



Safety+Health

Newsletter

UV Safety
Awareness

July is
Sarcoma
Awareness
Month



FAA Final Rule on SMS

Fireworks Safety

July 2024

Contents

03

UV Safety Awareness

Sunlight makes us happy, literally, but too much ultraviolet (UV) radiation exposure can have damaging effects on the skin, eyes, and immune system.

07

Fireworks Safety

Every year, thousands of people are injured badly enough to require medical treatment after fireworks-related incidents, with many of the injuries to children and young adults.

09

FAA Final Rule on SMS

FAA rule means more aviation entities are required to have a Safety Management System that went into effect May 28, 2024.

11

Sarcoma Awareness Month

Sarcomas are cancers that develop in connective tissues and may spread to other tissues or parts of the body. Learn the symptoms and risks.

13

Safety Message

“Fly-Away Tools”: There have been fatalities attributed to tools left in aircraft. After every maintenance task, account for every tool.

14

Upcoming Events

Clean Beaches Week – July 1st thru 7th
Vehicle Theft Prevention Month
PPE Roadshow



Clean Beaches Week

July 1st through the 7th is National Clean Beach week. Too often beaches are being trashed and stripped of their once beautiful scenes of beach waves. According to National Geographic, there are 5.25 trillion pieces of trash in the ocean, and approximately 269,000 tons sit on the surface of the ocean. The trash out in the ocean eventually ends up on the beaches for anyone who will pick it up. That is why in 2003, National Clean Beach week was instituted to raise awareness for beaches and the wildlife whose ecosystem gets interrupted by all the trash we humans fill the ocean with.

Also known as Earth Day for beaches, hundreds of events are organized locally on beaches around the USA and include beach clean ups, art fairs, seafood festivals and other educational events aiming to raise awareness about respecting the beach and surrounding environment.

With so much media attention focusing on the effects of our waste on marine life, the oceans, and our coastal landscape, this is an excellent opportunity to be proactive and attempt to address a small part of the overall problem while raising awareness of a much larger global challenge.

The 4th of July is the biggest day for beach visits in the USA, so why not go along and offer a helping hand and remember to leave no trace.

What you carry in, you carry out!



The **Clean Beaches Coalition** (CBC) is a network of coastal organizations and individuals committed to promoting clean, healthy and well managed beaches around the world.



UV Safety Awareness

Sunlight makes us happy, literally, but too much ultraviolet (UV) radiation exposure can have damaging effects on the skin, eyes, and immune system.

Most of us feel happier being outdoors, in the sunshine. The sun provides us with light, warmth, and produces endorphins in our body. Also, the sun provides us with healthy doses of vitamin D which is essential for healthy hair, skin, bones, immune system, and mood.

