

2020 Skin Cancer Screening Report

Introduction:

Farmers have significant occupational sun exposure and increased risk of skin cancer. While farmers know the risks of sun exposure, they do not consistently practice sun protection. An increase in several cancers, including skin cancers, have been found in farmers. Farmers may well benefit from skin cancer screening events.¹⁻³ In February of 2020, the National Farm Medicine Center, along with the Marshfield Clinic Health System, conducted two skin cancer screenings in central Wisconsin. These two recent events screened 245 people. Nineteen presumed cancers were identified and 31 percent of the patients were referred for additional examination. The targeted audience were farmers and their families in Wood and surrounding counties. Funding came from 2018 Wood County Farm Technology Days Grant Funding and donated funds from the Auction of Champions put on by the Marshfield Clinic Health System Foundation.

Methods

This potentially life-saving screening consisted of education, body area screening, and prevention. Each farmer completed a questionnaire, met with a licensed physician/dermatologist who conducted a visual inspection of sun-exposed skin or specific lesions as requested, received skin cancer prevention education from the physician, and received supporting materials including literature, sun safe hats, and sunscreen, along with follow-up instructions, if needed.

Staff of the National Farm Medicine Center (NFMC) obtained a grant from the 2018 Wood County Farm Technology Days. Additionally, Skin Cancer Screening funds from the Auction of Champions account were utilized. The Communications team set up two screening events and promoted the events targeting farmers and rural workers in central Wisconsin. The two events were the Potato and Vegetable Growers Association annual convention in Stevens Point, and the Marshfield Farm Show in Marshfield. The Marshfield Clinic Health System Dermatology Department agreed to work with NFMC to provide physicians, residents, and technicians to conduct the Skin Cancer Screening service.

Results:

A total of 245 individuals were screened. Ages of the participants ranged from 20-79+ years-of-age. The age ranges were as follows: under 20 years (0, 0.0%); 20-29 years (9, 3.7%); 30-39 years (15, 6.1%); 40-49 years (30, 12.2%); 50-59 years (62, 25.2%); 60-69 years (73, 29.7%); and 70 years or older (57, 23.2%).

