

Take time to care for your hands



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Recently, several lobstermen have reported painful and uncomfortable problems with their hands, such as infections, rashes, and significant peeling. Although it is beyond the scope of this column to diagnose these hand ailments, we can offer some hand protection tips.

Multiple layers of epithelial (skin) cells provide a strong barrier against infection. Aiding this barrier are several mechanisms of "decontamination" that are constantly at work in healthy skin.

First, the top layer of cells is constantly sloughing-off, taking with it organisms and toxins that have landed there.

Second, there are actually "helpful" organisms, bacteria for example, which

reside on our skin and may secrete substances that make it difficult for harmful bacteria to survive.

Third, secretions of sweat and unsaturated fatty acids create an acid environment that discourages the growth of infection-causing pathogens.

When the skin is healthy, all of these mechanisms prevent pathogens from penetrating into the deeper layers of the epithelium.

However, fishing is a hostile environment for skin in general and hands in particular.

In a recent study of commercial fishermen in the Northeast Atlantic and Barents Sea, published in the International Archives of Occupational and

Environmental Health (2003), the Royal Norwegian Coast Guard found that "hand and finger injuries accounted for 35% of all the injuries."

Fishermen's hands are subject to: lacerations from rope, wire, and metal parts; crushing in winches and between heavy gear such as trawl doors; punctures from nails, fish hooks, fish fins, lobster claws, and urchin spines; and abrasions from handling traps, rope, crushed ice, and more.

Injuries such as these destroy the natural protective ability of the skin by providing a route for bacteria and viruses to enter and cause infection.

Also, cold water temperatures can affect peripheral nerves in the hand and hands that are constantly wet lose the protective acid covering of skin secretions. Long exposure to sunlight is harmful to skin as well.

Further, the hands of lobstermen are subjected to the unique environment of the bait box.

One bait dealer reported that his herring is packed in ice containing 20% salt and redfish is preserved in a brine containing 25% salt.

This high salt content is "hyperosmotic" relative to skin cells. That means it draws fluid from the skin cells and causes them to become overly dry, resulting in cracking.

This could easily account for the peeling skin some fishermen experience on their hands.

And although iced, bait undoubtedly harbors bacteria that can get into the deeper layers of cells through breaks in the skin.

Many fishermen wear gloves to protect

Fishermen's hands can become overly dry, leading to cracking and peeling skin. Hand care should include the use of a good hand cream, and watching for signs of infection.



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What to do

The skin is best able to function as a protector when it is intact without breaks, moist but not wet, and clean.

This is a tall order for fishermen.

The best you can do is wear gloves to protect your hands, but bring out new ones before they get scratchy inside.

Wash frequently with soap, perhaps with the new waterless soap, and use a good hand cream whenever you have a minute and when you're done for the day.

Finally, watch for infection. The presence of rashes, infections on the finger tips, nails, or palms, as well as boils, ulcers, swelling, or pain, all signal the need to pay attention.

In the fishing environment, even small punctures, such as those from urchin spines or lobster claws, can result in a major local or systemic infection.

The presence of a red line running up your arm from your hand is an indication that an infection has moved into the rest of the body, a serious situation that requires immediate medical help.

Take time to take good care of your hands on a daily basis.

FISH SAFE:

- Keep hands as clean and dry as possible.
- Restore moisture to overly dry skin with a good hand cream.

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Susan Jones photo



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SAFE

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- Restore moisture to overly dry skin with a good hand cream.
- Seek medical attention for hand or skin ailments sooner rather than later.

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United States Coast Guard

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