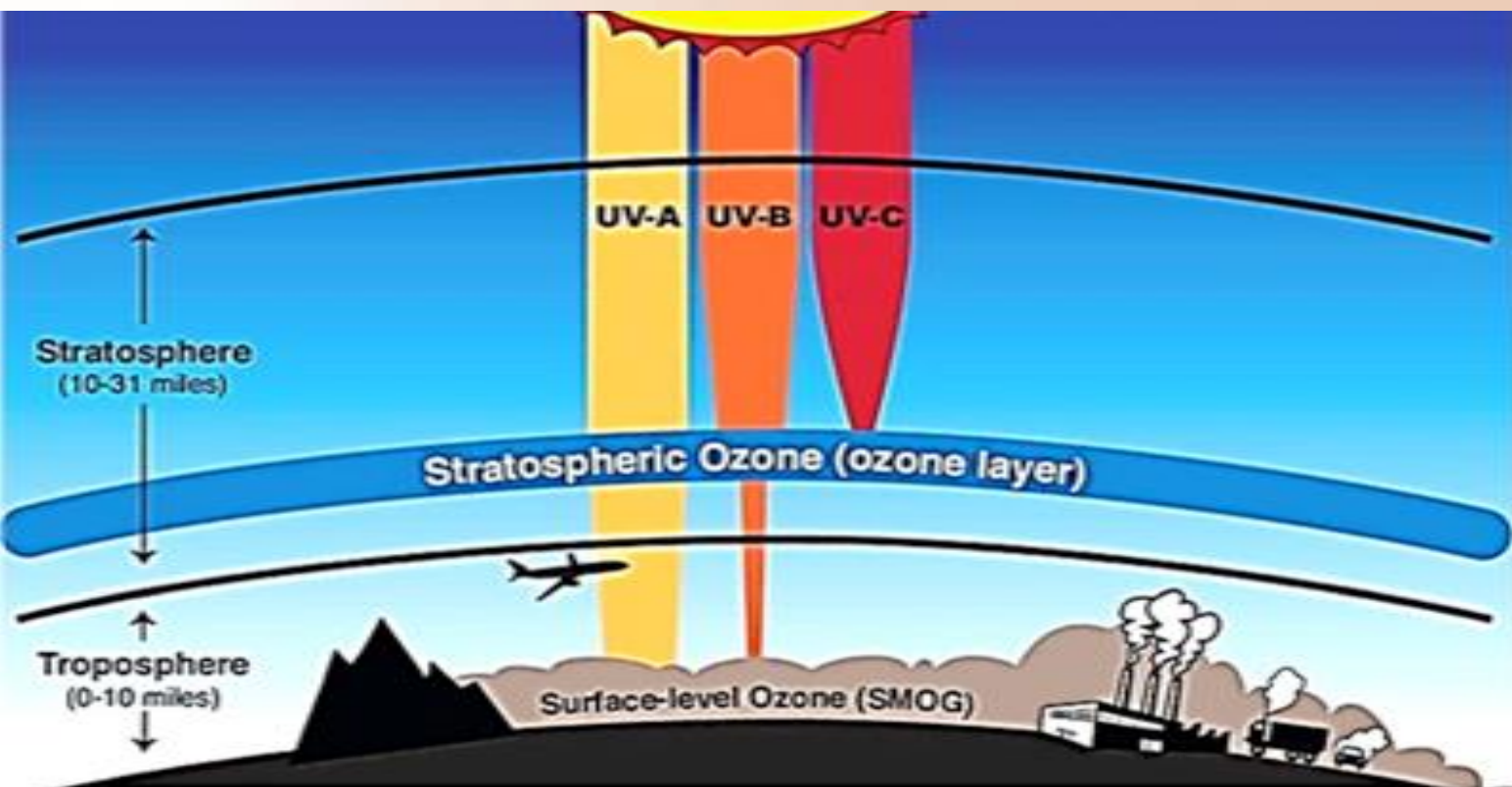
On the flip side of this, the existence of damaging rays can leave us with blistering sunburns, premature aging, skin cancer, and more.

Awareness is the first step in sun protection and understanding the difference in UV rays.

Understanding how these rays affect us is equally important so that you can make the healthiest choices for yourself and your family in terms of exposure and protection.

The sun is a natural source of ultraviolet (UV) radiation which emits 3 kinds of UV light. There is long wavelength (UVA), medium wavelength (UVB), and short wavelength (UVC).

The shorter the wavelength, the stronger the light. Fortunately, UVC radiation (powerful enough to kill humans instantly) is absorbed by our atmosphere and never reaches earth.



As the ozone layer slowly depletes from environmental pollution, there is an increase in the penetrations of UVA and UVB, resulting in earlier and more aggressive skin damage.

UVA rays account for roughly 95% of the UV radiation that reaches the Earth's surface and have the least energy among UV rays. These rays can cause skin cells to age and can cause some indirect damage to cells' DNA. UVA rays are mainly linked to long-term skin damage such as wrinkles and are a major contributor to almost every type of skin cancer.

UVB rays have slightly more energy than UVA rays. UVB rays are the ones your mother always warned you about. The ones that lead to painful and visible sunburn. Along with burning, UVB rays are also

thought to cause most skin cancers.

UVC rays have more energy than the other types of UV rays. Fortunately, because of this, they react with ozone high in our atmosphere and don't reach the ground, so they are not normally a risk factor for skin cancer.

But UVC rays can also come from some man-made sources, such as arc welding torches, mercury lamps, and UV sanitizing bulbs used to kill bacteria and other germs (such as in water, air, food, or on surfaces).

Other health issues related to UV radiation

UV rays can cause eye problems. They can cause the cornea (on the front of the eye) to become inflamed or burned. They can also lead to the formation of cataracts (clouding of the lens of the eye) and pterygium (tissue growth on the surface of the eye), both of which can impair vision.

Exposure to UV rays can also weaken the immune system, so that the body has a harder time fending off infections. The key take away is there are *no* safe UV rays.



The intensity of UV rays depends on several factors.

- ◆ **GEOGRAPHIC LOCATION** – Along the equator, UV radiation is at its most intense.
- ◆ **ALTITUDE** – For every 1,000 meters increase in altitude the intensity of UV levels increases up to 20%.
- ◆ **TIME OF THE DAY** – The sun is at its highest and the most intense at noon; depending on the season this can vary between 10 a.m. and 4 p.m.
- ◆ **ENVIRONMENTAL SETTING** – UV rays can bounce off surfaces like water, sand, snow, or pavement, leading to an increase in UV exposure.
- ◆ **WEATHER** – Cloud cover does not significantly affect UV levels. The risk of UV exposure can be quite high even on hazy or overcast days. This is because UV is invisible radiation, not visible light, and can penetrate clouds.
- ◆ **MEDICATION** – Certain medications can increase the body's sensitivity to UV radiation.



