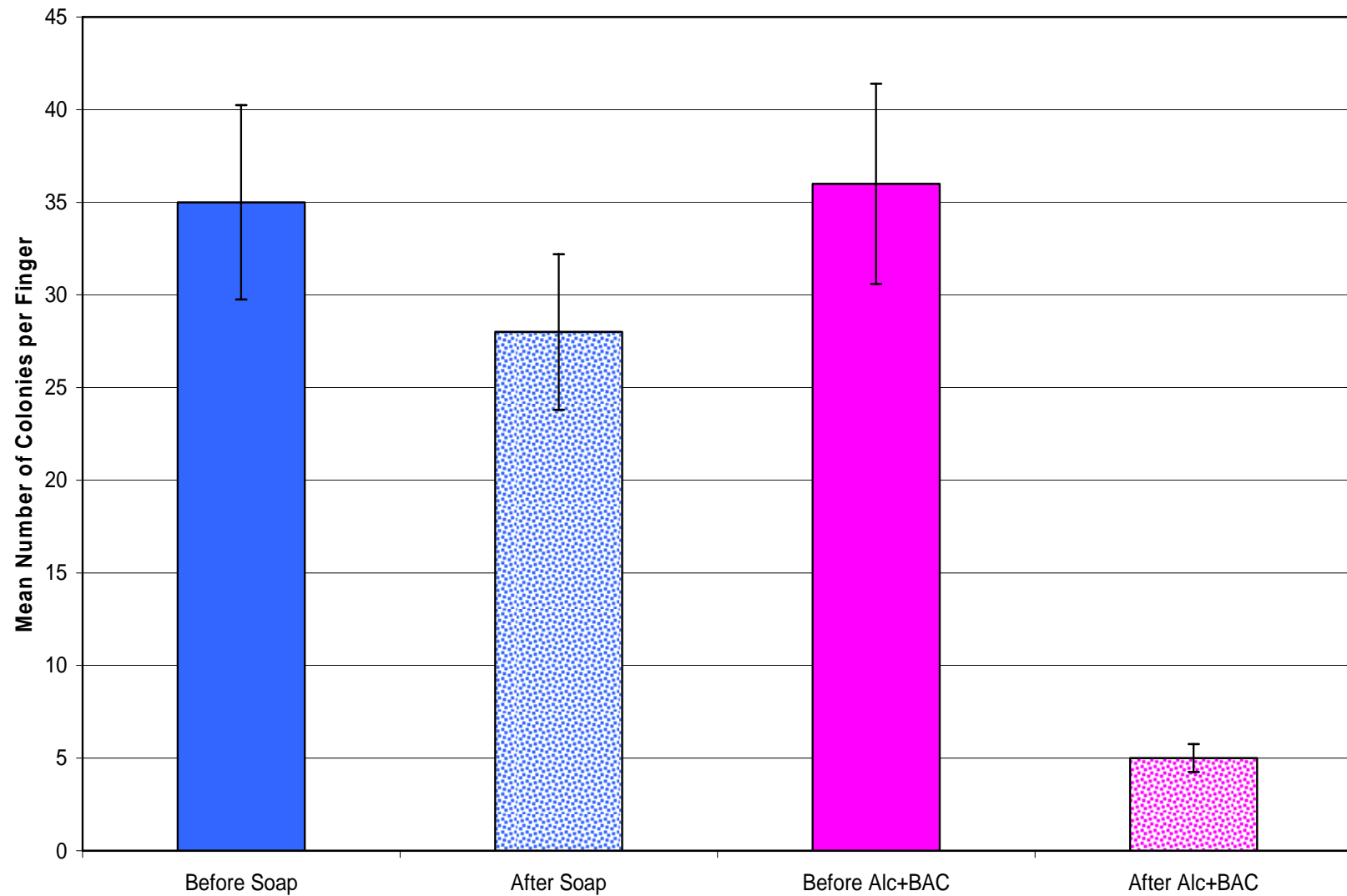
