**Appendix 1. Socio-demographic data and general health conditions**

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| **Personal and health history** |
| 1. Birthdate: | 2. Age:  |
| 3. Sex: | 1.\_\_\_\_Female  | 2.\_\_\_\_Male |
| 4. Home address and commune of origin (write it): |  |
| 5. Place of work and commune (write it): |  |
| 6. Phone Number: |  |
| 7. Marital status (check with an X): | 1.\_\_\_\_Married  | 2.\_\_\_\_Single  |
| 3.\_\_\_\_Cohabitant partner | 4.\_\_\_\_Widow  |
| 5.\_\_\_\_Separate or Divorced  |
| 8. Do you work as a seasonal worker or an agricultural worker? (check with an X): | 1.\_\_\_\_Yes  | 2.\_\_\_\_No |
| 9. Does your partner work on farming? (check with an X): | 1. \_\_\_\_Yes  | 2.\_\_\_\_No |
| 10. What level of education do you have? (check with an X): | 1.\_\_\_\_ Illiterate  | 2.\_\_\_\_Incomplete Elementary |
| 3.\_\_\_\_Elementary Complete  | 4.\_\_\_\_Incomplete High school |
| 5.\_\_\_\_High School complete  | 6.\_\_\_\_Technical studies |
| 7.\_\_\_\_Incomplete College | 8.\_\_\_\_College complete |
| 11. What is the approximate family income? (Write):  |
| 12. How many people (children and adults) live in the home? (Write):  |
| 13. Do you have a mental, physical, sensory or psychiatric disability? (check with an X):  | 1.\_\_\_\_Yes  | 2.\_\_\_\_No |
| 14. If you are a woman, are you pregnant? (check with an X):  | 1.\_\_\_\_Yes  | 2.\_\_\_\_No |
| 15. Drug use (check with an X): | 1.\_\_\_\_Yes  | 2.\_\_\_\_No |
| 16. Do you have some of the following health conditions? (check with an X):  |
| 1.\_\_\_\_Anemia  | 2.\_\_\_Diabetes  | 3.\_\_\_\_Kidney damage | 4.\_\_\_Liver Damage  | 5.\_\_\_\_Epilepsy | 6.\_\_\_\_Skin allergy or dermatosis |
| 7.\_\_\_\_Asthma  | 8.\_\_\_Cancer  | 9.\_\_Depression  | 10.\_\_\_Hypertension  | 11.\_\_\_Heart Disease  | 12.\_\_\_Anxiety |
| 17. Drink alcohol? (check with an X): | 0.\_\_\_\_No 1.\_\_\_\_ Yes How many drinks a week?: |
| 18. Do you smoke? (check with an X): | 0.\_\_\_\_No 1.\_\_\_\_ Yes How many cigarettes a week?: |
| 19. Do you have children with congenital malformations? (check with an X): | 1.\_\_\_\_Yes 0.\_\_\_\_No |
| 20. Are you an agricultural worker or work in the field? (check with an X):  | 1.\_\_\_\_Yes 0.\_\_\_\_No |
| 21. What is your healthcare plan? (check with an X): | 1.\_\_\_\_Government healthcare 2.\_\_\_\_Private Insurer3.\_\_\_\_None4.\_\_\_\_Do not Know5.\_\_\_\_Other.¿Which one?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 22. Are you covered by a workplace safety and insurance agency? (check with an X): | 0.\_\_\_Yes1.\_\_\_No2.\_\_\_Do not know |
| 23. If you are an agricultural worker, have you been given acetylcholinesterase tests in your work in the past year?(check with an X): | 0.\_\_\_\_Not applicable 1.\_\_\_Yes 2.\_\_\_No |
| 24. What were the results of the tests? (check with an X):: | 0.\_\_\_\_Not applicable 1.\_\_\_\_Normal 2.\_\_\_\_Abnormal report3.\_\_\_\_Did not receive results |