Most people are not aware that the sun's UV rays can also damage the human eyes. Sunglasses play a key role in protecting the eyes in two important ways: they filter light and protect the eyes from damaging UV rays.

Sunglasses lenses are categorized by darkness of tint. There are five categories in total which absorb measurably different amounts of light through the lens. (See Chart)

Are dark sunglasses better?

No. Darker lenses simply absorb more visible light which has *no effect* on UV protection whatsoever. UV is invisible light and must be blocked, regardless of lens darkness and their designated lens category.

Most sunglasses should have a tint level category 2 or 3. The tint category is usually noted on a sticker or label on the inside of the temple.

UV400 or UV40 sunglasses have lenses which block 99-100% of UVA and UVB sunlight. This means they properly protect your eyes from the most damaging frequencies up to 400 nanometers.

Always check that your sunglasses are rated with full UV protection which is the single most crucial factor of any pair of sunglasses. □

SPF- Sun Protection Factor

SPF is only a measure of protection against UVB radiation, it has no bearing on the more dangerous and aging UVA rays.

A high-SPF sunscreen will prevent you from a UVB-induced sunburn, but sunburn is nature's way of letting you know that you have had too much sun for your skin type and a signal that it's time to seek shade.

So, thanks to your SPF 30, you may be spending three to four times longer in the sun, believing that you are protected. Since your sunscreen blocks mainly UVB light and to a much lesser extent UVA, you have just gotten three to four times more UVA light.

However, Broad spectrum SPF refers to sunscreens that protect the skin from both UVA and UVB rays. This is the best choice to protect yourself and your family from harmful exposure.



CATEGORY	0	1	2	3	4
ABS%	0% - 10%	10% - 20%	20% - 43%	43% - 85%	85% - 92%
Tint	Very Light	Light	Marginal	Dark	Very Dark
Sun Use	Overcast	Low	Moderate	Strong	Very Strong
Driving Suitability	Day & Night	Day Only	Day Only	Day Only	Never

Fireworks Safety

Fireworks were once a summertime tradition reserved only for celebrating the Fourth of July. Now they're a common sight and sound in neighborhoods everywhere throughout the summer.

The National Safety Council advises everyone to enjoy fireworks at public displays conducted by professionals, and not to use any fireworks at home. They may be legal in your state, but they are not safe.

Every year, thousands of people are injured badly enough to require medical treatment after fireworks-related incidents, with many of the injuries to children and young adults. While the majority of these incidents are due to amateurs attempting to use professional-grade, homemade, or other illegal fireworks or explosives, less powerful devices like small firecrackers and sparklers can also cause significant injuries.

The most common injuries are burns, which can range from minor to severe, with some resulting in permanent scarring or loss of function. Explosive fireworks can also result in a loss of vision or hearing. The most severe firework injuries are amputations and other significant traumatic injuries, or even death.

Additionally, fireworks start an average of 19,000 fires each year.





Sparklers Are Dangerous

Who doesn't remember the thrill of watching trails of light jump from sparklers? Although sparklers can trigger nostalgia, it doesn't mean they're safe. In fact, sparklers result in nearly a third of all fireworks-related injuries. Each of those bright showers of light can burn at over 2,000 degrees Fahrenheit!

Sparklers can quickly ignite clothing, and children have received severe burns from dropping sparklers on their feet. According to the National Fire Protection Association, sparklers alone account for more than 25% of emergency room visits for fireworks injuries.

Another thing to think about is your pets. Animals have sensitive ears and can be easily frightened or stressed by the Fourth of July and big celebrations. Keep pets indoors to reduce the risk that they'll run away or get injured.

Enjoy your holiday and keep your family safe during this fireworks safety month. Don't let firework injuries take the fun out of your holiday.

Stay safe and be responsible this Fourth of July. For more tips, visit the Consumer Product Safety Commission on Fireworks. □

<https://www.cpsc.gov/Safety-Education/Safety-Education-Centers/Fireworks>



FAA Final Rule on SMS



U.S. airlines have been required to have SMS since 2018 and some aerospace companies already voluntarily have SMS programs like Boeing.

Back in 2020 Congress directed the FAA to mandate SMS for aircraft manufacturers as part of a wide-ranging certification reform bill following two fatal Boeing 737 MAX crashes, but the FAA's final rule goes beyond the requirements from lawmakers.

