IV-19. OCCUPATIONAL ALLERGY CLINIC

I. Purpose: the Occupational Allergy Clinic is a service provided to NIH employees for diagnosis and treatment of work-related allergies.

II. Relevant Occupational Medical Service (OMS) Procedure Manual Sections

A. Anaphylaxis. Chapter II Section 2
B. Occupational Injuries and Illnesses. Chapter III Section 20
C. Personal Allergy Program. Chapter III Section 21

III. Attachments

A. Occupational Allergy Triage Questionnaire (Attachment I)
B. OMS Allergy Clinic Guidelines (Attachment II)
C. Dander Allergy Questionnaire (Attachment III)
D. Intradermal Testing Form (Attachment IV)

IV. Enrollment and Initial Evaluation

A. If an OMS clinician suspects that an employee's symptoms are suggestive of a work-related allergy, the clinician:
   1. Administers and reviews the employee's responses to Occupational Allergy Triage Questionnaire (Attachment I);
   2. Consults, as needed, with an OMS physician, physician assistant, or the allergy clinic nurse to determine whether or not the employee may have a work-related allergy;
   3. Completes a occupational illness report in HealthRx and issues the appropriate Workers' Compensation forms, if the circumstances are suggestive of a work-related allergy;
   4. Schedules a two hour appointment with the allergy clinic nurse for the employee to be evaluated by an allergist in OMS; and
   5. Instructs the employee to avoid taking antihistamines for 48 hours prior to the appointment with the allergist.

B. At the appointment with the allergist, the employee first meets with the allergy clinic nurse. The allergy clinic nurse:
   1. Reviews the OMS Allergy Clinic Guidelines (Attachment II) and asks the employee to sign and date the form. The nurse then also signs and dates the completed form.
   2. Obtains a targeted medical history including medications taken, if any, paying special attention to beta blockers and monoamine oxidase (MAO) inhibitors.
   3. Confirms that an occupational illness report has been entered and that the employee was issued the appropriate Workers' Compensation claim forms.
   4. Assists the employee complete a Dander Allergy Questionnaire

(Attachment III).

C. The allergist:
   1. Reviews the Occupational Allergy Triage Questionnaire and the Dander Allergy Questionnaire and obtains additional medical history, as indicated;
   2. Administers the intradermal tests and utilizes the Intradermal Testing Form (Attachment IV) to record the skin testing and test results.
   3. The allergist determines whether or not the test results are consistent with an occupational allergy.
      a. Allergic reactions to dust mites are not considered to be work related unless the employee works in an environment with irreparably, excessive concentrations of dust or is a housekeeper responsible for removing dust.
      b. Allergic reactions to trees and grasses are not considered to be work related unless the employee is responsible for working with trees and grass.
   4. The allergist develops a treatment plan for workers with work-related allergies. The plan may include efforts to reduce the exposure to the identified allergens, oral medications, and desensitization injections.
   5. The allergist directs employees who have allergies that are not work-related to an appropriate health care provider in the community.

V. Administration of Desensitization Injections

A. Employees receive desensitization injections in the OMS Allergy Clinic on Tuesdays between 1 and 4 p.m. and Thursdays between 8 and 11 a.m.
B. Prior to administering the allergen the nurse reviews the vial(s) with the patient for correct name, strength and dosage.
C. The nurse does not administer the allergen if the employee is febrile or experiencing poorly controlled asthma.
D. The nurse administers the subcutaneous injection(s) in the employee's upper outer arm.
   1. If administering a single antigen, the nurse alternates the arm injected on successive visits.
   2. If the employee receives more than one allergen, the nurse utilizes the same site at each visit.
E. Using the Allergy Recording Sheet (see the Personal Allergy Procedure), the nurse records the:
   1. Nature and amount of the allergen;
   2. Date and time of the injection; and
   3. Employee's reaction twenty minutes following the injection.
F. The nurse reduces the dose of the allergen(s) in accordance with the allergist's instructions based on the reaction to the last dose or the delay since the last dose.
   1. If there is a two cm. or more of induration, drop the next injection dosage back to previous uncreative dose.
   2. The employee on maintenance who has a two cm. or more reaction will

receive half the previous dose at the next injection.

