

# Skin Cancer: Recognition, Treatment, Prevention

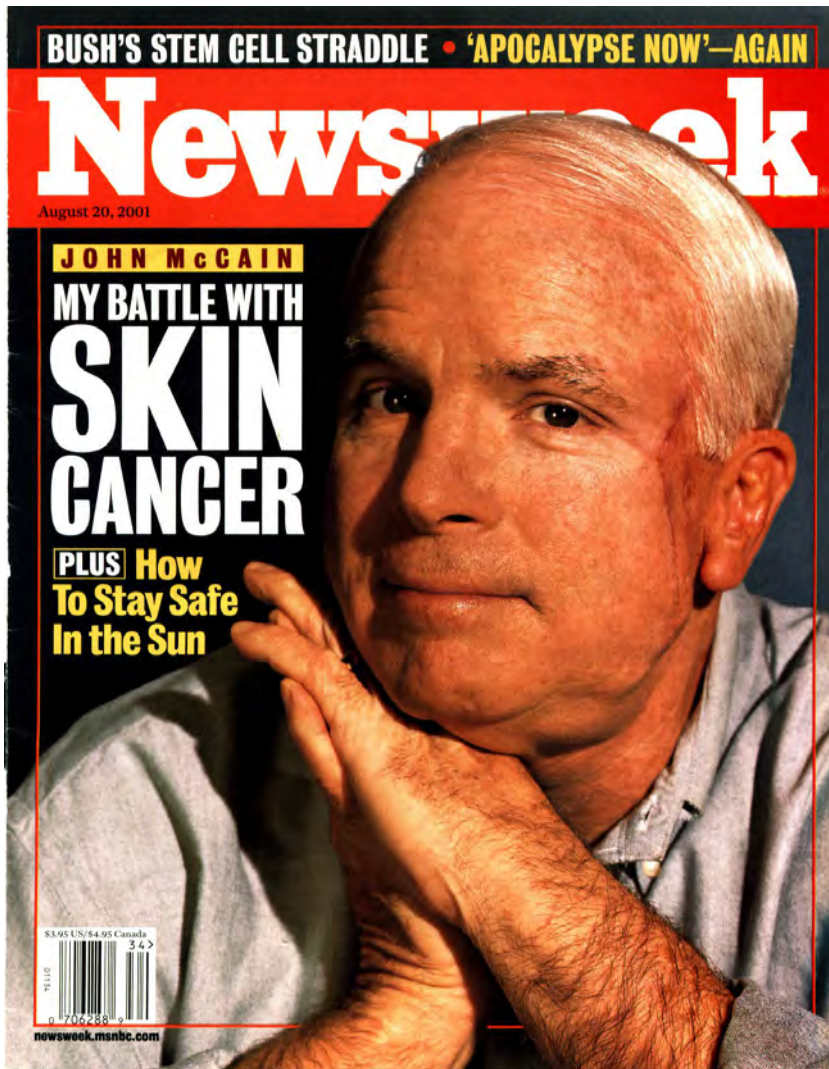
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# SKIN CANCER

- Between 1994 & 2014, skin cancer increased 77%
- By the age of 70, 1 out of 5 people will develop skin cancer
- Approximately 9500 people are diagnosed with skin cancer every day
- More people are diagnosed with skin cancer than all other cancers combined
- Annual cost of treating skin cancer is \$8 billion