The FAA in 2023 required major airports to adopt SMS programs after more than 10 years of study.

Now, all commercial and charter airlines, aircraft manufacturers, and air tour operators must establish a safety management system, according to a Federal Aviation Administration final

rule that went into effect May 28, 2024. The rule describes a safety management system as “a formal, top-down, organization-wide approach to managing safety risk and ensuring the effectiveness of safety risk controls.”

The rule further calls on those required to have an SMS to “share hazard information with each other and work together to identify and address hazards and safety issues.”

SMS systems require four key components - safety policy, safety risk management, safety assurance, and safety promotion.

The main purpose of a safety management system is to provide a systematic approach to managing safety risks in operations. It also aims to improve safety by building on existing processes, demonstrating corporate due diligence, and reinforcing the overall safety culture.

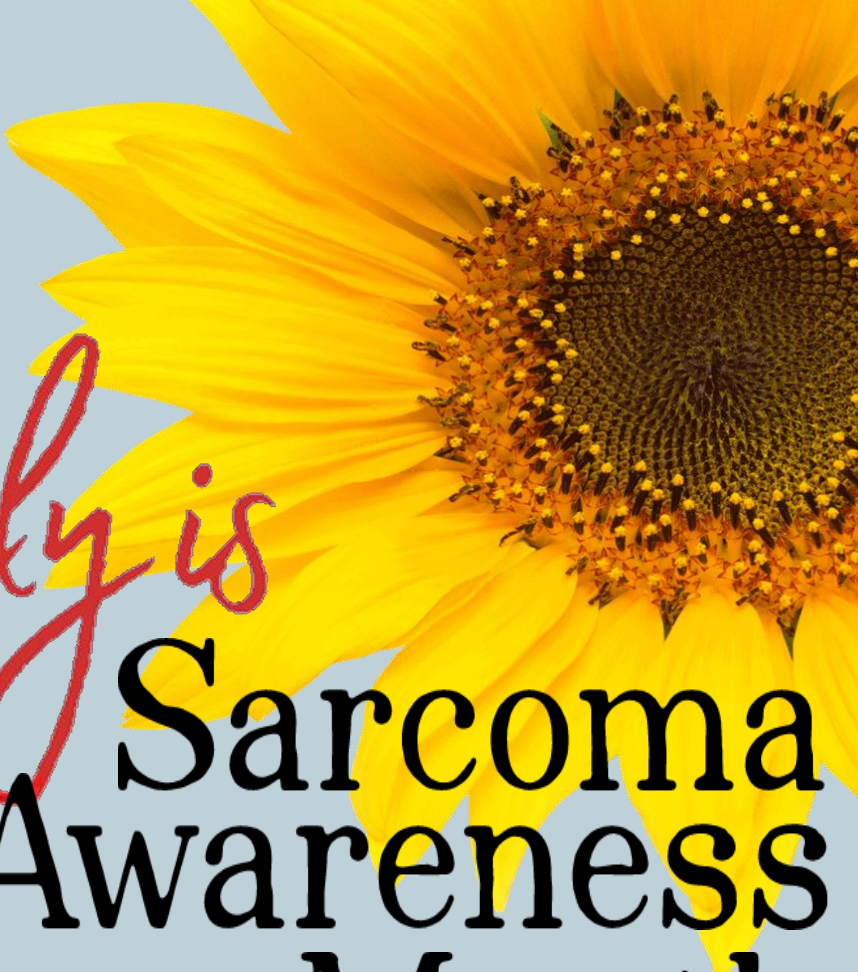
Whereas the traditional industry approach to safety “was based on the reactive analysis of past accidents,” a SMS “helps organizations proactively identify potential hazards in the operating environment, analyze the risks of those hazards, and mitigate those risks to prevent an accident or incident,” FAA says.

Too many operators either do not have an SMS in place or have an ineffective one. It’s time more got on board. The risk to the flying public is too far great not to.

Requiring more aviation organizations to implement a proactive approach to managing safety will prevent accidents and save lives. American’s SMS program can be found in the SPPM (Safety Policies Procedures Manual) 05-01. □



Sarcoma is a rare kind of cancer. As a result, it doesn't get the attention or necessary research & funding that other more common cancers might get. This month is a good time to learn more about different types of sarcomas, risk factors, and symptoms.



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Sarcomas are cancers that develop in connective tissues and may spread to other tissues or parts of the body. There are more than 70 different subtypes of sarcomas, but all sarcomas are divided into two main types: soft tissue sarcomas and bone cancers. Soft tissue sarcomas develop in muscles, fat, tendons, nerves, veins, arteries, or even within organs.

