



Anthony Liberatore

# Toxic tort primer

## When the air we breathe and water we drink is doing us harm

Fortunately, the smog days of 1970s Los Angeles no longer exist. Even so, metropolitan air and water can contain many potentially hazardous chemicals as a result of industrial pollution, manufacturing processes and motor vehicle exhaust. Certain communities also have an increased risk of airborne exposures because the need for housing has caused residential communities to be built adjacent to or intermingled with industrial activities. What this all means is that good people are being unwittingly exposed to chemicals that could be causing them harm.

This article is intended to provide an initial guide of points for the trial lawyer to consider before filing that "toxic tort" case. Subjects covered include air and water testing procedures and protocols, establishing medical causation, venue and viable causes of action.

### Obtaining proof of exposure

If you are involved, it is likely due to someone suffering from an unexplained illness, or people reporting foul odors from air or water. At this point, efforts must be undertaken to determine the nature and cause of the exposure. Is it airborne or waterborne? What is the source? Once you ascertain the nature of the exposure and its source or a potential source, you must then create a testing methodology that will enable you to confirm the exact identities of the chemical contaminants and the quantities of the contaminants. These two factors are critical in overcoming later defense challenges to your liability claims and medical causation testimony. Securing proper evidence of the type and quantity of chemical contaminants brings you that much closer to linking the chemicals with the harms.

If you are dealing with airborne contaminants entering someone's home from nearby industrial processes, you want to have ambient air sampling conducted that best reflects your client's actual exposure over time. A consultant could conduct Environmental Protection Agency-approved *Summa* Canister indoor and outdoor sampling at various intervals. This includes a short duration "grab" sample, and time drawn samples at 4-hour, 8-hour, 12-hour and/or 24-hour intervals. Stagger the intervals so that you have overlap between the time drawn and grab samples.

Since airborne exposure is affected by a myriad of environmental factors such as wind, humidity, temperature and terrain, it is important that you have simultaneous meteorological data that coincides with your sampling. There are approximately 610 registered meteorological stations in Los Angeles County. You should try to obtain the meteorological data from the closest reliable point source.

Consideration should be given so that the terrain of the meteorological station is substantially similar, if not identical, to your site. A helpful Web site is [www.sccoos.org](http://www.sccoos.org). If you have a large budget, it may warrant the expense of creating a mobile meteorological station in and around the immediate area of your testing.

You must work with your consultants to maximize the benefits of your testing. Often, you should first start with grab samples and evaluate the results to determine what follow-up testing should be done, if any. Remember, the defense will ask you to produce all sampling results so you do not want to create defense evidence. This is why you must be judicious in your testing and evaluate key characteristics of your contaminant chemicals to see how they disperse in

the atmosphere from the point source to the location of the exposure, paying particular attention and consideration to variable factors such as wind speed, temperature, terrain and time of day.

Some consultants are more knowledgeable than others. But remember, you are the lawyer who has an understanding of the Evidence Code so you must pay particular concern to strengthen the admissibility and reliability of your samples. Consideration must be given to chain of custody in conducting the sampling and in the analysis of the samples. If you are using *Summa* Canisters to conduct ambient air samples, ensure that the lab that is providing you with the canisters has sterilized and sealed them consistent with industry custom and practice and also consistent with the laboratory's own procedures and protocols. When the samples are obtained, make sure your consultants assign sample numbers, document the exact location of the samples, start time and end time, and, if possible, photograph the canister at the very location where the sample was obtained. Once the sample is obtained, proper chain of custody documents should be completed by the consultant who obtained the sample and the laboratory receiving the sample.

For waterborne exposure, even though the sampling receptacles are different, many of the above testing procedures and protocols should be followed. You should be aware of the fact that for certain petroleum and/or organic solvent-based materials, they are extremely volatile and can evaporate from the water into the air during testing. The result is that the water that is analyzed may yield much lower chemical readings than what actually exists in the water.

