Estimated number of new cancer cases for 2021, excluding basal cell and squamous cell skin cancers and in situ carcinomas except urinary bladder. Estimates are not available for Puerto Rico.

**Note:** Incidence counts for 2021 are model-based and thus should be interpreted with caution. State estimates may not equal US total due to rounding.
Skin Cancer Report

New cases and deaths: Skin cancer is the most commonly diagnosed cancer in the US. However, the actual number of the most common types – basal cell and squamous cell (i.e., keratinocyte carcinoma or KC), also referred to as nonmelanoma skin cancer – is unknown because cases are not required to be reported to cancer registries. The most recent study of KC occurrence estimated that in 2012, 5.4 million cases were diagnosed among 3.3 million people.

Invasive melanoma accounts for about 1% of all skin cancer cases, but the vast majority of skin cancer deaths. In 2021, an estimated 106,110 new cases of invasive melanoma and 101,280 cases of in situ melanoma will be diagnosed in the US, while 7,180 people will die from the disease (Table 1). Incidence rates are higher in women than in men before age 50, but thereafter are increasingly higher in men, largely reflecting age and sex differences in historical occupational and recreational exposure to ultraviolet radiation, as well as use of indoor tanning among young women. Differences in early-detection practices and use of health care may also contribute.

Incidence trends: Invasive melanoma incidence has been increasing rapidly since the mid-1970s; from 2008 to 2017, the rate increased by about 2% per year, although this trend masks stable or declining rates among young age groups. Mortality trends: Mortality trends also vary by age, with a declining trend in individuals younger than 50 years since the mid-1980s, but only in the past decade in older adults. Advances in treatment have accelerated declines in the past five years among all ages; from 2014 to 2018, the melanoma death rate fell by almost 7% per year in adults younger than 50 years of age and close to 5% per year in older adults.

Risk factors: Light skin color is the strongest risk factor, with incidence among non-Hispanic White individuals almost 30 times higher than that among non-Hispanic Black or Asian/Pacific Islander individuals. Additional risk factors include a personal or family history of melanoma and the presence of atypical, large, or numerous (more than 50) moles. Excess exposure to ultraviolet (UV) radiation from sunlight or the use of indoor tanning increases risk of all common types of skin cancer. Risk is also increased for people who are sun-sensitive (e.g., sunburn easily or have natural blond or red hair); those who have a history of excessive sun exposure (including sunburns); and people with a weakened immune system or certain genetic syndromes.

Prevention: Most skin cancer cases and deaths are caused by exposure to UV radiation, and thus potentially preventable. Exposure to intense UV radiation can be minimized by wearing protective clothing (e.g., long sleeves, a wide-brimmed hat, etc.) and sunglasses that block UV rays; avoiding the sun at peak hours; applying broad-spectrum sunscreen that has a sun protection factor (SPF) of at least 30 to unprotected skin as directed; seeking shade; and not sunbathing or indoor tanning. Children and adolescents should be especially protected from the sun (and indoor tanning), as severe sunburns early in life may particularly increase risk of melanoma. Communities can help prevent skin cancer through educational interventions in schools and providing shade in communities and at schools, recreational sites, and occupational settings. In 2014, the US surgeon general released a Call to Action to Prevent Skin Cancer because of the growing burden of this largely preventable disease. The purpose of this initiative is to increase awareness and encourage all Americans to engage in behaviors that reduce the risk of skin cancer. See surgeongeneral.gov/library/calls/prevent-skin-cancer/call-to-action-prevent-skin-cancer.pdf for more information.

Early detection: The best way to detect skin cancer early is to be aware of new or changing skin spots or growths, particularly those that look unusual. Any new lesions, or a progressive change in a lesion’s appearance (size, shape, color, new bleeding, etc.), should be evaluated promptly by a clinician. Periodic skin examination, preferably monthly and with the help of a partner for areas that are hard for you to see, may be helpful in identifying changes.
Signs and symptoms: Warning signs of all skin cancers include changes in the size, shape, or color of a mole or other skin lesion; the appearance of a new skin growth; or a sore that doesn’t heal. Changes that progress over a month or more should be evaluated by a clinician. Basal cell carcinoma may appear as a growth that is flat, or as a small, raised pink or red translucent, shiny area that may bleed following minor injury. Squamous cell carcinoma may appear as a growing lump, often with a rough surface, or as a flat, reddish patch that grows slowly. The ABCDE rule outlines warning signs of the most common type of melanoma: A is for asymmetry (one half of the mole does not match the other half); B is for border irregularity (the edges are ragged, notched, or blurred); C is for color (the pigmentation is not uniform); D is for diameter greater than 6 millimeters (about the size of a pencil eraser); and E is for evolution, meaning a change in the mole’s appearance over time. Not all melanomas have these signs, so be alert for any new or changing skin growths or spots.

Treatment: Most cases of KC are cured by removing the lesion through minor surgery or other techniques (e.g., freezing). Radiation therapy and certain topical medications may be used. For melanoma, the primary growth and surrounding normal tissue are surgically removed, and sometimes a sentinel lymph node is biopsied to determine stage. More extensive lymph node surgery may be needed if the sentinel nodes contain cancer. Melanomas with deep invasion or that have spread to lymph nodes may be treated with surgery, immunotherapy, chemotherapy, and/or radiation therapy. The treatment of advanced melanoma has changed greatly in recent years, with FDA approval of several new immunotherapy and targeted drugs that can be very effective. Traditional chemotherapy may be used but is usually much less effective than newer treatments.

Survival: Almost all cases of non-melanoma skin cancer can be cured, especially if the cancer is detected and treated early. Although melanoma is also highly curable when detected in its earliest stages, it is more likely than non-melanoma skin cancer to spread to other parts of the body. The 5-year relative survival rate for melanoma is 93%, ranging from 99% for cases diagnosed at a localized stage (83% of cases) to 27% for distant-stage (4%) (Table 8).

The American Cancer Society’s mission is to save lives, celebrate lives, and lead the fight for a world without cancer.