The AAD’s Firefighter Skin Cancer Checks Program provides skin checks to firefighters, who are at elevated occupational risk. To reach firefighters, the AAD has partnered with the Firefighter Cancer Support Network (FCSN) and needs the participation of member volunteers and state societies.

This toolkit is designed to help dermatologists and their staff understand how to plan and conduct skin check events for firefighters.

Why do firefighters need skin cancer checks?

- Firefighters have a 21% greater risk of melanoma, the most serious form of skin cancer. (Jalilian et al., 2019)
- Firefighters have a 62% greater risk of melanoma between ages 30-49 compared to the general population of the same age (Pukkala et al., 2014)
- The 9/11 World Trade Center 14-year follow-up study showed firefighters had higher rates of melanoma compared to the general population. (Li et al., 2021), (Boffetta et al., 2021)
- Firefighting is classified as a known human carcinogen — meaning firefighters have a higher risk of cancer due to their occupation — according to top researchers from across the world who have worked with the International Agency for Research on Cancer (IARC). They further listed melanoma as a cancer of concern for firefighters due to the higher rates in firefighters than in the general population. (Demers et al., 2022)
- Firefighters are exposed to carcinogens (cancer-causing substances) in the line of duty, especially when fighting fires. Some of the carcinogens they may encounter include asbestos, benzene, formaldehyde, PAHs, and PFAS. These carcinogens can be inhaled, ingested, or absorbed through the skin. (“Systemic Exposure to PAHs and Benzene in Firefighters Suppressing Controlled Structure Fires,” 2014) (Mazumder et al., 2023)

Planning tips for dermatologists

- The dermatologist organizing the event works with the fire department to organize the date, location, and time of the skin check.
- Potential contacts in the fire service include the local chief, union president, or state fire marshal.
- You can also work through our partners at the FCSN to find an interested firefighter organization in your area by using our contact form at aad.org/skincancercheck-contact.
- Volunteer medical assistants and nurses can help facilitate workflow and manage paperwork. Usually a 1:1 ratio of patient to dermatologist works best but a 1:2 ratio would work as well.
- The fire service is responsible for scheduling firefighters, organizing the arrival of trucks, etc.
- One to two fire service administrative staff should be available during skin checks to help with logistical issues.
- Scheduling via signupgenius or another volunteer management service can minimize wait times.

For more information, see: aad.org/firefighters
Scheduling firefighter skin checks

Location
Skin checks can often be scheduled at the fire station. Fire stations usually have on-call or bunk rooms that are suitable for skin checks, or you may be able to use a large room with partitions.

Work hours
Firefighters typically work 24-hour shifts 2 days a week with 4 rotating groups. Conducting skin checks at shift change may enable you to check firefighters from two different shifts, as one arrives and another leaves. Firefighters usually belong to unions, so scheduling an event concurrent with a union meeting can work well.

Volunteer firefighters
Volunteer firefighters usually have a primary job, so scheduling a skin check after work hours or on a Saturday may facilitate their participation.

Types of firefighters
Like medicine, the fire service has many subspecialities. This program may also include hazmat, industrial, airport, EMS, wildfire, and many other types of firefighters.

Duration
The time required for a skin check event depends on the number of firefighters and dermatologists available. One dermatologist can usually see 6-10 patients an hour.

Small fire service
Only one skin check visit is necessary. Ask the station for help choosing a time that is usually quiet for the firefighters, to reduce the chances they will have to respond to an emergency.

Large fire service
It usually isn’t practical to complete skin checks in a single day. Multiple visits, such as on consecutive Saturdays, may help. It may be possible to facilitate skin checks by rotating firefighters off the call roster while they are at the event.

A larger fire service typically has one or more large stations that serve as hubs for smaller satellite stations. It’s often possible to do skin checks at the larger station, with firefighters from the satellite stations rotating in for their checks.

Typical skin check workflow

Before skin checks
Start with education on skin cancer before the skin check event begins. The FCSN has a free online video lecture on cancer in the fire service (registration required). Firefighters may be more open to signing up

For more information, see: aad.org/firefighters
for a screening after being educated on cancer risks. At the start of the event, you can reinforce the message by educating the firefighters on sun protection and cancer risks.

**Pre-exam**
When it’s time for skin checks, an assistant should collect paperwork from each firefighter and bring them to the exam room. They should instruct the firefighter to disrobe and wait for the dermatologist.

**Exam**
The exam presents another opportunity to educate. Firefighters do physically demanding work, so it can be helpful to explain warning signs, such as wounds that don’t heal for longer than 3-4 weeks or recur in the same spot, or skin changes that should be evaluated by a dermatologist.

**Post-exam**
At the end of the exam, the assistant collects paperwork and gives the firefighter a goodie bag with information about skin cancer and sun block samples. The assistant then places the paperwork into labeled bins: “No follow up,” or “Follow up recommended.”

**Working with firefighters**

**Confidentiality**
It’s vital to maintain patient confidentiality, especially with the fire service and union.

**Skin and hair**
Many firefighters have facial hair or tattoos or both, which can make a complete skin exam more challenging.

**Insurance**
Full-time firefighters typically have insurance through the fire service. Volunteer firefighters typically do not have insurance through the fire service.

**Underwear**
Some firefighters do not wear underwear, so having paper underwear available can be helpful.

**Culture**
A good sense of humor is helpful when dealing with firefighters!

**Supplies**
Make sure each exam room has a small table and a wipeable chair or two. It should be stocked with gloves, lighting, hand sanitizer, samples, and handouts such as AAD materials or a list of local dermatologists.

For more information, see: aad.org/firefighters
Office supplies

- Pens, Scotch tape, clear packing tape, binder clips, clip boards.
- Forms and handouts, privacy posters and other educational materials.

Sanitary supplies

- Exam gloves, hand sanitizer, sanitizer wipes to wipe down chairs.

Patient supplies

- Paper underwear, paper johnnies (hospital gowns), available at firefighter request. Usually only a small number are used per screening.
- Goodie bags with samples of sunblock and handouts.

Lighting

- Lights: 1000-lumens light with electric outlet, one per screening area, with one extension cord per light.
- Battery-powered light as backup if no plugs are available.
- Dermatoscope or Dermlite Lumiscope.

Furniture

- Portable chairs and tables for firefighters to fill out forms, if needed.
- If conducting exams in a large room, purchase partitions or pop up tents, or use pipe and drape for patient privacy. Ensure that partitions provide adequate privacy.

How to order forms

Member dermatologists can order forms from the AAD website, at aad.org/firefighter-forms.

Non-members may order from the public version of our form, at aad.org/nonmember-firefighter-forms.

Each English screening packet contains 50 forms and handouts, along with a PHI poster. Spanish screening packets are bundled with 10 forms in each packet. Most forms are 8.5 x 14 with the exception of California forms, which are 11 x 17.

For more information, see: aad.org/firefighters