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Also, if there are unspecified hydrocarbons in your water sample test results (i.e. TPH (Total Petroleum Hydrocarbons) as Gasoline and Light HC (C4-C12), TPH as Diesel (C13-C22), and/or TPH as Diesel and HC (C23-C40)), you should conduct follow up testing to differentiate which specific chemicals exist within the TPH readings. For certain reasons, unspecified petroleum hydrocarbons do not contain Maximum Contaminant Level (MCL) exposure limits. The absence of information concerning the exact chemicals can later be used to undermine your causation testimony.

### Causation considerations

Can you get there from here? You will hear defense experts parrot that “the dose makes the poison.” Although this may be true in part, there are many more factors involved. A good starting point for establishing causation for the chemicals at issue is to determine whether they are known to cause the harm suffered. If so, at what levels do people develop a dose-response to the chemicals at issue? And were sufficient levels present for a sufficient amount of time to cause your client harm? If the chemicals are not generally known to cause the harm at issue, you have a greater, but not insurmountable, challenge.

In either event, the defense will insist that a plaintiff must first prove two levels of causation. First, is the chemical generally known to cause the harms suffered (referred to as general causation)? Second, was the dose sufficient to cause the claimed harms (referred to as specific causation)? There is no California case which says medical causation must be proven under the general and specific causation approach. Even so, defense attorneys and experts will try to convince the court that such findings must be made in order to establish causation.

To bolster your case, satisfy your causation burden pre-filing rather than waiting until after the lawsuit is filed. Factors to consider in whether or not you will be able to establish causation, or at least a triable issue of material fact as to the element of causation, revolve around the disease, syndrome or symp-

toms suffered and the chemicals at issue. You must ascertain whether the chemicals you identified in your sampling are known to cause the disease, syndrome or symptoms at issue. There are many sources from which your consulting pathologist, toxicologist, chemical engineer and/or occupational medicine doctor can determine whether the identified chemicals can cause the harms specific to your case. Scientific and medical journals, treatises, epidemiological studies, case studies and case reports are a good starting point. Also, some of the chemicals in your samples may exist on the Proposition 65 master chemical list. *The Safe Drinking Water and Toxic Enforcement Act of 1986*, Health & Safety Code section 25249.5, *et seq.* (*Proposition 65*). If the chemical appears in the Proposition 65 list, this means that the Office of Environmental Health Hazard Assessment (OEHHA) of the California Environmental Protection Agency, has deemed that at certain levels of exposure the chemical is known to cause cancer or reproductive toxicity. In certain instances, there may be a wide array of literature discussing known harms for a chemical. For instance, benzene is a known cause of leukemias such as chronic myelogenous leukemia (CML), and acute myelogenous leukemia (AML). At certain concentrations, benzene as well as other organic solvents are known to cause toxic encephalopathy, peripheral neuropathy and other injuries.

In other instances, applicable information for certain chemicals can be contained in Material Safety Data Sheets. Material Safety Data Sheets are designed to provide workers and emergency response personnel with safety information in the event of an accidental release, spill or discharge of the subject chemical. MSDS data also can include information about chemical properties and consequences of exposure to the particular chemical.

If the chemicals at issue are not known to cause the exact harms at issue, but known to cause similar effects to certain body systems or functions, and there is corroborating data linking exposure to

harms in case studies, reports or animal studies, an expert may still be able to provide a causation opinion so long as it is reasonably supported. This is addressed in more detail in the next section of this article.

