Radiation Skin Changes: What to Expect

Radiation skin changes usually happen in the area being treated. NCI describes skin that may become dry, peeling, itchy, red or darker, sore, swollen, or moist in more intense reactions. Skin care instructions vary by treatment area, dose, timing, and personal risk factors, so ask your radiation team what to use and what to report.

This page is for people starting radiation therapy who want to know what skin changes to expect and how to care for the treated area.

The short answer

Radiation skin changes usually happen only in the treated area, not all over your body. Skin can become dry, itchy, red, or darker. It may look sunburned, or feel swollen and tender. Some reactions become moist, with sores that are wet and painful.

Why the treatment area matters

Radiation damages skin cells in the path of the beam. If the treated area has skin folds, NCI advises keeping them clean and dry to help prevent infection. Ask your team when changes may start and how long they may last.

Skin care during treatment

Common skin care steps include:

- Use only the mild soap your radiation team recommends.
- Avoid heating pads, ice packs, and tight bandages on the treated area.
- If hair removal is needed there, ask about an electric razor or shaving less often.
- Apply the specific moisturizer your team recommends, ideally while skin is still slightly damp after bathing. Ask which products, such as powder or antiperspirant, to avoid before treatment.
- Protect the area from the sun with clothing or the sunscreen your team approves.

When it becomes a moist reaction

Some reactions progress to what doctors call moist desquamation, where skin becomes wet, raw, and painful. This needs different care than dry, intact skin, so tell your team as soon as you notice this change rather than treating it yourself.

When to get help sooner

Keeping the area clean and dry, and following your team's instructions, helps prevent infection from taking hold. Some changes still need to be reported quickly.

- **Call 911 or go to an emergency department if** you have confusion, fast breathing, or you cannot stay awake alongside a temperature of 100.4°F (38°C) or higher. Do not drive yourself.
- **Call your care team immediately, day or night, if** your temperature reaches 100.4°F (38°C) or higher, or you get shaking chills, while you are also having chemotherapy — the CDC says to call right away (cdc.gov/cancer-preventing-infections/patients/fever.html), because an infection during chemotherapy can be life-threatening. If nobody answers quickly, go to an emergency department and say you are on chemotherapy.
- **Call your care team the same day if** redness is spreading beyond the treated area, or the skin is hot, swollen, weeping pus, or smells bad.
- **Call your care team the same day if** the skin becomes wet, raw, or blistered over a wide area, or the pain is hard to control.
- **Call your care team within a day or two if** itching, peeling, or soreness is getting worse, or your usual skin routine is no longer helping.

What to ask your team

- What products are safe to use on my skin during treatment?
- Is my skin reaction expected for this stage, or should it be checked?
- What does a moist reaction look like, and what would I do if it happens?
- Are there skin-fold areas I should watch more closely?
- How long after treatment ends should skin changes be expected to improve?

Sources

- National Cancer Institute — Skin and Nail Changes during Cancer Treatment (cancer.gov/about-cancer/treatment/side-effects/skin-nail-changes)
- National Cancer Institute — Radiation Therapy Side Effects (cancer.gov/about-cancer/treatment/types/radiation-therapy/side-effects)
- Centers for Disease Control and Prevention — Fever during cancer treatment (cdc.gov/cancer-preventing-infections/patients/fever.html)

Source: National Cancer Institute - Skin and Nail Changes During Cancer Treatment (cancer.gov/about-cancer/treatment/side-effects/skin-nail-changes)

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