# SKIN CANCER

Basal cell carcinoma

Squamous cell carcinoma



Nonmelanoma skin cancer/  
keratinocyte carcinoma

Melanoma



Can metastasize if not caught early

# SKIN CANCER

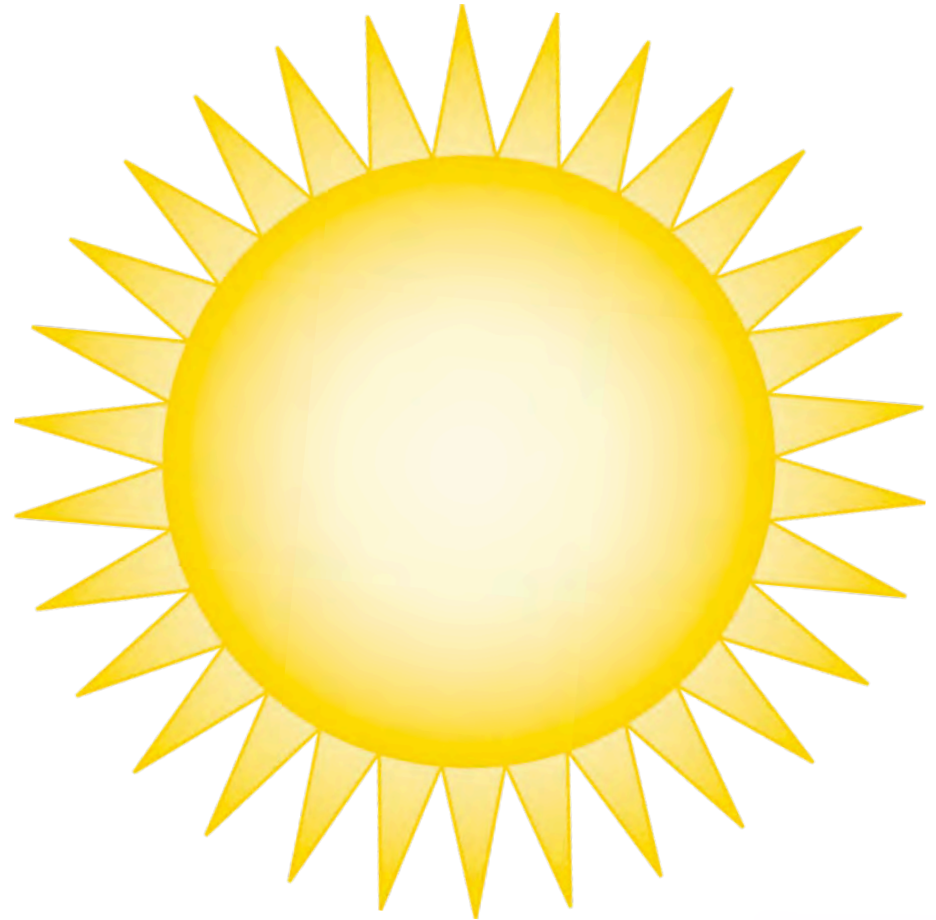
**BCC ~ 3-4 million**

**SCC > 1.8 million**

**Melanoma ~ 186,000**

# SKIN CANCER - CAUSE

- Sun Exposure
- Tanning Beds
- Skin Type
- Genetic Conditions



# ACTINIC KERATOSIS

AK's are precancerous lesions

Commonly seen on sun-exposed skin-  
Head and neck, dorsal hands, lower legs

A significant proportion will develop  
SCC's and BCC's



# Treatment: AK

1. Freezing (Cryosurgery)
2. Scrape and Burn (Curretage)
3. Topicals:
  1. 5FU
  2. Imiquimod
4. Photodynamic Therapy (PDT)

# Basal Cell Carcinoma

Usually asymptomatic

> 90% in Sun- exposed skin

Nose Most Common Site

Onset 40-60 year Old

Increasing incidence younger patients

20-40% develop second primary

# SCC-Etiology

**UV exposure**

**X-ray**

**Scar**

**Immunosuppression (transplant pts)**

# Treatment

**Curettage (Scraping)**

**Excision**

**Cryosurgery**

**Radiation**

**Mohs Surgery**

**Topicals**

# MELANOMA

2023 estimates:

- 89,000 in situ
- 97,000 invasive

Overall 5 year survival = 94%

- Stage 1 = 99%

- 25% arrive in pre-existing moles
- 75% arrive in normal skin

After age 50, significantly more men than women develop melanoma

Lifetime risk:

- Men 1 in 20
- Women 1 in 40

# MELANOMA INCEDENCE - U.S.

**Only 5% of all skin cancers, yet 75% of skin cancer deaths.**

## **Incidence**

- ~ 186,000 cases/yr.
- ~ 10,000 deaths/year.