3. Those on weekly dosages may skip up to two weeks from their due date with no change in their subsequent dose.
4. Those who miss over two weeks are given half of the previous dose.

G. The nurse must check arm before employee leaves health unit, after a waiting period of twenty minutes, and record the reaction.

1. If the employee leaves the clinic before the reaction can be checked, the allergy clinic nurse discuses the incident with the medical director and a minimum reminds the employee of the rules.
2. If there is a second instance where the employee leaves the clinic before the reaction is checked, the employee will be discharged form the OMS allergy clinic.

VI. Ordering Allergens and Supplies

A. The nurse maintains an adequate stock of allergens and supplies for the Occupational Allergy Clinic.

1. The nurse checks the supplies every month and orders supplies as needed, allowing two months for delivery, to avoid an interruption in desensitization schedules.
2. When ordering allergens, diluents and sterile vials, the nurse requests that vials have at least a 2 year shelf life from the ship date.

B. The nurse supplies the following information on the order form for allergens:

1. Date: Present date
2. For: OMS
3. Source: Hollister-Stier & Co.
4. Catalog number: Found on stock bottle
5. Description: Name and strength of allergen and the statement – “50% glycerin”
6. Quantity: Number of vials needed
7. Unit: Vial.
8. In the comments section of the form, the nurse indicates that the PNU content needs to be marked on each allergen vial

C. Diluent for allergenic extract and empty sterile vials are also ordered from Hollister-Stier. Include the following information on the order form

1. Description: See label on empty bottle of diluent
2. Quantity: At least 200 vials
3. Unit: 25 vials per tray

D. Labels for the new mixes are also ordered from Hollister-Stier.

E. The 1 ml allergist syringes for skin testing are ordered from Becton-Dickinson. Include the following information on the order form:

1. Description: As written on tray of needles
2. Quantity: 1 case
3. Unit: 25 syringes per tray

F. The nurse submits the completed order forms to the clinic administrator for processing.

VII. Preparing and Identifying Patients' Allergens

A. The allergist mixes and labels the allergen.
B. The label includes the following information, the:
   1. Patient's name,
   2. Name of allergen,
   3. PNU strength, and
   4. Expiration date.

Occupational Allergy Triage Questionnaire

Name: _____ DOB: _____ SSN: _____
(Last 4 digits)

Institute: _____ Bldg: _____ Room: _____ Phone _____

Job Title/Description: _____

1. Symptoms:
_____

When do symptoms occur:
_____

2. When are symptoms most noticeable? Location: _____
Day of week: _____
Time of day: _____
Season of year: _____

3. Duration and severity of symptoms:
_____

Treatment (including avoidance) tried to date and effect:
_____

	Yes	No
4. Are you exposed to lab animals?	☐	☐
If yes, describe: _____		
5. Are you bothered by dust at work?	☐	☐
6. Are you bothered by dust at home?	☐	☐

Past Medical history for:	Yes	No
1. Allergies	☐	☐
MD Evaluation	☐	☐
Diagnosis	☐	☐

	Treatment tried		Was it effective?	
	Yes	No	Yes	No
Avoidance	☐	☐	☐	☐
Medications (specify types)	☐	☐	☐	☐
Desensitization injection	☐	☐	☐	☐
2. Asthma	☐	☐		
3. Hayfever	☐	☐		
4. Seasonal sinus problems	☐	☐		
5. Eczema	☐	☐		

Disposition:			
1. 2159 Completed	☐	☐	
2. CA-2 Issued	☐	☐	
3. Appointment in Occupational Allergy Clinic	☐	☐	Date: _____
4. Referred to private allergist	☐	☐	

Interviewer: _____ Date: _____

OMS Allergy Clinic Guidelines

The doctor has determined that you will benefit from the administration of desensitization injections your work-related allergy. The injection(s) will be administered weekly beginning with a very dilute strength and gradually increased as tolerated until a maintenance level is reached. When the maintenance level is achieved, the intervals between injection(s) will be increased gradually until you will be receiving the injections monthly. If you miss your scheduled injections or if you have a significant reaction to an injection, the dosage will be reduced and gradually increased again.

