



# Skin Cancer Education

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Yuma Community Assessment

AHEC Scholars

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## Objectives

- Provide a brief overview of skin cancer and importance of education
- Assess the needs of Yuma community regarding skin cancer education
- Overview of our project methods
- Provide a brief overview of our project limitations and future implications

# Introduction



Retrieved from [skincancer.org](http://skincancer.org)

- Skin cancer is by far the most common cancer in the United States with an estimate of 3 million Americans diagnosed with benign skin cancer and an estimate of 1 million Americans diagnosed with malignant melanoma subtype.
- Approximately one in five Americans will be diagnosed with some form of skin cancer in their lifetime
- Exposure to natural and ultraviolet radiation is the most important risk factor for developing of skin cancer with emphasis on childhood exposure, and history of sunburn during adolescence

# Background



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Melanoma lesions. Retrieved from [mayoclinic.org](http://mayoclinic.org)

- According to the Arizona Melanoma Task Force:
  - From 2009 to 2014, there was an observed 19% increase in the rate of invasive melanoma from 18.2 to 21.6 cases per 100,000 persons
  - Mortality rates for melanoma decreased an estimated 24%, from 3.4 to 2.6 per 100,000 persons
  - As of 2016, Arizona ranks as #18 in age-adjusted rate of melanoma of the skin per the CDC
  - According to the Arizona Melanoma Profile Annual Report of 2017, the county of Yuma has among the lowest rates of melanoma (6-8 cases per 100,000) compared to Arizona's average rate.

# Yuma Community Assessment



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- Yuma County is one of the largest agricultural centers in the US.
- Agriculture is the main means of employment for both residents and the migrant workers.
- Based on the risk factors and lack of skin cancer education and screening among uninsured and low-income residents in Yuma County, our AHEC scholar group decided on a project to provide skin cancer education to increase knowledge of sun protection behaviors and prevention activities for residents in Yuma County, Arizona.

# Evidence Synthesis



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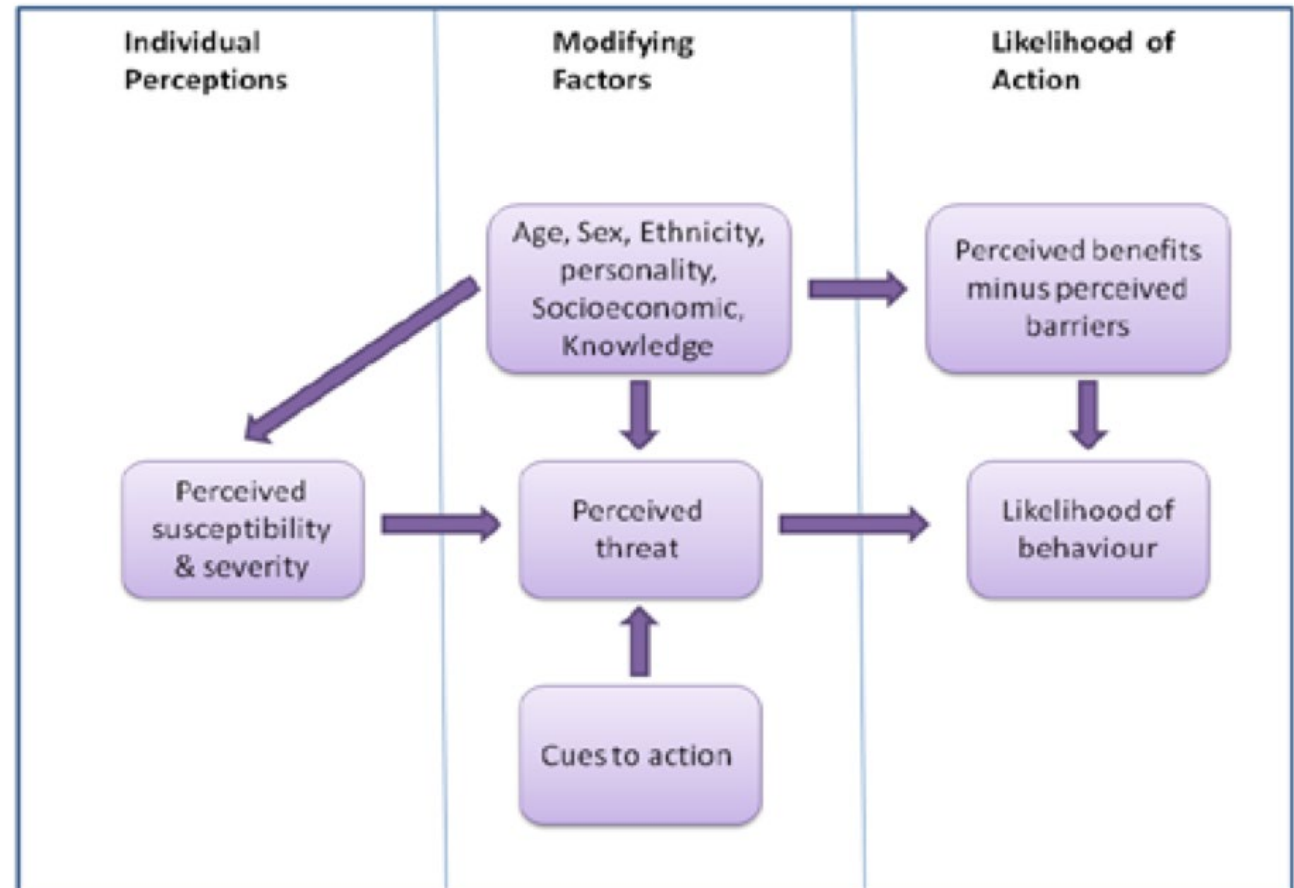
- A literature search was done utilizing bibliographic databases to include PubMed, CINAHL, and Cochrane Review.
- Keywords utilized and conducted for the search included: skin cancer, public education, and primary prevention in adults.
- Key concepts derived from the studies included the effects of skin cancer screening at health fairs.
- Increased knowledge was gained from screenings, in which health fair participants shared this new knowledge to family and friends (Escoffery et al., 2017; Monroe et al., 2017).
- Based on systematic reviews conducted by the Community Preventive Services Task Force and the United States Preventive Services Task Force recommend advocating for community interventions to educate the public to make changes in behavior for the prevention and screening for skin cancer (Community Preventive Services Task Force [CPSTF], 2016;Henrickson et al., 2017).
- Based on research indicates the best method is face-to-face education, especially in working with uninsured, minority and immigrant populations (CPSTF, 2016).