**Incidence has doubled in the past 25 years.**

# Risk Factors

**Fair skin, freckles, red/blonde hair**

**Sunburn easily, tan poorly**

**Hx blistering sunburns**

**Dysplastic nevi (Atypical mole)**

**Increased number of nevi**

**Family history of melanoma**

**Large congenital nevi**

Having **5 or more** sunburns doubles your risk for melanoma<sup>1</sup>

**Just 1** blistering sunburn in childhood or adolescence more than doubles a person's chances of developing melanoma later in life<sup>2</sup>





# Diagnosing Melanoma

- A - Asymmetry**
- B - Border irregularity**
- C - Color variegation**
- D - Diameter > 6mm.**
  - Diameter changing**
- E - Evolution**



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# Treatment = Excision



# Education

- SELF skin exams
- Importance of family history
- Sun protection

# SUN PROTECTION

## Sun screens

- SPF 30 or greater
- UVA & UVB protection.
- Apply 20-30 minutes before, then every 2 - 3 hours.

Protective clothing , especially hats with a 4 inch brim

Sun avoidance (10-3)

Avoid tanning parlors

Keep living in Rochester

# SUNSCREEN

## Physical Blockers

- Zinc oxide or titanium dioxide
- Inert metal particles that reflect UVA and UVB

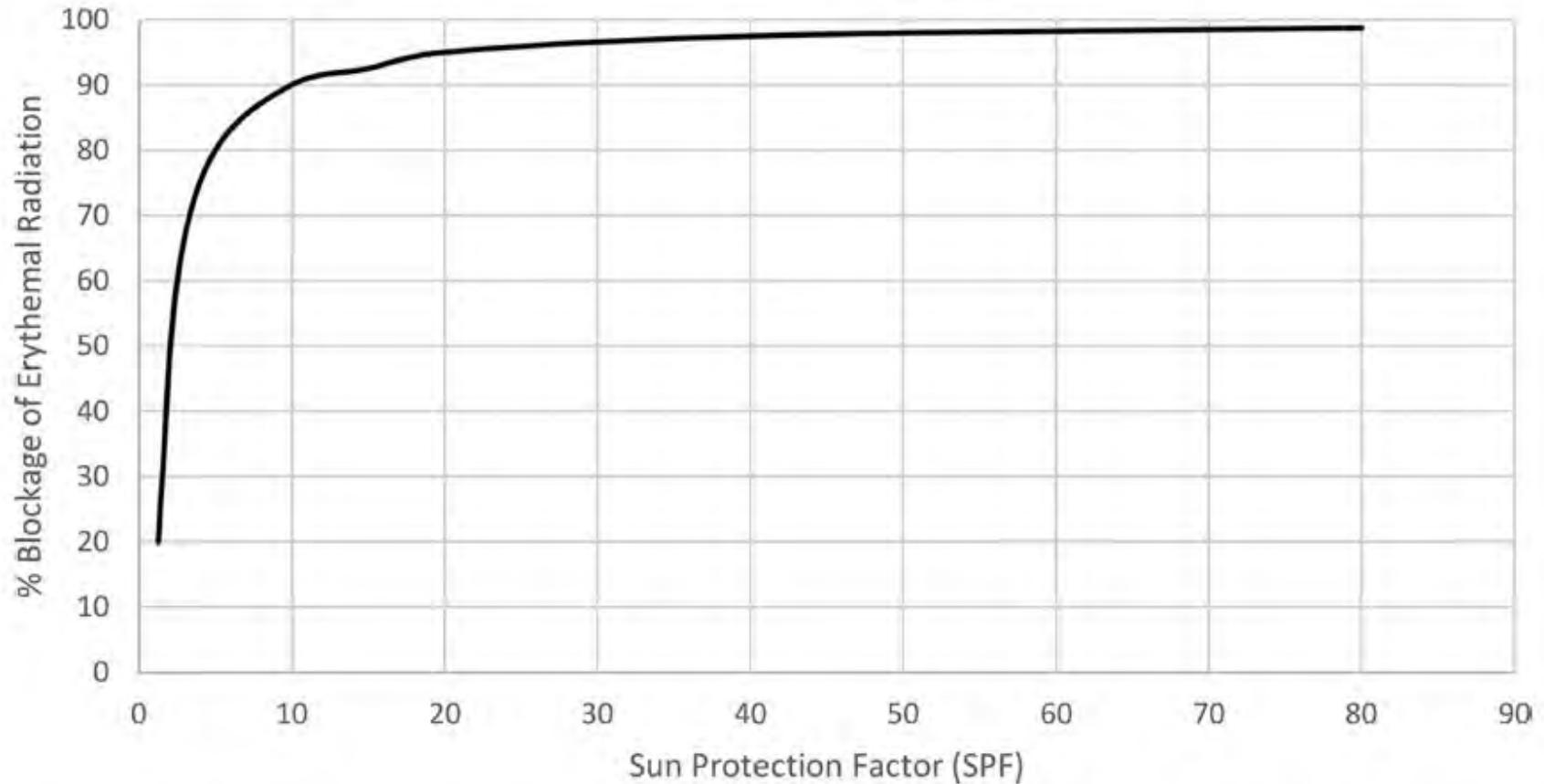
## Chemical Absorbers

- Absorb energy in UVA, UVB, or both
- Many sunscreens contain both
  
- Must reapply
- Proven to decrease actinic keratoses and skin cancers

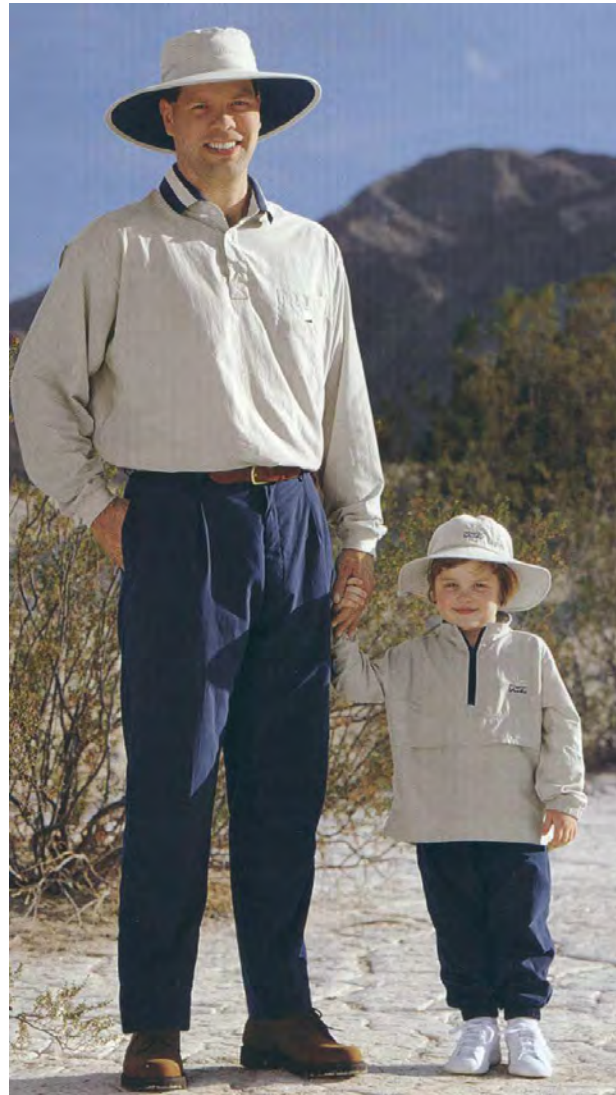


# SUN PROTECTIVE FACTOR

Relationship of SPF to the Blockage of UVB Radiation



**Figure 14-1.** The relationship of SPF to the blockage of UVB radiation. This is a nonlinear relationship, and as SPF increases beyond 30, there is minimal added protection.



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# DOES MY SKIN CANCER NEED MOHS SURGERY?

Location

- Head, neck, hands, feet

Recurrent

Large or rapid growth

Aggressive

Decreased immune system

# TREATMENT OF SKIN CANCER

## Excision with closure

- 4-10 mm margin of tissue excised
- 95% cure rate

## Electrodesiccation and curettage (ED&C)

- Scrape and burn
- 92-95% cure rate

## Creams

- 5-fluorouracil, Imiquimod
- 70-90% cure rate

## Mohs surgery

- 98-99% cure rate