These sarcomas are most often located in arms, legs, and the abdomen but can also occur in the head or neck. Bone cancers are found in bone or cells that form bone. Most bone cancers are found in long bones, such as leg or arm bones.

Bone and joint cancer is most frequently diagnosed among teenagers,

while soft tissue cancers typically affect those 55 years or older.

In 2024, approximately 13,590 cases of soft tissue sarcoma and approximately 3,970 cases of bone and joint cancer are expected to be diagnosed in the United States, according to data from the National Cancer Institute. Some 5,200 people are expected to die from soft tissue and bone sarcomas, respectively.

Because sarcomas are difficult to distinguish from other cancers when they are found within organs, their incidence is probably underestimated, according to the National Cancer Institute.

Sarcoma Risk Factors

We don't yet know what causes sarcoma, but we do know some things that raise the risk of developing one:

- Other people in your family have had sarcoma
- You have a bone disorder called Paget's disease
- You have a genetic disorder such as neurofibromatosis, Gardner syndrome, retinoblastoma, or Li-Fraumeni syndrome
- You've been exposed to radiation, perhaps during treatment for an earlier cancer

Sarcoma Symptoms

Soft tissue sarcomas are hard to spot, because they can grow anywhere in your body. Most often, the first sign is a painless lump. As the lump gets bigger, it might press against nerves or muscles and make you uncomfortable or give you trouble breathing, or both. There are no tests that can find these tumors before they cause symptoms that you notice. Osteosarcoma can show obvious early symptoms, including pain off and on in the affected bone, which worsens at night. Swelling often starts weeks after the pain, and a limp if the sarcoma is in your leg.

Children and young adults get osteosarcoma more often than adults. Because active children and teens often have pain and swelling in their arms and legs, osteosarcoma might be mistaken for growing pains or a sports injury. If your child's pain doesn't get better, gets worse at night, and is in one arm or leg rather than both, talk to a doctor.

Adults who have this kind of pain should see a doctor right away. For more information on sarcomas, please visit the National Cancer Institute at:

<https://www.cancer.gov/types/soft-tissue-sarcoma>

SARCOMA

Types

Angiosarcoma

Malignant neoplasm in the vessel walls

Osteosarcoma

Tumor in a bone

Ewing's sarcoma

Bone

Chondrosarcoma

Cartilage

Gastrointestinal stromal tumor

Mesenchymal neoplasms of the gastrointestinal tract

Liposarcoma

Fat cells

Fibrosarcoma

Fibrous connective tissue

Hemangioendothelioma

Vascular neoplasms



"Fly-Away Tools"

It's sad to say there have been fatalities attributed to tools left in aircraft. Can you imagine the immense emotional impact and the legal consequences if your tool caused a loss of life? With a little common sense, attention to detail and time, you can avoid the dire consequences of leaving your tools where they might cause harm to innocent people.

This is one type of accident you can absolutely prevent. The cure is simple and may keep you from becoming the cause of an accident. After every maintenance task, account for every tool. As a matter of fact, do so before signing off the work. Put a big sign on your toolbox or add a note to the inspection checklist. Included below are some simple tips that may prevent "Fly-Away Tools":

- *Organize your toolbox so you can readily identify when a tool is missing.*
- *Place stickers on your toolbox to remind you to inventory your tools after performing maintenance.*
- *Place posters throughout your hangar to remind everyone to inventory their tools after performing maintenance.*
- *Insert steps into your checklist to require a tool inventory prior to signing the aircraft maintenance log and returning the aircraft to service.*
- *Do not let the aircraft operate or depart until you do the tool check!*

Adopting some, or all, of these simple steps will not only prevent the loss of expensive tools, but most importantly, it could save a life.



Upcoming Events



Clean Beaches Week

July 1st through the 7th is National Clean Beach week. Too often beaches are being trashed and stripped of their once beautiful scenes of beach waves. Offer a helping hand and remember to leave no trace. What you carry in, carry out!

Vehicle Theft Prevention

The U.S. Department of Transportation's National Highway Traffic Safety Administration wants to remind you to protect yourself from vehicle theft.

During National Vehicle Theft Prevention Month in July, the agency is highlighting the preventive measures vehicle owners should take, the importance of addressing the vehicle theft problem, and its significant economic impact. For more information visit: <https://www.nhtsa.gov/vehicle-safety/vehicle-theft-prevention>



PPE ROADSHOW

- SEA – July 24th
- Class II Stations – TBD





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Matters!**

Got Feedback?

Suggestions on Safety topics in upcoming Newsletters?

Email: Safety@local591.com