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| **Domain:** | Environmental Exposures |
| **Measure:** | Ultraviolet Light Exposure |
| **Definition:** | Questions about the respondent's exposure to the sun, use of tanning booths and sunlamps, and time spent outdoors. |
| **Purpose:** | Ultraviolet light is damaging to the skin and without proper protection a person may experience photosensitivity, skin aging, and skin cancer. |
| **Essential PhenX Measures:** |  |
| **Related PhenX Measures:** |  |
| **Collections:** |  |
| **Keywords:** | Ultraviolent light, UV, sunburn, sun exposure, tanning booth, sun lamp, photosensitivity, skin aging, sun tan, tan, skin rash, sun rash, sunlamp, Non-Hodgkin's Lymphoma Study, NHL, Sun Exposures Module, Environmental Exposures |

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| **Protocol Release Date:** | October 30, 2009 |
| **PhenX Protocol Name:** | Ultraviolet Light Exposure |
| **Protocol Name from Source:** | The Expert Review Panel has not reviewed this measure yet. |
| **Description:** | The interviewer asks the respondent several questions about sunburn, use of tanning booths and sunlamps, and time spent outdoors in the mid-day sun. |
| **Specific Instructions:** | Note, "DK" denotes "Don't Know".  |
| **Protocol:** | The following questions focus on your complexion and your exposure to the sun. 1. If you spent an hour in the mid-day sun for the first time without sunscreen, which of these reactions best describes what would happen to your skin:[] 1 A blistering sunburn,[] 2 A sunburn without blisters,[] 3 A mild sunburn that becomes a tan, [] 4 A tan with no sunburn, or[] 5 No change in skin color?2. Did you ever get a blistering sunburn?[] 1 YES[] 2 NO (Go to 3)2a) How old were you the first time you got a blistering sunburn?">\_\_\_">\_\_\_"> YEARS OLD [] 98 DK2b) IF DK EXACT AGE, SAY: About how old were you? PROBE FOR CATEGORY.[] 01 UNDER 5 YEARS OLD[] 02 5 - 14 YEARS OLD[] 03 15 - 24 YEARS OLD[] 04 25 - 39 YEARS OLD[] 05 40 - 64 YEARS OLD[] 06 65 YEARS OLD OR OLDER 2c) How old were you the last time you got a blistering sunburn?">\_\_\_">\_\_\_"> YEARS OLD [] 98 DK 2d) IF DK EXACT AGE, SAY: About how old were you? PROBE FOR CATEGORY.[] 01 UNDER 5 YEARS OLD[] 02 5 - 14 YEARS OLD[] 03 15 - 24 YEARS OLD[] 04 25 - 39 YEARS OLD[] 05 40 - 64 YEARS OLD[] 06 65 YEARS OLD OR OLDER 2e) How many blistering sunburns have you gotten in your life?">\_\_\_">\_\_\_">\_\_\_"> BLISTERING SUNBURNS [] 98 DK2f) IF DK EXACT NUMBER, SAY: About how many? PROBE FOR CATEGORY.[] 1 1 OR 2 [] 2 3 OR 4 [] 3 5 - 9 [] 4 10 - 19 [] 5 20 OR MORE3. Did you ever get a skin rash from sun exposure?[] 1 YES[] 2 NO (Go to 4)3a) How old were you the first time you got a skin rash from sun exposure?">\_\_\_">\_\_\_"> YEARS OLD [] 98 DK3b) IF DK EXACT AGE, SAY: About how old were you? PROBE FOR CATEGORY.