| 25. During the last period that you were exposed to OP pesticides for your agricultural work, did you ever present any of the following symptoms or signs? (check with an X): |
| 1.\_\_\_\_Dizziness  | 2.\_\_\_Nausea  | 3.\_\_\_\_Fatigue | 4.\_\_\_Vomiting  | 5.\_\_\_\_Headache | 6.\_\_\_\_Abdominal pain |
| 7.\_\_\_\_Diarrhea | 8.\_\_\_Shortness of breath | 9.\_\_\_Leg weakness and/or cramps  | 10.\_\_\_Skin injuries  | 11.\_\_\_Insomnia  | 12.\_\_\_Night sweats |
| 13.\_\_\_\_Blurry vision | 14.\_\_\_Salivation | 15.\_\_\_Has been intoxicated with OP  | 16.\_\_\_Has been hospitalized for OP poisoning  |
| 26. If you are an applicator, name the pesticides you apply at work | Write the names here: |

**Appendix 2. Final structure of the exposure questionnaire with the items grouped in the four rotated factors.**

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| **Factor 1: Labor conditions in the application of OP pesticides** |  |
| 1.- How long have you worked as an agricultural worker? | 0. \_\_\_\_10 years or less  |  1.\_\_\_\_More than 10 years |
| 2.-Are you currently working applying pesticides? | 1.\_\_\_\_Yes  | 0.\_\_\_\_No |
| 3.-When was your last pesticide application? | 0.\_\_\_\_Not applicable  | 1.\_\_\_\_2 years or more  |
| 2.\_\_\_\_Less than 2 years |  |
| 4.-Do you work mostly as a seasonal or permanent pesticide applicator? (Check one) | 0.\_\_\_\_Not applicable  | 1.\_\_\_\_Seasonal  |
| 2.\_\_\_\_Permanent |  |
| 5.-How many years have you applied pesticides? | 0.\_\_\_\_Not applicable  | 1.\_\_\_\_10 years or less  |
| 2.\_\_\_\_More than 10 years |  |
| 6.-Do you have a pesticide applicator license? | 1.\_\_\_\_Yes  | 0.\_\_\_\_No |
| 7.-Do you know the health risks you are exposed to when applying or mixing pesticides? | 1.\_\_\_\_Yes  | 2.\_\_\_\_No  | 0.\_\_\_\_Not applicable |
| 8.-Are you trained on the health risks of pesticides? | 1.\_\_\_\_Yes  | 2.\_\_\_\_No  | 0.\_\_\_\_Not applicable |
| 9.-Do you eat, drink or smoke during the application? | 1.\_\_\_\_No  | 2.\_\_\_\_Yes or Occasionally  | 0.\_\_\_\_Not applicable |
| 10.-During or after pesticide application, do you wash your hands before smoking, eating or drinking? | 1.\_\_\_\_Yes  | 2.\_\_\_\_No or Occasionally  | 0.\_\_\_\_Not applicable |
| 11.-What type of pesticide do you recall applying? (Can check more than one option)(Internal code for answers rating: 0= Not applicable; 1= Only one OP pesticide; 2= More than one OP pesticide) | 0.\_\_\_\_Not applicable OP  | 1.\_\_\_\_Chlorpyrifos (Lorsban, Troya) |
| 2.\_\_\_\_Methamidophos (MTD 600, Monitor, Tamaron) | 3.\_\_\_\_Azinphosmethyl (Gusathion) |
| 4.\_\_\_\_Metidation | 5.\_\_\_\_Diazinon |
| 6.\_\_\_\_Phosmet | 7.\_\_\_\_Dimethoate |
| 8.\_\_\_\_Profenofos | 9.\_\_\_\_Cadusafos |
| 10.\_\_\_\_Other OP | (Name them): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 12.- Do you use manual pump backpack to apply OP pesticides? | 1.\_\_\_\_Yes  | 0.\_\_\_\_No or Not applicable |
| 13. Do you use a motorized pump backpack to apply OP pesticides? | 1.\_\_\_\_Yes  | 0.\_\_\_\_No or Not applicable |
