

# ENVIRONMENTAL EXPOSURE QUESTIONNAIRE

## PRACTITIONER INTERPRETATION GUIDE

### A Metabolism of pollutants

1	Do you often have to lower the regular dose of prescription, over-the-counter medication, or herbal supplements because you are too sensitive to normal doses?	Yes	Suggests Phase 1 liver detoxification is slow.
2	Do you need to avoid caffeine in the afternoon because it can keep you up at night?	Yes	Suggests CYP1A2 is low and will have difficulty clearing polycyclic aromatic hydrocarbons (solvents).
3	Have you ever experienced adverse reactions to medications? If so, describe the medication and what the reaction was.	Yes	Suggests poor Phase 2 detoxification.

### B Toxicant-related health problems

1	Do you often experience a sudden onset of physical, mental, or emotional symptoms upon exposure to chemical odours such as cleaners, perfumes, new materials, cigarette smoke, diesel exhaust, etc. Examples of symptoms include headaches, skin rashes, nausea, fatigue and shortness of breath.	Yes	Suggests they may be chemically over-burdened; environmentally ill; immuno-toxic; deficient in GSH and magnesium and/ or likely have low GSTM1 and PON1 SNP.
2	When did you first notice such reactions?	Age first chemically overloaded.	
3	What was the chemical you first reacted to?	Chemical class first overburdened with.	
4	Do you experience unpleasant symptoms when you walk down the soap aisle in the grocery store, or do you find yourself avoiding the soap aisle altogether?	Yes	Suggests they are chemically reactive.
5	In the last 6 months, are your chemical reactions getting better, worse or the same?	<p><b>Better</b> – suggests general home environment is reducing in toxicants and exposure.  <b>Worse</b> - suggests new toxicants being introduced.  <b>Same</b> – suggests no new toxicants.</p>	
6	Tick the chemicals that you react to or are sensitive to and approximate age when it began.	Indicates the age and duration they have been overburdened with each toxicant.	
		Age	Age
	Cleaners		Paints
	Perfumes		New carpet or fabric
	Cigarette smoke		Plastics
	Car exhaust fumes		Pesticides or other agricultural chemicals
			Other (list)

7	Please tick any illness that you have, or have had in the past, and note the age at which it began or became significantly worse.				
<b>Environmental illness may be associated with each of these conditions.</b>					
<b>Illnesses that coincide with chemical reactivity in section above suggests potential causative or contributing agents.</b>					
	Yes?	Age		Yes?	Age
			Asthma		
			Allergies		
			Hypothyroidism		
			Infertility		
			Low testosterone		
			Gestational hypertension		
			Gestational diabetes		
			Type 2 diabetes		
			Obesity		
			Balance disorder		
			Brain fog-diminished cognition		
			Memory loss		
			Depression or anxiety		
			Parkinsonism		
			Tremors		
			Rheumatoid arthritis		
			Lupus (SLE)		
			Sjogren's syndrome		
			Autoimmune thyroiditis		
			Any other auto immune illness		

### C AIR POLLUTANT EXPOSURE

<b>Shows proximity to these sources of toxicants.</b>							
How many minutes- drive away do you live from:		1-4	5-9	10-19	20-30	>30	Don't know
1	The closest highway or freeway?						
2	A busy street?						
3	The closest golf course?						
4	The closest agricultural area?						
5	The closest industrial area where you see smokestacks?						
6	The closest landfill?						
7	Do you live in a city, town or region known for its air pollution? If so, please state where it is.	Yes	<b>Suggests higher risk of exposure to air pollutants.</b>				
	Please provide further details if you have previously lived in an area known for air pollution, or frequently travel to such areas.						
8	How often can you 'see the air' in your area?	All of the time	Most of the time	1-4 times monthly	4-8 times yearly	Rarely	
<b>Indicator of air pollutants.</b>							
9	Approximately what year, or decade, was your house built in?			<b>Older houses have an increased risk of lead exposure.</b>			
10	Do you have air purifiers in your home?	Ozone	Yes	<b>Suggests poor air quality and increased oxidative stress.</b>			
		Ion generator	Yes	<b>Suggests poor air quality and increased oxidative stress.</b>			
		HEPE air purifier	Yes	<b>Suggests fair air purification quality.</b>			
		IQ Air or multifilter purifier	Yes	<b>Best air purification quality.</b>			
11	When were your air ducts last cleaned?	<b>Lack of cleaning increases potential for higher indoor air pollution load.</b>					

