seek professional assistance with shoe fitting for correct type and fit
✓ Socks: Synthetic blends (no cotton), thick construction, minimal stitching at toes and heel
✓ Insoles: Soft, off-the-shelf designs lessen friction
✓ Apply tape or prevention dressings over high friction or blister-prone areas
✓ Lubricants (petroleum jelly): Only effective for brief periods (less than 1 hr)
✓ Drying agents (powders): Will absorb moisture, but may increase frictional forces when wet

TREATMENT

NONPAINFUL CLOSED BLISTER

✓ Keep area clean by washing with soap and water
✓ Protect blister with a dressing and/or foam or felt donut pad
✓ Donut pad: ¼ -½ inch larger than blister, cut hole in pad the size of the blister
✓ Monitor for opening of blister

PAINFUL CLOSED OR OPEN BLISTER

✓ Clean the foot and toes with soap and water
✓ Apply latex gloves
✓ Clean the blister with a disinfectant or antimicrobial soap
✓ Use a sterile needle or scalpel to puncture a closed blister, allow to drain
✓ With sterile scissors, remove the covering (roof) of the blister along the base
✓ Flush the wound area with warm saline or drinkable water
✓ Cover the wound with a semi occlusive or occlusive dressing
✓ Apply a secondary dressing to increase adherence of occlusive dressing
✓ For activity, a donut pad can be used over the secondary dressing
✓ Monitor for infection (presence of abnormal heat, redness, leakage, or smell from wound, unexpected pain or tenderness). If any of these are present seek medical attention immediately.

DRESSINGS, TAPES, and KITS

✓ Semi occlusive and occlusive dressings to apply over wound area:
  o Tegaderm (Nexcare, 3M) film, foam, and hydrocolloid dressings
  o DuoDerm (ConvaTec) hydrocolloid dressings
  o 2nd Skin (Spenco) hydrogel dressings
  o ACTIV-FLEX (Johnson & Johnson) hydrocolloid dressings
  o Most can be left on wound for 1-7 days without dressing changes
✓ Blister Kits, Insoles, Pads, and Tape
  o Nexcare (3M)
  o 2nd Skin (Spenco)
  o Dr. Scholl’s (Schering-Plough HealthCare Products)

Courtesy of University of North Florida Athletic Training Education Program
http://www.unf.edu/brooks/clinical-applied-movement/at.html