

## WORKPLACE EXPOSURE QUESTIONNAIRE

My name is Olusegun Thomas, a lecturer/researcher at the University of Ibadan. Together with some colleagues, we are conducting an investigation into any likely effects on human health that workplace chemicals pose to “tie and dye” workers. Findings from this study can be useful in informing government on how to provide measures that will reduce exposure to these chemicals and to improve health of the participants. The information on this form will be kept strictly confidential and will be used only to aid risk assessment. Your participation is entirely voluntary and you can opt out at any time during the study. The completion of the questionnaire will take an average of 40 minutes. Please be truthful with your responses.

Thank you for your help.

### *Part A: Sociodemographic Information*

Respondent's ID \_\_\_\_\_

Gender: Male   
Female

Marital status: Single   
Married   
Others \_\_\_\_\_

Religion \_\_\_\_\_

Level of Education: No formal education   
Primary school   
Secondary school   
Post-secondary

Age group: Below 19   
19-30   
21-40   
41-50   
51-60   
Over 60

History of Alcohol use: Never   
Occasional   
Frequently   
Quitted

History of smoking: Never   
Occasional   
Frequently   
Quitted

Number of working years in dye industry \_\_\_\_\_

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### *Part B: Hazards Knowledge*

1. Can exposure to dyes and/or chemicals have harmful effects on:

Hands	Yes <input type="checkbox"/>	No <input type="checkbox"/>	I don't know <input type="checkbox"/>
Skin	Yes <input type="checkbox"/>	No <input type="checkbox"/>	I don't know <input type="checkbox"/>
Eyes	Yes <input type="checkbox"/>	No <input type="checkbox"/>	I don't know <input type="checkbox"/>
Lungs	Yes <input type="checkbox"/>	No <input type="checkbox"/>	I don't know <input type="checkbox"/>
Liver	Yes <input type="checkbox"/>	No <input type="checkbox"/>	I don't know <input type="checkbox"/>
Kidney	Yes <input type="checkbox"/>	No <input type="checkbox"/>	I don't know <input type="checkbox"/>

2. Can dyes and chemicals gain entry into human body through:

Hands/ intact skin	Yes <input type="checkbox"/>	No <input type="checkbox"/>	I don't know <input type="checkbox"/>
Wounds/broken skin	Yes <input type="checkbox"/>	No <input type="checkbox"/>	I don't know <input type="checkbox"/>
Lungs/Inhalation	Yes <input type="checkbox"/>	No <input type="checkbox"/>	I don't know <input type="checkbox"/>
Eyes/nostrils lining	Yes <input type="checkbox"/>	No <input type="checkbox"/>	I don't know <input type="checkbox"/>
Mouth/ingestion	Yes <input type="checkbox"/>	No <input type="checkbox"/>	I don't know <input type="checkbox"/>

3. Will the exposure to dyes/chemicals lead to symptoms or medical conditions such as:

- Headaches Yes  No  I don't know   
 Hands hardening Yes  No  I don't know   
 Breathing difficulty Yes  No  I don't know   
 Skin discolouration Yes  No  I don't know   
 Diarrhoea Yes  No  I don't know   
 Liver disease Yes  No  I don't know   
 Cancer Yes  No  I don't know