12	Do you use spray or plug-in air-conditioners in the home?		Yes	Potential exposure to solvents. Consider symptom picture.			
13	Are shoes worn in the house?		Yes	Increased risk of indoor air pollution.			
14	Are pesticides used in your home or garden?		Yes	Potential exposure to persistent organic pollutants. Consider symptom picture.			
15	Do you have pets in your home that you apply anti-flea or tick product to?		Yes	Potential exposure to neonicotinoid pesticides. Consider symptom picture.			
	If so, how often?			Daily	Weekly	Monthly	< 1 Monthly
16	Do you have an attached garage that your car is parked in?		Yes	Increased risk of indoor air pollution.			
17	Do you drive a diesel vehicle?		Yes	Increased exposure.			
18	Does your car have an exhaust leak?		Yes	Risk exposure to benzene (solvent).			
19	Type of appliances (stove, hot water)	Electric	Yes	NOT a potential source of toxic exposure.			
		Natural gas	Yes	Potential source of toxic exposure.			
20	Type of heating	Electric	Yes	NOT a potential source of toxic exposure.			
		Gas	Yes	Potential source of toxic exposure.			
		Oil	Yes	Potential source of toxic exposure.			
		Wood	Yes	Increased risk of asthma.			
		Diesel	Yes	Potential source of toxic exposure.			
21	Have you lived in a new home or recently remodelled home?		Yes	High exposure to building chemicals. Assess if age lived there correlates with start of illness or illness exacerbation.			
22	Does your current home have wall to wall carpets		Yes	Increased exposure to numerous chemicals.			
23	Are the carpets treated with 'Scotchgard' or similar to resist staining?		Yes	Increased exposure to perfluorocarbons.			
24	Is any furniture or curtains treated with 'Scotchgard' or similar to resist staining?		Yes	Increased exposure to perfluorocarbons.			
25	Do you use Teflon coated cookware?		Yes	Increased exposure to perfluorocarbons.			
26	What is the newest piece of furniture in your home and when was it purchased?		Assess potential for toxins used in manufacturing, especially with synthetic materials and if this correlates with when illness began.				
27	Do you sleep with any of the following?						
	• Pillow-top mattress		Yes	High potential for exposure to benzene and styrene.			
	• Memory foam mattress		Yes				
• Memory foam pillow		Yes					
28	Do you have any hobbies that require the use of solvents, paints, gasoline or lead?		Yes	Increased exposure to solvents.			
29	Have you ever worked at a job or did you attend schooling that brought you in contact with industrial chemicals? What chemicals?		Yes	Increased exposure to industrial chemicals Assess the types mentioned and duration of exposure, as well as correlations to illness.			
	How many years?	1-4	5-9	10-19	20-30	>30	
30	How often do you have your clothes dry cleaned?		The higher the frequency, the greater the potential for high solvent exposure.				
31	How often do you get your hair coloured?		The higher the frequency, the greater the potential for high solvent exposure.				
32	How often do you have your nails done (where an acrylic service is offered)?		The higher the frequency, the greater the potential for high solvent exposure, especially toluene.				