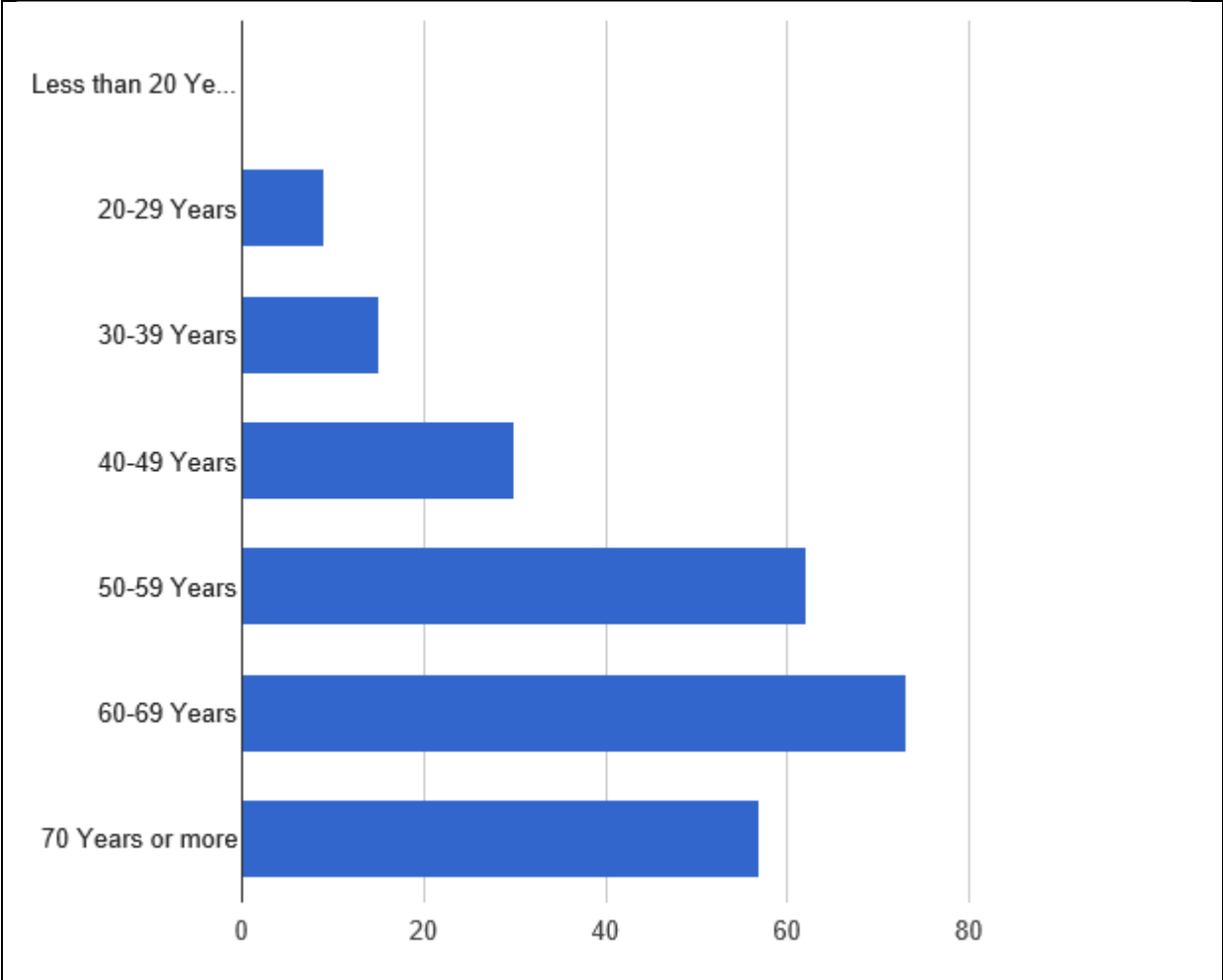


Figure 1: Ages of all participants in 2020 Skin Cancer Screening Events put on by the National Farm Medicine Center, funded by 2018 Wood County Farm Tech Days, and Auction of Champions funding from Marshfield Clinic Health System Foundation

Occupation: The goal of the event was to screen farmers or individuals engaged in a rural or agricultural occupation. Although this was the target goal, no person was turned away from our screening because of occupation. The occupations of participants included: Full-time farmer (57, 23.2%); Part-time farmer (15, 6.1%); Retired farmer (32, 13.0%); Spouse of farmer (10, 4.1%); Agribusiness (33, 13.4%); Agri-student (0, 0.0%); Other (99, 40.2%).