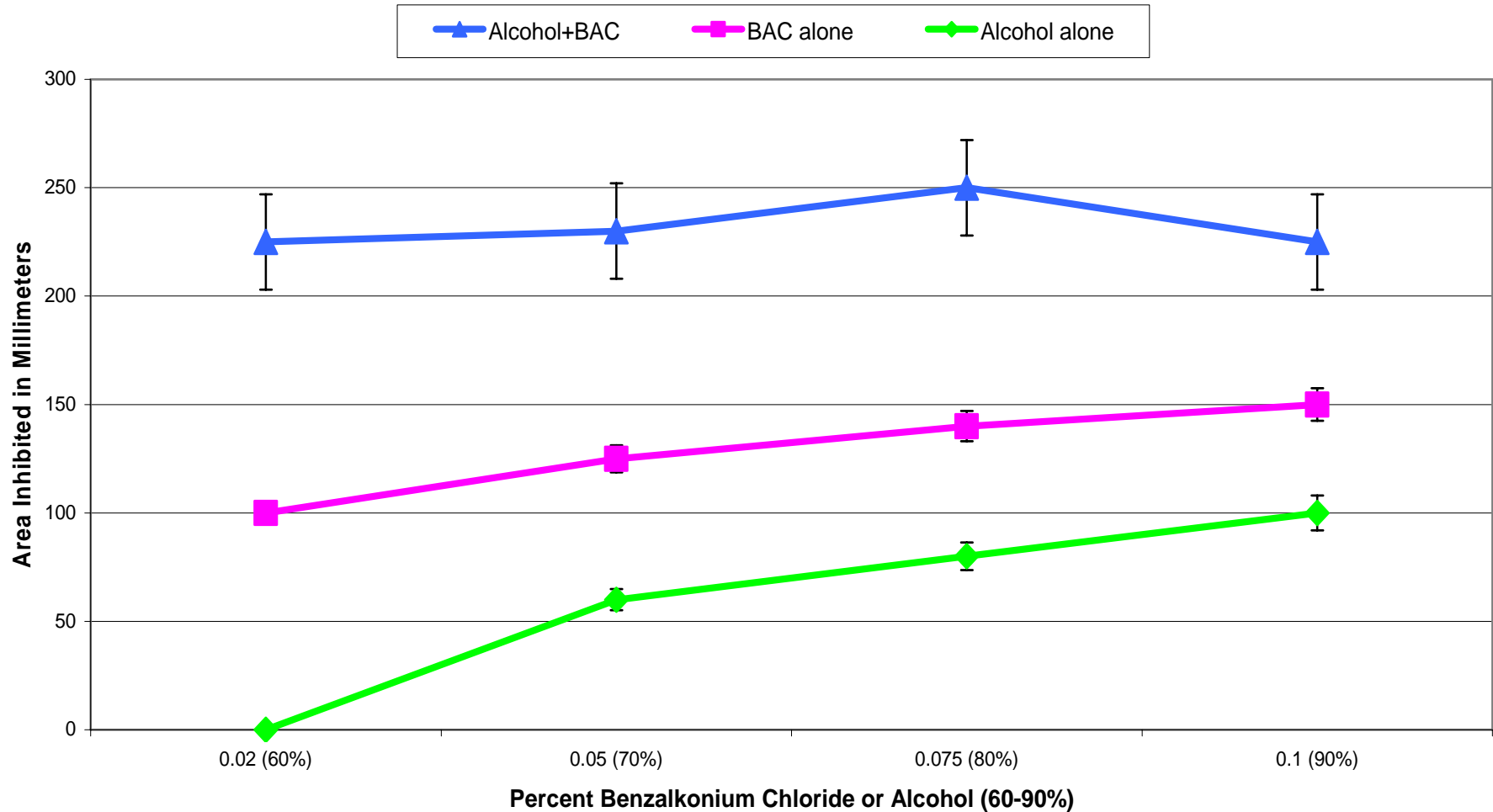


