A small pilot study has found no pathogenic bacterial growth on scrub suits laundered in the hospital or at home.

Culture swabs were taken of the left shoulder of scrub suits worn by 50 OR personnel—30 who laundered their scrubs at home and 20 who wore hospital-laundered scrubs.

None of the cultures grew pathogenic microorganisms. There also were no significant differences in normal skin flora on the suits that were home- or hospital-laundered.

The cultures were taken on a convenience sample of staff within 2 hours after arriving at work. The staff did not know in advance their suits would be cultured.

The study was conducted at Boulder Community Hospital, a 200-bed facility in Boulder, Colo, where the surgical staff have been home laundering scrub suits for about 7 years.

“My purpose for doing the study was to make sure that if we were requiring the staff to home launder their scrubs, we didn’t do any harm,” says Priscilla Jurkovich, RN, MSN, Boulder Community’s educator for surgery and service coordinator for presurgery testing. Her report of the study is in the March/April MCN/ American Journal of Maternal Child Nursing.

Questions about home laundering

To learn more about home laundering, the staff were asked five questions:

1. Did you wear the scrubs into the hospital or store them in a locker?
2. Do you have a cat or a dog at home?
3. Was your home laundry temperature set to hot, warm, or cold?
4. Did you wash the scrubs separately or with other household clothes?
5. Did you dry the scrubs in a dryer?

Of the 30 people in the home-laundering group:

• 21 washed their suits in warm water, 6 in hot water, and 3 in cold water.
• 18 wore their scrubs into the hospital, and 12 stored them in a locker.
• 22 washed them separately, and 8 washed them with other clothing.
• 22 had pets, and 8 did not.

Though pets are a possible source of contamination, the study found only normal skin flora on the scrubs worn by 11 of the 22 pet owners, while 11 scrubs had no growth. Skin flora are of human origin and not pathogenic. The growth of skin flora approached but did not reach statistical significance.

Jurkovich decided to swab the left shoulder because that was the protocol used in a 1986 study of cover gowns by Copp and colleagues from Stanford University Hospital, one of the few other studies of contamination of surgical apparel.

Home-laundering instructions

Boulder Community began allowing home laundering in 1997 after some of the staff reported sensitivity to the hospital’s detergent. Others wanted to buy their own suits because the hospital’s scrubs didn’t fit properly, and some wanted to wear more colorful cloth caps and warm-up jackets.

Now all of the staff in the OR, preop, and postop areas launder their own scrubs, which are provided by the hospital. Each full-time staff member is given 6 scrub suits, enough for 5 shifts and 1 night of call. Physicians are provided with hospital-laundered suits. The hospital estimates it saves $17,000 a year in laundry costs.
The staff are given basic laundering instructions, which include using regular laundry soap, washing the suits separately in warm water, and drying them in the dryer. There is no recommendation for the dryer temperature. They are expected to launder their suits daily and may either wear them into work or put them in their locker.

Reference