4. Are the chemicals you use capable of causing skin burns and/or irritation?

Yes  No  I don't know

5. Will waste dyes and chemicals from dyeing process still have harmful effects on health?

Yes  No  I don't know

6. Can the mixing of chemicals such as caustic soda, sulphites and dyes produce poisonous gases?

Yes  No  I don't know

7. Will inhaling the gas have any harmful effect on human health?

Yes  No  I don't know

8. Is textile fibre dust dangerous to health?

Yes  No  I don't know

9. Can the inhalation of textile fibre dust cause respiratory problems?

Yes  No  I don't know

10. Are you being exposed to excessive heat during work?

Yes  No  I don't know

**Part C: Safety Practices and barriers to PPE compliance**

11. Do you wash hands with soap and water before eating or drinking?

Yes  No

12. Do you eat in the workshop or during active dyeing process?

Yes  No

13. Do you wash hands with soap and water after work?

Yes  No

14. Do you bathe entire body after work?

Yes  No

15. Do you read label on dye and chemical containers?

Yes  No

16. Do you cover dye/chemical containers after use?

Yes  No

17. Do you adhere to instructions of usage on containers of dyes/chemicals?

Yes  No

18. Do you dispense dye powder with respirator?

Yes  No

19. Have you ever been instructed on safe handling methods?

Yes  No

20. Do you have adequate training on how to handle hazards?

Yes  No

21. Do you take work clothes home for cleaning?

Yes  No

22. Identify (by ticking) if you frequently ever used any of the following:

- Gloves   
 Respirator   
 Eye goggles   
 Workshop overall   
 Footwear

23. Identify if you frequently (consistently) use any of the following in the last one month

- Gloves   
 Respirator   
 Eye goggles   
 Workshop overall   
 Footwear

**Express your level of agreement or otherwise with the following statements**

24. The use of PPE is cumbersome and uncomfortable

Agree  Undecided  Disagree

25. The use of PPE is a waste of resources

Agree  Undecided  Disagree

26. The use of alternatives ("blood flushing" with antibiotics & herbal decoctions) is as effective in reducing harmful effects of exposure

Agree  Undecided  Disagree

27. The risks associated with dye/chemicals exposure are over exaggerated?

Agree  Undecided  Disagree

**Part D: Estimates of Exposure**

28. How many hours do you come in contact with dyes/chemicals, their solutions or dyed materials in a day

1-2  3-5  more than 5

30. How many days in a week do you come in contacts with these items above for the contact period indicated above:

1-2  3-4  5-7

31. Indicate the presence of any of the following in the air contained in your work area

Dust e.g. dye powder, textile fibre dust

Gas e.g. from mixing/reaction of chemicals, candle wax vapour

Smoke e.g. combustion products from stoves etc. to prepare dye solution

Organic solvents e.g. thinners and bleach

Waste products (discarded dye/chemical solutions) from previous dyeing processes

32. What type of ventilation does your work area have?

No ventilation

Open doors and windows

Open space with no wall barriers

Air conditioning

Fume hood with fan and air filters

Others \_\_\_\_\_

33. Do you work behind any engineering device (e.g. cupboards, screens etc.) to limit exposure?

Yes  No

**Part E: Self-reported Health Problems**

34. Have you ever had wheezing or whistling in your chest in past twelve months?

Yes  No

35. Have you had this wheezing or whistling in the chest when you did not have a cold?

Yes  No

36. How many attacks of wheezing and whistling have you had in the past twelve months?

None

1-3 times

4-12 times

More than 12 times

37. Have you ever experienced shortness of breath or feeling of suffocation during work?

Yes  No

38. Have you ever be woken by an attack of shortness of breath at any time in the past 12 months?

Yes  No

39. Have you ever be woken by an attack of cough at any time in the past 12 months?

Yes  No

40. Do you cough almost daily for at least part of the year?

Yes  No

41. Do you cough up phlegm for at least part of the year?

Yes  No

42. Have you ever had asthma?

Yes  No  → 47

43. Was the diagnosis confirmed by a doctor?

Yes  No

44. Are you currently taking any medications including inhalers, tablets for asthma?

Yes  No

45. Do you have any nasal allergies including hay fever?

Yes  No

46. Have you had any eye irritation including conjunctivitis in the past 12 months?

Yes  No

47. Have you ever had eczema (atopic dermatitis) or skin inflammation?

Yes  No

48. Have you ever had any skin irritation, itchiness or tenderness?

Yes  No

49. Have you ever had any sore on your skin or hands that failed to heal completely?

Yes  No

50. Have you ever had any mouth sore that failed to heal completely?

Yes  No