## Mean Number of Colonies per Treatment Group



In the graph above Germ Out<sup>®</sup>, which contains two germ killers (70% Isopropyl alcohol and 0.02% Benzalkonium chloride), reduces the numbers of bacteria (microorganisms) on the fingers significantly better than antimicrobial soap and water<sup>2</sup>.

## ANTIBACTERIAL ACTIVITY



In the graph above the zone of bacterial inhibition was measured in millimeters with alcohol alone (60% to 90%), with Benzalkonium chloride alone (0.02% to 0.10%), and with Germ Out<sup>®</sup> alone (The concentration of Benzalkonium chloride in Germ Out<sup>®</sup> was varied between 0.02% and 0.10% while the concentration of Isopropyl alcohol was kept constant at 70%). The zone of bacterial inhibition in millimeters for Germ Out<sup>®</sup> at all concentrations of Benzalkonium chloride was significantly greater than the zone with alcohol alone or Benzalkonium chloride alone at all concentrations. Germ Out<sup>®</sup> contains two powerful germ killers. They are 70% Isopropyl alcohol and 200 parts per million (0.02 wt%) Benzalkonium chloride.

# Effect of Alcohol-Based Handrubs on Skin Condition

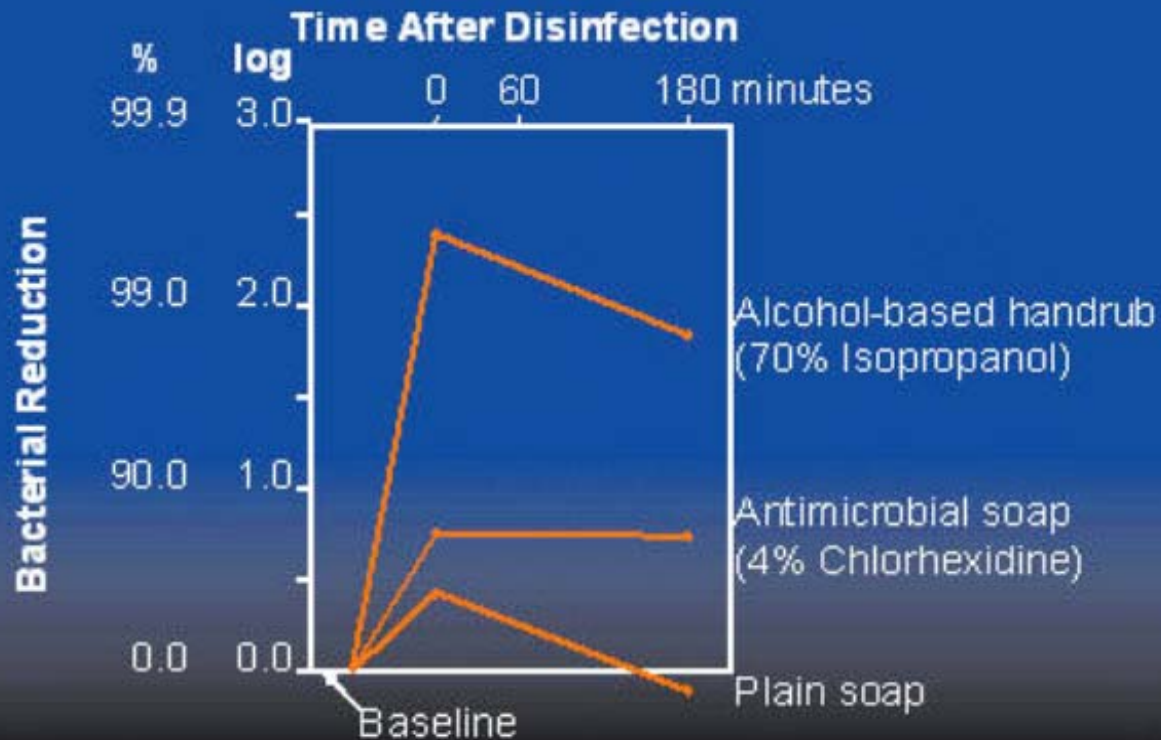


~ Alcohol-based handrub is less damaging to the skin ~

Boyce J, *Infect Control Hosp Epidemiol* 2000;21(7):438-441.

In the graph above left, healthy and dry hands were measured on a self-reporting score from 0 (healthy) to dry (6) at baseline and after using alcohol rubs or soap and water washing for two weeks. At baseline there was no significant difference between the two methods but at two weeks the alcohol rub was significantly better at maintaining healthy (not dry) hands than soap and water. In the graph above right, the epidermal water content of the skin was measured on a scale from 15 (dry) to healthy (27) at baseline and after two weeks using alcohol rub and soap and water. At baseline there was no significant difference between the two methods but after two weeks the alcohol rub epidermal water content was significantly healthier than the soap and water method<sup>7</sup>. The alcohol rub method for maintaining hand hygiene was significantly better than the soap and water method.

# Ability of Hand Hygiene Agents to Reduce Bacteria on Hands



Adapted from: *Hosp Epidemiol Infect Control*, 2<sup>nd</sup> Edition, 1999.

In the graph above 70 % Isopropyl alcohol reduces the number of bacteria significantly better than antimicrobial soap and water or soap and water<sup>1</sup>.