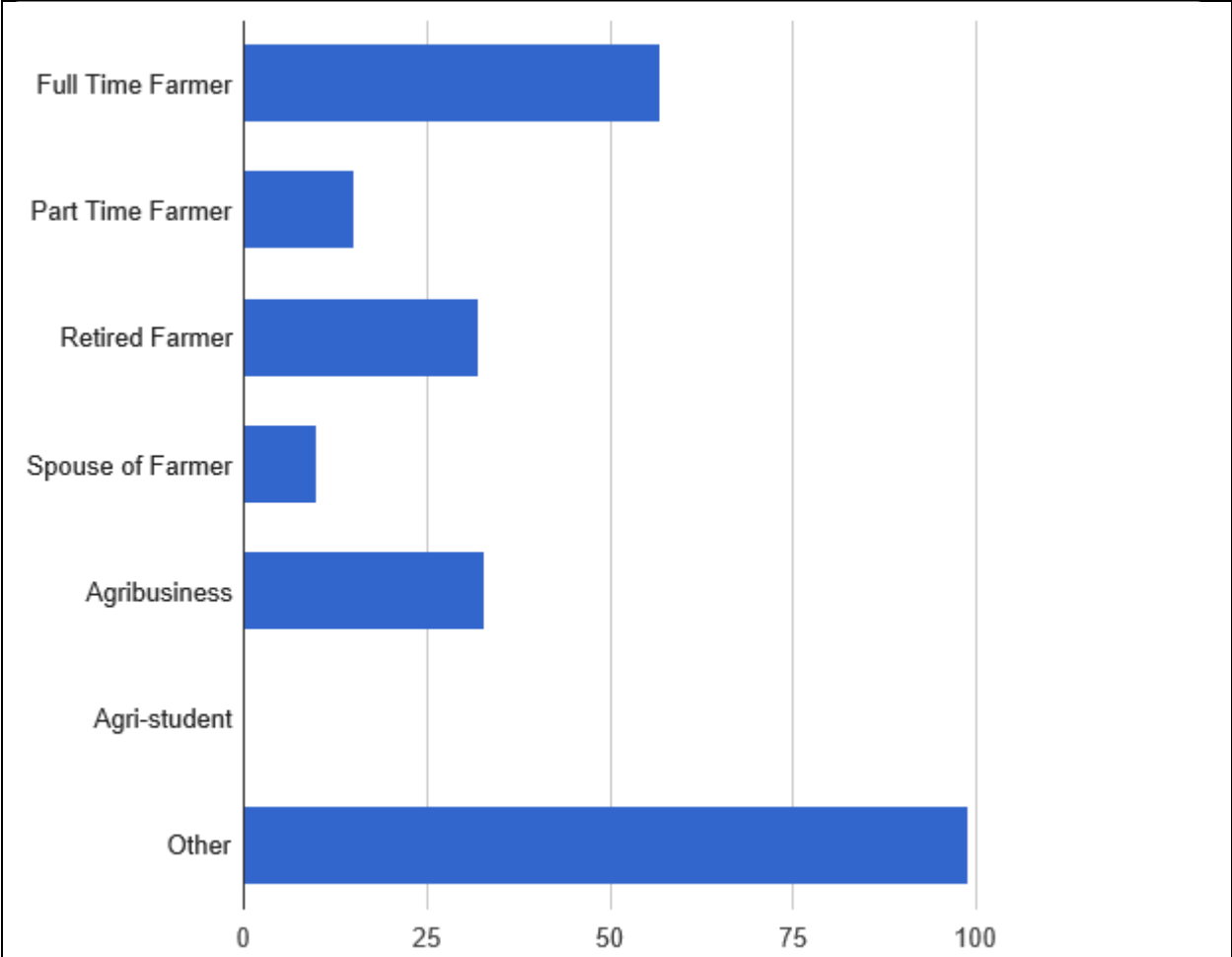


Figure 2: Occupation of all participants in 2020 Skin Cancer Screening Events put on by the National Farm Medicine Center, funded by 2018 Wood County Farm Tech Days, and Auction of Champions funding from Marshfield Clinic Health System Foundation

Diagnoses: During the two events, there were a variety of presumptive diagnoses found. The counts and frequency of diagnoses are as follows: actinic keratosis (48, 20.8%); basal-cell carcinoma (14, 6.1%); squamous-cell carcinoma (5, 2.2%); dysplastic nevus (1, 0.4%); melanoma (0, 0.0%); seborrheic keratosis (129, 55.8%); acne (3, 1.3%); lentigos (19, 8.2%); and other (109, 47.2%).