### Stay in State court

Generally, when you are in State court, medical causation opinions are not subject to a threshold admissibility test. (*Roberti v. Andy's Termite & Pest Control, Inc.* (2003) 113 Cal.App.4th 893, 903 [6 Cal.Rptr.3d 827].) In federal court, causation opinions can be subject to a *Daubert* challenge. (*Daubert v. Merrell Dow Pharmaceuticals, Inc.* (1993) 509 U.S. 579, 591 [113 S.Ct. 2786].) In essence, *Daubert* applies a threshold admissibility or reliability test to an expert's testimony. However, the California Supreme Court has specifically rejected the *Daubert* test in California. (*People v. Leahy* (1994) 8 Cal.4th 587, 612 [34 Cal.Rptr.2d 663].) In some instances, California courts do act as a gate keeper of evidence when the subject matter of testimony is based on new scientific techniques, commonly referred to as “machine evidence.” In the case of *People v. Kelly* (1976) 17 Cal.3d 24, 30 [130 Cal.Rptr. 144], the court held that evidence obtained through a new scientific technique may be admitted only after its reliability has been established by a showing that: the technique is generally accepted as reliable in the scientific community; the person testifying about the technique in its application is a properly qualified expert on the subject; and the person conducting the test used correct scientific procedures.

It is important to keep in mind that the defense will attempt to convince the Court that a plaintiff must establish general causation, specific causation and that the opinions of your expert must be generally accepted within the scientific community. This is a powerful defense when there is no clearly defined link between the chemicals at issue and the precise diagnosis of your client. One of the theories espoused by some leading toxicologists is that there is a dearth of

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scientific literature on chemicals associated with oil and natural gas production and refining facilities because the petrochemical industry pays leading scientists, researchers and physicians not to publish materials that establish a causal link between petrochemicals, organic solvents and other related chemicals and any identifiable diseases, syndromes or symptoms. Conspiracy theory or truth? How many decades passed before the scientific literature finally acknowledged that cigarette smoking actually caused lung cancer?

*Roberti* and related cases are helpful because they stand for the proposition that toxicological causation opinions are not subject to a *Kelly* or *Daubert* gate keeper test. In fact, medical causation opinions within the toxic exposure context can be based on a review of a patient's medical records, the results of standardized testing, and a review of research papers and studies, including inconclusive studies and studies of animals.

A brief talk about *Roberti* is instructive. The plaintiff sued a pest control company claiming that exposure to the chemical Dursban caused his autism and/or brain damage. The defendant moved in limine to exclude the testimony of plaintiff's causation expert arguing, more or less, that plaintiff's theories of medical causation were novel and not accepted in the medical community and thus did not satisfy a threshold level of reliability. The trial court, conducting what amounted to an impermissible *Daubert* type analysis ruled that reliance

on animal studies to prove causation in the absence of confirmatory epidemiologic studies was insufficient and the expert's opinion speculative. The Court disallowed the testimony and dismissed the case.

The Court of Appeal reversed and held that it is reversible error to apply a threshold admissibility or reliability test to a plaintiff's expert testimony akin to the *Daubert* test. The Court of Appeal also held that it is improper to require a medical expert testifying on the issue of causation to have to satisfy a reliability quotient under the three-prong *Kelly* test. Presuming the expert has the appropriate training, skill or experience, so long as the expert's medical testimony is based upon materials like medical records, results of standardized tests, a review of scientific literature, case studies, etc., the causation testimony is admissible and then it is up to the jury to decide the weight it will give such testimony.

### Causes of action

The causes of action available depend upon the nature of the exposure and the relationship between the harm and exposure source. It is common for employees to be exposed to chemicals at their jobs. Due to workers' compensation laws, an employer is not usually a proper defendant in a civil suit for exposure-related injuries. Even so, the injured employee may still pursue a third-party product liability case against the manufacturers, distributors or other parties in the chain of distribution of the toxic

chemicals. In other contexts, tenants or occupants of residential dwellings adjacent to industrial processes can also be exposed to harmful chemicals. In such an instance, claims against the entity conducting the industrial processes could be made for negligent operations, trespass, nuisance, intentional infliction of emotional distress and unfair business practices. If the industrial operator violates established emissions regulations or protocols, negligence per se claims can also be made.

### Conclusion

This article is to provide guidance on principles of general applicability only. Each case is different and will require the exercise of discretion and judgment for that case. By establishing the major hurdles concerning proof of exposure and medical causation in advance of filing, you will be in a much better position against your adversary. Get ahead and stay ahead.

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