**D METAL EXPOSURE**

1	Were you raised in a smoking household?	Yes	Increased risk lead, cadmium, arsenic.
2	Have you ever smoked?	Yes	Increased risk lead, cadmium, arsenic.
	a) How many packs a day?	More packs and /or more years indicates an increasing risk of exposure to lead, cadmium and arsenic.	
	b) How many years?		
3	Have you lived in a home that was built before 1970?	Yes	Increased risk lead exposure.
4	Have you remodelled a home that was built before 1970?	Yes	Increased risk lead exposure.
5	Do you use filtered water for cooking and drinking?	No	Increased risk of arsenic exposure in ground water, depending on geographical location.
6	Have you ever had silver amalgam fillings in your teeth?	Yes	Increased risk mercury exposure.
	a) Do you grind your teeth?	Yes	Increased risk mercury exposure.
	b) Total number?	Increased number = increased risk mercury exposure as well as risk lower selenium levels.	
	c) How many years have they been in your mouth?	Increasing exposure.	
	d) If amalgams have been removed, how long ago?	More recent: greater mercury release.	
7	How often do you consume tofu?	Once or more weekly → high cadmium burden.	

**E FOOD POLLUTION**

1	How often do you consume the following foods?	Rarely/ never	< 1 x weekly	1 x weekly	> 1 x weekly
	Tuna (canned)			Risk mercury exposure.	
	Tuna (fresh)			Risk mercury exposure.	
	Salmon (canned or farmed)			Risk mercury and PCB exposure.	
	Salmon (wild)			Low risk	
	Swordfish			Risk mercury exposure.	
	Shark (flake)			Risk mercury exposure.	
	Orange roughy			Risk mercury exposure.	
	King mackerel			Risk mercury exposure.	
	Barramundi			Risk mercury exposure.	
	Sardines			Risk PCB exposure.	
2	How often do you consume commercial varieties (non-organic) of the following?	Rarely/ never	< 1 x weekly	1 x weekly	> 1 x weekly
	Apples			Risk pesticide and persistent organic pollutant exposure.	
	Celery				
	Cherry tomatoes				
	Cucumber				
	Grapes				
	Nectarines				
	Peaches				
	Potatoes				
	Snap peas				
	Spinach				
	Other dark green leafy vegetables				
	Strawberries				
	Capsicum				

3	How often do you consume canned soup?			Risk BPA exposure.
4	How often do you have other canned foods?			
5	How often do you have pre-packaged 'microwave-safe' meals?			Risk plastics exposure.
6	How often do you microwave food in 'microwave-safe' plastic, or Styrofoam?			Risk plastics and styrene exposure.

## F MYCOTOXINS

1. Have you ever had any of the following in your current or past residence?	Current residence		Past residence	
	Yes	Risk mould exposure.	Yes	Risk mould exposure.
Has your house ever flooded?		Risk mould exposure.		Risk mould exposure.
Roof leaks?				
Window leaks?				
Water in the basement?				
Broken water pipe?				
Does your carpet ever get wet when it rains?				
Any water stains on ceilings or walls?				
Any rooms in the home that smell musty?				
Do you suspect that your home has mould in it?				
Is there any visible mould around the shower/ tub/ sinks in your home?				
Is there any visible mould on the walls or ceiling in your home?				
Do you have a front-loading washing machine?				
Ever received insurance money for your home?				
Ever need assistance to clear water from your home?				
Is your home water supply from a well or cistern?	Yes	Risk mycotoxin exposure.	Yes	Risk mycotoxin exposure.

## G LIFESTYLE POLLUTANTS

1	How often do you use the following personal care products?	Rarely/ never	< 1 x weekly	Daily	> 1 x daily
		a) Skin lotion			Risk phthalate exposure.
b) Sunscreen					
c) Scented deodorant					
d) Perfume or cologne					
2	Do you have any silicone-containing implants?	Yes	Assess for correlation with any auto-immune conditions.		
	How many years have you had the implants?	1-4	5-9	10-19	20-30
3	Do you have implants of any other materials?		Assess for correlation with any auto-immune conditions.		
	How many years have you had the implants?	1-4	5-9	10-19	20-30
4	In your home do you have any of the following:				
	a) Wi-Fi routers	Yes	Risk EMF exposure.		
	b) Bluetooth appliances	Yes			
	c) Smart meter	Yes			
	d) Cordless phones	Yes			
5	How many hours do you spend on a mobile phone a day on average?	Increasing risk with more time.			