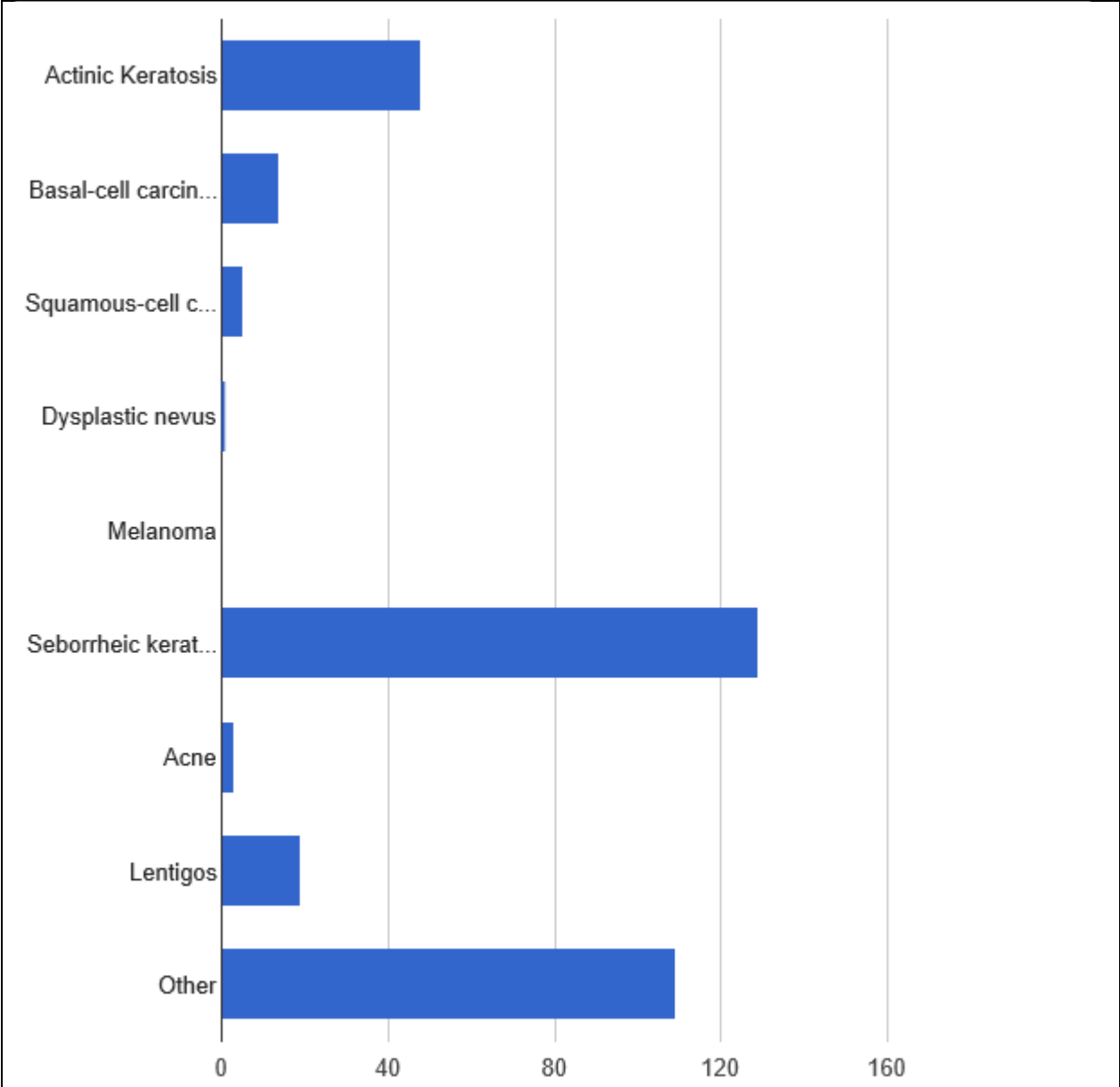


Figure 3: Presumptive diagnosis of all participants in 2020 Skin Cancer Screening Events put on by the National Farm Medicine Center, funded by 2018 Wood County Farm Tech Days, and Auction of Champions funding from Marshfield Clinic Health System Foundation

Body Area Screened: Each participant was screened in one of three possible areas: hands (28, 12.3%); face (174, 76.7%); or body (132, 58.1%). The participant decided how much or how thoroughly they wanted each physician or resident to examine them.