[] 01 UNDER 5 YEARS OLD[] 02 5 - 14 YEARS OLD[] 03 15 - 24 YEARS OLD[] 04 25 - 39 YEARS OLD[] 05 40 - 64 YEARS OLD[] 06 65 YEARS OLD OR OLDER 3c) How old were you the last time you got a skin rash from sun exposure?">\_\_\_">\_\_\_"> YEARS OLD [] 98 DK 3d) IF DK EXACT AGE, SAY: About how old were you? PROBE FOR CATEGORY.[] 01 UNDER 5 YEARS OLD[] 02 5 - 14 YEARS OLD[] 03 15 - 24 YEARS OLD[] 04 25 - 39 YEARS OLD[] 05 40 - 64 YEARS OLD[] 06 65 YEARS OLD OR OLDER 3e) How many times you have gotten a skin rash from sun exposure in your life?">\_\_\_">\_\_\_">\_\_\_"> SKIN [] 98 DK3f) IF DK EXACT NUMBER, SAY: About how times? PROBE FOR CATEGORY.[] 1 1 OR 2[] 2 3 OR 4[] 3 5 - 9[] 4 10 - 19[] 5 20 OR MORE4. Have you ever used a sunlamp?[] 1 YES[] 2 NO (Go to 5)4a) How old were you the first time you used a sunlamp?">\_\_\_">\_\_\_"> YEARS OLD [] 98 DK 4b) IF DK EXACT AGE, SAY: About how old were you? PROBE FOR CATEGORY.[] 01 UNDER 5 YEARS OLD[] 02 5 - 14 YEARS OLD[] 03 15 - 24 YEARS OLD[] 04 25 - 39 YEARS OLD[] 05 40 - 64 YEARS OLD[] 06 65 YEARS OLD OR OLDER 4c) How old were you the last time you used a sunlamp?">\_\_\_">\_\_\_"> YEARS OLD [] 98 DK 4d) IF DK EXACT AGE, SAY: About how old were you? PROBE FOR CATEGORY.[] 01 UNDER 5 YEARS OLD[] 02 5 - 14 YEARS OLD[] 03 15 - 24 YEARS OLD[] 04 25 - 39 YEARS OLD[] 05 40 - 64 YEARS OLD[] 06 65 YEARS OLD OR OLDER 4e) How many times have you used a sunlamp in your life?">\_\_\_">\_\_\_">\_\_\_">SUNLAMP [] 98 DK 4f) IF DK EXACT NUMBER, SAY: About how times? PROBE FOR CATEGORY.[] 1 1 OR 2[] 2 3 OR 4[] 3 5 - 9[] 4 10 - 19[] 5 20 OR MORE5. Have you ever used a tanning booth?[] 1 YES[] 2 NO (Go to 6)5a) How old were you the first time you used a tanning booth?">\_\_\_">\_\_\_"> YEARS OLD [] 98 DK 5b) IF DK EXACT AGE, SAY: About how old were you? PROBE FOR CATEGORY.[] 01 UNDER 5 YEARS OLD[] 02 5 - 14 YEARS OLD[] 03 15 - 24 YEARS OLD[] 04 25 - 39 YEARS OLD[] 05 40 - 64 YEARS OLD[] 06 65 YEARS OLD OR OLDER 5c) How old were you the last time you used a tanning booth?">\_\_\_">\_\_\_"> YEARS OLD [] 98 DK 5d) IF DK EXACT AGE, SAY: About how old were you? PROBE FOR CATEGORY.[] 01 UNDER 5 YEARS OLD[] 02 5 - 14 YEARS OLD[] 03 15 - 24 YEARS OLD[] 04 25 - 39 YEARS OLD[] 05 40 - 64 YEARS OLD[] 06 65 YEARS OLD OR OLDER 5e) How many times have you used a tanning booth in your life?">\_\_\_">\_\_\_">\_\_\_">TANNING BOOTH USES [] 98 DK 5f) IF DK EXACT NUMBER, SAY: About how times? PROBE FOR CATEGORY.[] 1 1 OR 2[] 2 3 OR 4[] 3 5 - 9[] 4 10 - 19[] 5 20 OR MOREPlease answer the following questions about your exposure to the sun at different periods of your life. When we refer to "**mid-day sun**," it means those hours when the sun is more than halfway up in the sky. For most of the United States, that would be between the hours of 10 AM and 4PM Daylight Savings Time.