# Theoretical Framework and Concepts

## The Health Belief Model

- **CONSISTS OF SIX CONCEPTS**
- Perceived susceptibility
- Perceived severity
- Perceived benefits
- Perceived barriers
- Perceived self-efficacy
- Cues to action
- Modifying factors

## THE HEALTH BELIEF MODEL



Adapted from Glanz, Rimer & Lewis, 2002

# The Health Belief Model & Model Application



Retrieved from American Academy of Dermatology.org

- Perceived susceptibility- implementation process includes obtaining health needs assessment to determine at risk and to establish patient population (RuralHealthInfo, 2020).
- Perceived severity - communication of the consequences of unhealthy skin behaviors and associated risk to skin health
- Perceived benefits - communicates the how, when and where of taking action and potential positive findings such as determining whether sunscreen use or use of wide brim hat would decrease skin cancer prevalence (Nahar et al., 2019).
- Perceived barriers - geared towards correcting mis-information to sun protection measures and necessity of skin examinations (Nahar et al., 2019).
- Cues to action – includes promotion and awareness activities of a sun protection program such as performing skin exams, use of flyers/brochures in English and Spanish to communicate the goals of this educational project by the AHEC team members.
- Self-Efficacy - includes providing education, setting goals, skill development and positive reinforcement in promoting successful behavior changes ( Nahar et al., 2019;RHHub, 2020).



# Methods



Retrieved from [mysuccessfulyear.com](http://mysuccessfulyear.com)

- **Project Design:** Qualitative study using a pretest-post-test design to assess the knowledge of the study population on different aspects of skin cancer and its prevention before and after providing education on skin cancer.
- **Setting:** The study will be conducted during health fair events throughout Yuma County.
- **Participants:** A convenience sample of participants attending health fairs.
- **Inclusion Criteria:** 18 years and older, English and Spanish speakers, at least two risk factors to include light skin and hair, a family history of melanoma or a personal history of skin cancer, skin that rarely tans or always or mostly burns, history of skin excisions or moles.
- **Exclusion Criteria:** Persons with a history of melanoma within the past 5 years.
- **Sample Size:** The potential for small sample size secondary to non-attendance to sun safety education events.
- **Instruments:** Use of a questionnaire designed to determine baseline knowledge.

# Results



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- Pre-test/post-test model from a Likert scale rating system
- Use of paired T-test to analyze data
- Descriptive statistics to describe demographic characteristics
- We would anticipate an overall increase in knowledge to risk factors, prevention and causes to skin cancer from pre-test results to post-test results.

# Conclusion



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- Excessive sun exposure is associated with skin cancer development.
- Strategic awareness is one method to prevent skin cancer.
- The aim of this project is to evaluate the impact of educational activities of skin cancer prevention in Yuma County.
- The impact of this project is to be evaluated through the application of questionnaires pre and post educational interventions.
- The challenge of this proposed study is coordination and the integration of contributions of AHEC team members.

# Questions



- Thank you from the AHEC Scholars

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**THANK YOU**

**WAHEC COHORT GROUP MEMBERS**

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