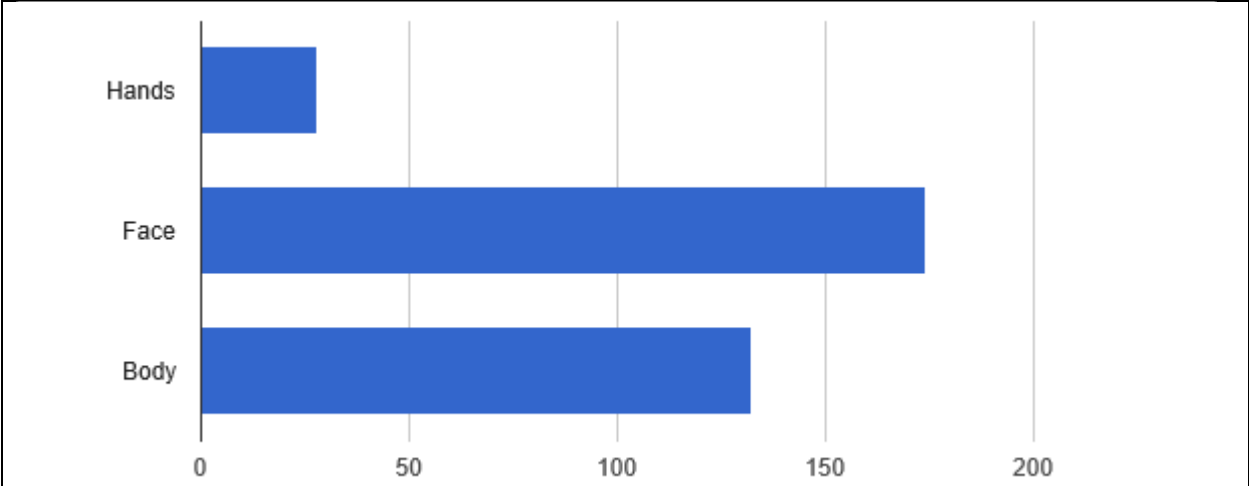


Figure 4: Area examined of all participants in 2020 Skin Cancer Screening Events put on by the National Farm Medicine Center, funded by 2018 Wood County Farm Tech Days, and Auction of Champions funding from Marshfield Clinic Health System Foundation

Degree of Sun Damage: Each participant was labeled with the degree of sun damage recognized on his or her body. The counts and frequency were as follows: Mild (133, 64.6%); Moderate (71, 34.5%); and Severe (2, 1.0%)

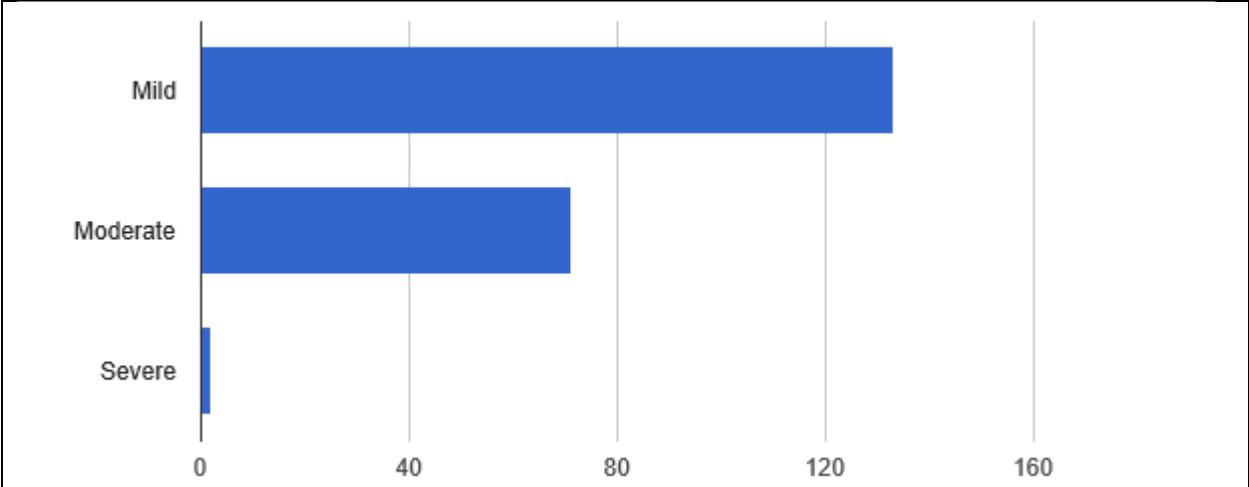


Figure 5: Degrees of damage of all participants in 2020 Skin Cancer Screening Events put on by the National Farm Medicine Center, funded by 2018 Wood County Farm Tech Days, and Auction of Champions funding from Marshfield Clinic Health System Foundation

Exposure: Participants were examined as they chose, either just the sun exposed areas, or other areas that are not normally exposed to the sun. The counts and frequency were as follows: Sun Exposed (172, 72.0%) and other (127, 53.1%).