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| AGE GROUPS  | 6. On a typical weekday in the summer, about how many hours did you generally spend in the mid-day sun] (when you were) (AGE GROUP)?  | 7. On a typical weekend day in the summer, about how many hours did you generally spend in the mid-day sun] (when you were) (AGE GROUP)?  | 8. (When you were) (AGE GROUP), [for how many months a year did you usually have a tan]?  |
| a) In your teens  | [] 1     LESS THAN 1 HOUR[] 2     1 OR 2 HOURS[] 3     3 OR 4 HOURS[] 4     5 OR 6 HOURS | [] 1     LESS THAN 1 HOUR[] 2     1 OR 2 HOURS[] 3     3 OR 4 HOURS[] 4     5 OR 6 HOURS | [] 1     NEVER HAD A TAN[] 2     1 - 3 MONTHS[] 3     4 - 6 MONTHS[] 4     7 - 9 MONTHS[] 5     10 - 12 MONTHS |
| b) In your twenties  | [] 1     LESS THAN 1 HOUR[] 2     1 OR 2 HOURS[] 3     3 OR 4 HOURS[] 4     5 OR 6 HOURS | [] 1     LESS THAN 1 HOUR[] 2     1 OR 2 HOURS[] 3     3 OR 4 HOURS[] 4     5 OR 6 HOURS | [] 1     NEVER HAD A TAN[] 2     1 - 3 MONTHS[] 3     4 - 6 MONTHS[] 4     7 - 9 MONTHS[] 5     10 - 12 MONTHS |
| c) In your thirties  | [] 1     LESS THAN 1 HOUR[] 2     1 OR 2 HOURS[] 3     3 OR 4 HOURS[] 4     5 OR 6 HOURS | [] 1     LESS THAN 1 HOUR[] 2     1 OR 2 HOURS[] 3     3 OR 4 HOURS[] 4     5 OR 6 HOURS | [] 1     NEVER HAD A TAN [] 2     1 - 3 MONTHS[] 3     4 - 6 MONTHS[] 4     7 - 9 MONTHS[] 5     10 - 12 MONTHS |
| d) In the past ten years  | [] 1     LESS THAN 1 HOUR[] 2     1 OR 2 HOURS[] 3     3 OR 4 HOURS[] 4     5 OR 6 HOURS | [] 1    LESS THAN 1 HOUR[] 2     1 OR 2 HOURS[] 3     3 OR 4 HOURS[] 4     5 OR 6 HOURS | [] 1     NEVER HAD A TAN[] 2     1 - 3 MONTHS[] 3     4 - 6 MONTHS[] 4     7 - 9 MONTHS[] 5     10 - 12 MONTHS |
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| **Selection Rationale:** | Vetted against other ultraviolet light exposure questions, this set of questions was considered more complete and included questions about skin damage from the sun, types of exposure, and length of exposure.  |
| **Source:** | National Institutes of Health. National Cancer Institute. Non-Hodgkin's Lymphoma Study (NHL), Sun Exposures Module. 2001, Question numbers: SE-3 through SE10 (Source for questions 1 through 8 in Protocol text). |
| **Life Stage:** | Adult |
| **Language of source:** | English, Spanish |
| **Participant:** | Age 18+ |
| **Personnel and Training Required:** | The interviewer must be trained to conduct personal interviews with individuals from the general population. The interviewer must be trained and found to be competent (i.e., tested by an expert) at the completion of personal interviews\*. \* There are multiple modes to administer this question (e.g., pencil and paper and computer-assisted interviews). |
| **Equipment Needs:** | While the source instrument was developed to be administered by computer, the PhenX Working Group acknowledges that these questions can be administered in a non-computerized format (i.e. pencil and paper instrument). Computer software is necessary to develop computer-assisted instruments. The interviewer will require a laptop computer/handheld computer to administer a computer-assisted questionnaire. |
| **Standards:** |

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| **Standard** | **Name** | **ID** | **Source** |
| Common Data Element (CDE) | Person Ultraviolet Radiation Exposure Text | 2954215 | [CDE Browser](https://cdebrowser.nci.nih.gov/CDEBrowser/search?elementDetails=9&FirstTimer=0&PageId=ElementDetailsGroup&publicId=2954215&version=1.0) |
| Logical Observation Identifiers Names and Codes (LOINC) | Environ exp UV light proto | 62538-4 | [LOINC](http://s.details.loinc.org/LOINC/62538-4.html?sections=Web) |

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| **General references:** | Gonzaga, E. R. (2009). Role of UV Light in Photodamage, Skin Aging, and Skin Cancer: Importance of Photoprotection. Amer J of Clin Derm. 10:19-24. |
| **Mode of Administration:** | Interviewer-administered questionnaire |
| **Derived Variables:** | None |
| **Requirements:** |

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| **Requirement Category** | **Required** |
| Major equipment | No |
| Specialized training | No |
| Specialized requirements for biospecimen collection | No |
| Average time of greater than 15 minutes in an unaffected individual | No |

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| **Process and Review:** | The Expert Review Panel has not reviewed this measure yet. |