

Appendix 1

Survey for Doctors in Nuevo León - Health and Air Pollution

Dear Healthcare Professional,

We greatly appreciate you taking 10 minutes of your time to respond to this survey about the impact of air pollution on the health of your patients and community.

By participating, you are understood to give your consent for the data to be used for academic research. The survey is anonymous and confidential, and it will be of great help in understanding this issue from your perspective as a healthcare professional.

Thank you very much.

For any questions or comments, you can contact us.

Questionnaire:

1. Do you live in the state of Nuevo Leon, Mexico?
 - a. Yes
 - b. No
2. Considering the past year, to what extent have you observed an increase in the incidence or severity of the following diseases? (Asthma, COPD, Pneumonia, Hypertension, Behavioral disorders, Neurodevelopmental disorders, ADHD, Alzheimer's disease, Parkinson's disease, Ocular irritation, Retinopathy, Dry eye syndrome, Psoriasis, Acne, Urticaria, Eczema, Atopic dermatitis, Stroke, Myocardial infarction, Heart failure)
 - a. Not applicable
 - b. Not at all
 - c. A little
 - d. Moderately
 - e. A lot
3. How much do you think air pollution has harmed the health of people in your city or metropolitan area in the past year?
 - a. I don't know
 - b. No harm at all
 - c. Little harm
 - d. Moderate harm
 - e. A lot of harm

4. How informed do you feel about the association between air pollution and its impacts on health?
 - a. Not informed
 - b. Slightly informed
 - c. Moderately informed
 - d. Very informed
5. From your perspective, what are the effects of air pollution on health? (open-ended question)
6. How much do you believe air pollution is affecting the health of your patients?
 - a. Unknown
 - b. Does not affect
 - c. Affects slightly
 - d. Affects moderately
 - e. Affects greatly
7. To what extent do you think the following age groups are being affected by air pollution?: 0 to 4 years, 5 to 17 years, 18 to 39 years, 40 to 64 years, over 65 years, people with chronic illnesses, pregnant people, people in poverty.
 - a. Unknown
 - b. Not at all
 - c. Slightly
 - d. Moderately
 - e. Greatly
8. Any comments on what you have observed in patient care regarding this issue (optional)?
9. Indicate your level of agreement with the following statements (Likert scale):
 - a. If I were not a healthcare professional, I would probably not notice the impact of air pollution on health.
 - b. I personally experience symptoms or problems related to air pollution.
 - c. At times, I have refrained from outdoor activities due to poor air quality.
 - d. Exercising outdoors is still recommended.
10. Indicate your level of agreement regarding the sources of information you have had (Likert scale):
 - a. I know about the topic from what I learned in my professional training.
 - b. Through medical conferences/continuing education.
 - c. I have read research on the impact.
 - d. I have searched for studies on the topic on my own.
 - e. Through news/media.
 - f. I am familiar with the AIRE Nuevo León monitoring platform.
 - g. I use other platforms for air quality monitoring.
 - h. I frequently check the air quality status.
 - i. I know the technical aspects of pollutant particles.
 - j. I know the thresholds for issuing environmental alerts.
11. How serious do you believe the problem is in Nuevo León?
 - a. Unknown

- b. Not serious
 - c. Slightly serious
 - d. Moderately serious
 - e. Very serious
12. Indicate to what extent you believe the following factors contribute to air pollution (Likert scale):
- a. Thermal inversion phenomenon
 - b. Strong winds
 - c. Emissions from factories/industry
 - d. Use of private vehicles
 - e. Mountains as geographical barriers
 - f. Wildfires
 - g. Barbecues
 - h. Loss of natural areas/vegetation
 - i. Lack of efficient public transportation
13. How often do you give recommendations during your consultations to prevent/mitigate the effects of poor air quality on health?: Avoid outdoor exposure; Use medications for symptom/allergy control; Have filters in the home and/or workplace; Use face masks; Avoid exercising outdoors.
- a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Always or almost always
14. Regarding the previous question, would you like to add another recommendation that you give during your consultations? (If not, answer NA)
15. Do you use air filters in your home?
- a. Yes
 - b. No
 - c. Unknown
16. Do you use air filters in your workplace?
- a. Yes
 - b. No
 - c. Unknown
17. How informed do you think your patients are about the impact of air pollution on health?
- a. Not informed at all
 - b. Slightly informed
 - c. Moderately informed
 - d. Very informed
18. How informed do you think society is about the impact of air pollution on health?
- a. Not informed at all
 - b. Slightly informed
 - c. Moderately informed
 - d. Very informed

19. Who do you think should be responsible for addressing the problem of air pollution in Nuevo León (open-ended question)?
20. Which of the following do you consider barriers to discussing air pollution issues with patients? (Check all that apply)
- a. Air pollution is not occurring
 - b. Patients are not interested
 - c. Lack of time
 - d. Lack of knowledge on how to address the topic
 - e. Discussing these issues will not make a difference in their health
 - f. Not my responsibility
 - g. Other (please explain)
21. Indicate your level of agreement with the following statements (Likert scale):
- a. Teaching about air pollution and its impact on health should be integrated into medical education.
 - b. Medical societies should play an important role in promoting the relationship between air pollution and health.
 - c. I believe that my personal actions can contribute to combating air pollution.
 - d. I believe that my professional actions can contribute to combating air pollution.
 - e. Doctors have the responsibility to educate THEIR PATIENTS about the effects of air pollution on health.
 - f. Doctors have the responsibility to educate SOCIETY about the effects of air pollution on health.
22. Indicate your level of agreement with the following statements, identifying which agents should intervene to resolve or mitigate the problem of air pollution (Likert scale):
- a. Government authorities
 - b. Citizens - protest and demand
 - c. Citizens - change mobility habits
 - d. Healthcare professionals - advocate for the protection of citizens on this issue
 - e. Local civil associations
 - f. International environmental organizations
 - g. Companies and industries