To obtain the maximum effective relief for your allergy, it is important that you progress through the allergen strengths in a timely manner. Therefore, try not to miss your allergy injection(s). Please review the following guidelines closely:

- OMS offers desensitization injections on Tuesdays from 1-4 and Thursdays from 8-11. Dr. Siriganian will be in the OMS health unit every other Thursday from 9-11.

- Employees on beta blockers or monoamine oxidase (MAO) inhibitors are not eligible to receive desensitization injections from OMS, as these medications may interfere with the treatment required for a severe adverse reaction to a desensitization injection.

- Employees who receive desensitization injections sign sheet posted on the door to Room 6C-424 and wait outside the office, for the nurse to call you.

- The nurse calls each patient in turn for his/her injections.

- The nurse and patient will review the label on the allergen vial(s) together each time to insure dispensing the correct allergen(s).

- The employee must remain in OMS for 20 minutes following the injection(s). The nurse must inspect the injection site after 20 minutes and measure any local reaction. Please note: any patient who is unable or unwilling to follow this rule will not be provided desensitization injections by OMS.

- If a systemic allergic reaction occurs (for example: hives, flushing, difficulty breathing), the patient immediately informs an OMS staff member.

- If an employee repeatedly misses injections, they may be dropped from the program.

I have reviewed the guidance listed above and agree to abide by it:

Participant's signature:_____ Date: _____

Witness' signature:_____ Date: _____

Dander Allergy Questionnaire

****Do not take any antihistamines for 48 hours prior to allergy testing****

Appointment Date:_____ Time: _____

Name:_____ DOB:_____ SSN:_____
(Last 4 digits)

Institute:_____ Bldg: _____ Room:_____ Phone: _____

Job Title/Description: _____

1. Do you have allergies? ☐ Yes ☐ No

2. Do you have any of the following?
   - ☐ Asthma
   - ☐ Hayfever
   - ☐ Hives
   - ☐ Angioedema
   - ☐ Joint symptoms
   - ☐ Eczema
   - ☐ Rashes
   - ☐ Purpura
   - ☐ Sinus Trouble
   - ☐ Reaction to insect stings
   - ☐ Migraine headaches
   - ☐ Abdominal symptoms
   - ☐ Nasal polyps
   - ☐ Other: _____

3. Check any of the following as the possible cause(s) of the symptoms you have checked in the previous questions:
   - ☐ Pollen
   - ☐ Dusts
   - ☐ Animal Danders
   - ☐ Feathers
   - ☐ Emotional upsets
   - ☐ Physical stimuli (light, heat, cold, drafts)
   - ☐ Wood shavings
   - ☐ Fabrics
   - ☐ Irritants (fumes, smoke, bleach, etc)
   - ☐ Infections, type and site
   - ☐ Foods
   - ☐ Drugs
   - ☐ Cosmetics
   - ☐ Dyes
   - ☐ Animal bedding, if yes, describe: _____
   - ☐ Other: _____

4. Approximately how long have you had these symptoms?

5. Have any of the following treatments been tried and were they effective?

	Yes	No	Yes	No
	Treatment tried		Was it effective?	
Avoidance	☐	☐	☐	☐
Medication, specify:_____	☐	☐	☐	☐
Medication, specify:_____	☐	☐	☐	☐
Medication, specify:_____	☐	☐	☐	☐
Desensitization, specify:_____	☐	☐	☐	☐
Desensitization, specify:_____	☐	☐	☐	☐