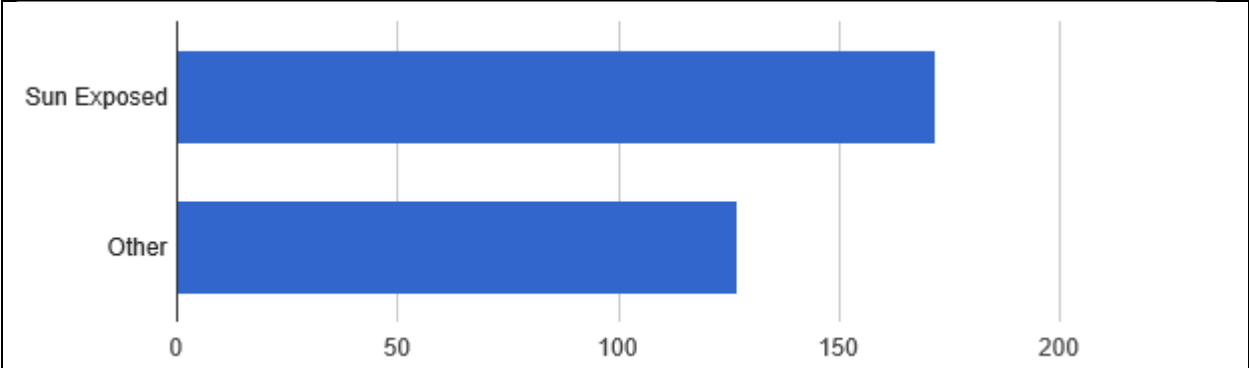


Figure 6: Examination area of all participants in 2020 Skin Cancer Screening Events put on by the National Farm Medicine Center, funded by 2018 Wood County Farm Tech Days, and Auction of Champions funding from Marshfield Clinic Health System Foundation

Referrals: Participants were examined and then the physician or resident would either refer the participant or not. The referral meant there was an area for which it was recommended the participant have a follow-up appointment to be examined more specifically. The counts and frequency were as follows: Not referred (156, 68.7%) and Referred (71, 31.3%).

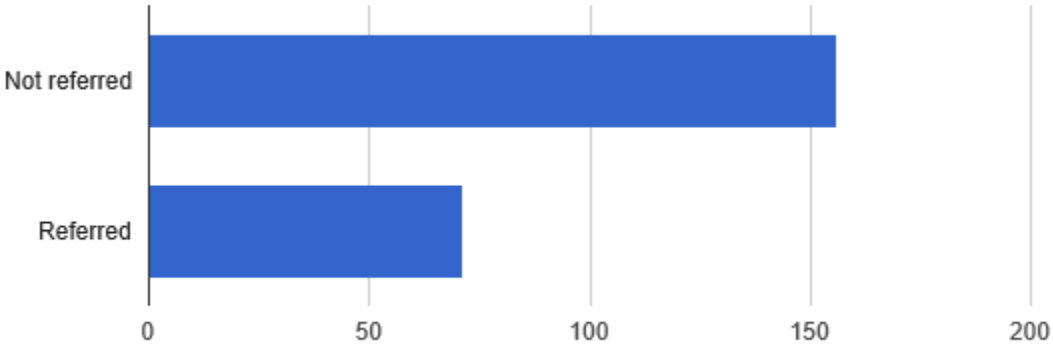


Figure 7: Referral for follow-up of all participants in 2020 Skin Cancer Screening Events put on by the National Farm Medicine Center, funded by 2018 Wood County Farm Tech Days, and Auction of Champions funding from Marshfield Clinic Health System Foundation

Geographic location: Participants were asked to share their ZIP Code. In this way, the reach of the screenings can be determined geographically, although we were promoting in Wood County, Wisconsin and the surrounding counties, as the majority of the funding came from the 2018 Wood County Farm Technology Days Grant.