| 14. Do you use a tractor operated nebulizer or pump to apply OP pesticides? | 1.\_\_\_\_Yes  | 0.\_\_\_\_No or Not applicable |
| 15.-Where do you wash the machinery that was used to apply pesticides? (Check one option) | 0.\_\_\_\_Does not wash, not applicable  | 1.\_\_\_\_In a dedicated place for washing |
| 2.\_\_\_\_Yard, orchard, pasture or field  | 3.\_\_\_\_Inside the house |
| 16.-Where do you store the pesticides? (Check one option) | 0.\_\_\_\_Not applicable  | 1.\_\_\_\_Warehouse at home or work |
| 2.\_\_\_\_In the house’s yard  | 3.\_\_\_\_Inside the house |
| 17.-Besides applying OP pesticides, do you mix and prepare them? | 1.\_\_\_\_Yes  | 0.\_\_\_\_No or Not applicable |
| 18.-The place where the pesticide is mixed is... | 0.\_\_\_\_Not applicable  | 1.\_\_\_\_Open  | 2.\_\_\_\_Closed |
| 19.-Do you wear personal protective equipment when mixing? | 0.\_\_\_\_Not applicable  | 1.\_\_\_\_Yes  | 2.\_\_\_\_No |
| 20.-Do you change your clothes after the application? | 1.\_\_\_\_Yes  | 2.\_\_\_\_No or Occasionally | 0.\_\_\_\_Not applicable  |
| 21.-If you change your clothes after work, where do you do it? (check one option) | 1.\_\_\_\_Work  | 2.\_\_\_\_Home | 0.\_\_\_\_Not applicable  |
| 22.-How long does it take between the end of the application and taking a shower or bath? (check one option) | 1.\_\_\_\_Less than 15 minutes  | 2.\_\_\_\_15 minutes or mores  |
| 0.\_\_\_\_Not applicable |  |
| **Factor 2: Use of PPE**In your work as an agricultural worker, check if you use the following Personal Protective Equipment (PPE): |  |
| 23.-Use of PPE in hands (gloves) | 0.\_\_\_\_Yes  | 1.\_\_\_\_No |
| 24.-Use of PPE in the head (hat) | 0.\_\_\_\_Yes  | 1.\_\_\_\_No |
| 25.-Use of protective eyewear (googles, face shield or safety glasses) | 0.\_\_\_\_Yes  | 1.\_\_\_\_No |
| 26.-Use of Respiratory PPE (Respiratory mask with recommended filters and facial protection) | 0.\_\_\_\_Yes  | 1.\_\_\_\_No |
| 27.- Use of PPE in the body (Waterproof suit with no cuts or holes) | 0.\_\_\_\_Yes  | 1.\_\_\_\_No |
| 28.-Use of PPE in the feet (rubber boot) | 0.\_\_\_\_Yes  | 1.\_\_\_\_No |
| 29.-Frequency of use of PPE | 0.\_\_\_\_Always  |  1.\_\_\_\_Never or occasionally |
| **Factor 3: Workplace conditions that prevent exposure to OP** |  |
|  |  |
| 30.- In our workplace we have showers | 0.\_\_\_\_Yes  | 1.\_\_\_\_No |
| 31.- In our workplace we have washbasin | 0.\_\_\_\_Yes  | 1.\_\_\_\_No |
| 32.- In our workplace we have hot water | 0.\_\_\_\_Yes  | 1.\_\_\_\_No |
| 33.-In our workplace we have drinking water | 0.\_\_\_\_Yes  | 1.\_\_\_\_No |
| 34.-In our workplace we have toilet | 0.\_\_\_\_Yes  | 1.\_\_\_\_No |
| **Factor 4: Home conditions related to OP exposure** |  |
| 35.-Do you have a greenhouse, orchard or field at home? | 0.\_\_\_\_Yes  | 1.\_\_\_\_No |
| 36.-Approximate distance from farms to your house (in meters) (Check one option) | 0.\_\_\_\_More than 500 meters  | 1.\_\_\_\_500 meters or less |
| 37.-Use organophosphate pesticides at home | 0.\_\_\_\_Yes  | 1.\_\_\_\_No |