6. Have you ever had any of the following? If yes, please explain.

Yes	No		
☐	☐	Pneumonia	_____
☐	☐	Pleurisy	_____
☐	☐	Chronic bronchitis	_____
☐	☐	Frequent colds	_____
☐	☐	Sinusitis	_____
☐	☐	Ear, nose or throat surgery	_____

7. Have any immunizations that you may have had (in childhood, in armed services, etc.) caused any untoward reactions? If yes, please explain: _____

_____

8. Are you allergic to any drug, including antibiotics? If yes, please explain: _____

_____

7. Has any blood relatives of yours, such as maternal or paternal grandparents, father, mother, brother, sister, maternal or paternal aunts and uncles, cousins, children, etc. had allergies? If yes, please explain:

	Relationship	Kind of allergy
a.	_____	_____
b.	_____	_____
c.	_____	_____

10. Do furs bother you? If yes, please explain: _____

11. Do insecticides bother you? If yes, please explain: _____

12. Do chemicals bother you? If yes, please explain: _____

13. Have you ever had pets? If yes, please list the kind of pet(s): _____

_____

14. Do you have pets now? If yes, please list the kind of pet(s): _____

15. Have pets every caused you symptoms? If yes, please explain (the pet and associated symptoms): _____

_____

16. Does being near horses cause you any symptoms? If yes, please explain:

_____

17. Does going to the circus or zoo cause you any symptoms? If yes, please explain:

_____

18. Have any of the symptoms, illnesses or agents in any of the previous questions caused you to change the type of work you do? If yes, please explain:
    a. Which symptom, illness or agent? _____
    b. What type of work? _____

19. If you have had or still have any kind of allergy, please answer the following:
    a. Date of first exposure: _____
    b. Was the exposure: ☐ continuous or ☐ on and off?
    Describe in detail: _____

_____

_____

Name:_____ DOB: _____
SSN: _____ DATE: _____
(Last 4 digits)

Intradermal Testing at 100 PNU

Screening Panel
- ☐ Diluent
- ☐ Bermuda grass
- ☐ Dust
- ☐ English plantain
- ☐ Grass #7
- ☐ Molds Mix 10
- ☐ Poplar
- ☐ Ragweed
- ☐ Sage
- ☐ Trees Mix
- ☐ Weeds Mix

Tester:

Animal Panel
- ☐ Cat
- ☐ Dog
- ☐ Feather
- ☐ Guinea pig
- ☐ Hamster
- ☐ Mouse
- ☐ Rabbit
- ☐ Rat
- ☐ Mite

#5137 Mold Mix #10
- #5009 Alternaria tenuis
- #5129 Hormodendrum clad
- #5221 Phoma herbarum
- #5125 Helminthosporium int.
- #5013 Aspergillus Mix
- #5169 Penicillium Mix
- #5113 Fusarium vasinfectum
- #5232 Rhizopus nigricans
- #5145 Mucor racemosus
- #5233 Pullularia pullulans

2631 Grass Mix #7
- #190 Kentucky Bluegrass
- #2060 Orchard Grass
- #2330 Redtop
- #2597 Timothy
- #2561 Sweet Vemaigrass
- #1568 Meadow Fescue
- #2384 Perennial Ryegrass

2630 Weed Mix 02 W/O Ragweed
- #1406 Common Cocklebur
- #787 Lamb's Quarters
- #2126 Rough Redroot Pigweed
- #1517 Dock/Sorrel Mix DS (Yellow Dock, Sheep Sorrel)

2620 Tree Mix #11
- #1061 White Ash
- #1121 American Beech
- #1154 River Birch
- #2627 Black Walnut
- #1436 Common Cottonwood
- #1541 American Elm
- #1703 Shagbark Hickory
- #1832 Hard Maple
- #2015 Red Oak
- #2564 American Sycamore
- #2678 Black Willow