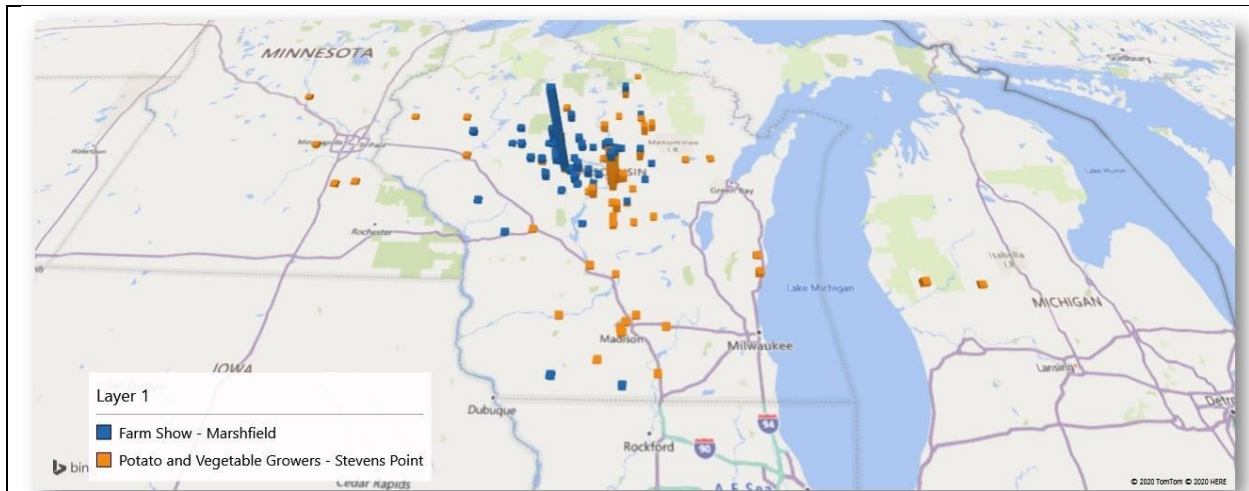


Image 1: Geographical location of all participants in 2020 Skin Cancer Screening Events put on by the National Farm Medicine Center, funded by 2018 Wood County Farm Tech Days, and Auction of Champions funding from Marshfield Clinic Health System Foundation

Funding

The National Farm Medicine Center was given \$7,630 in June of 2019 to run two Skin Cancer Screening events. The funding was for marketing and advertising, promotional and educational materials, event expenses, and travel expenses. Items we could not pay for were time-and-effort for personnel time or food. Our actual expense breakdown was as follows:

Marketing/Advertising	\$ 442.22
Promotional/Educational Materials	\$1,865.88
Event Expenses	\$ 305.00
Travel Expenses	<u>\$ 77.34</u>
Total Expenses	\$2,690.44
In-Kind (Staff T&E)	\$6,481.34

This leaves us with \$4939.56 left over to go back to the Wood County Farm Tech Days Foundation.

Some of the reasons we have so much left over is because the educational promotion that we were going to create with Creative Services we found already created and were given permission to use from the American Academy of Dermatology. Therefore, we didn't have any design costs. Another reason was we expected to need to buy privacy screens, which were in the event expenses budget. However, the Potato and Vegetable Growers Association donated pipe and drape at their event to work as screens. Then the second event, the Marshfield Clinic Health System supplied us with false walls that also worked as screens. We never needed to purchase these items. Both events also donated the

tables and chairs needed for the event so we didn't have to rent from the companies supplying items at either event.

We worked to get items donated and lent to us to help preserve money while still making the events the best they could be for our participants. We believe we have done this.

References

1. Marlenga B. The health beliefs and skin cancer prevention practices of Wisconsin dairy farmers. *Oncol Nurs Forum*. 1995;22(4):681-686.
2. Blair A, Freeman LB. Epidemiologic studies in agricultural populations: observations and future directions. *J Agromedicine*. 2009;14(2):125-131. doi:10.1080/10599240902779436
3. Carley A, Stratman E. Skin cancer beliefs, knowledge, and prevention practices: a comparison of farmers and nonfarmers in a midwestern population. *J Agromedicine*. 2015;20(2):85-94. doi:10.1080/1059924X.2015.1010059