

WHITE PAPER
DEPARTMENT OF VETERANS AFFAIRS
Kidney and Renal Conditions Determined Not to be Related to Contaminated
Drinking Water at Camp Lejeune

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ISSUE: To describe certain kidney and renal conditions determined by the Institute of Medicine (IOM) to not be related to contaminants at Camp Lejeune as it pertains to claims for VA disability benefits related to exposure to contaminated water at Camp Lejeune. Camp Lejeune's water supply has been determined to have been contaminated with chemicals associated with an increased risk of adverse health outcomes between early 1950s to mid-1980s. This determination has resulted in Veterans filing claims for VA disability benefits related to exposure to Camp Lejeune contaminated water (CLCW).

DISCUSSION: Renal toxicity is a non-specific, overarching term for a multitude of kidney conditions stemming from a variety of causes. In non-clinical settings, this has been further generalized as "kidney conditions." As related to CLCW exposure and covered by the Honoring America's Veterans and Caring for Camp Lejeune Families Act, this generalized term has resulted in unnecessary evaluations of conditions that are tangential to those of concern from exposure to CLCW. In the Institute of Medicine's (IOM) report, "The Review of VA Clinical Guidance for the Health Conditions Identified by the Camp Lejeune Legislation," the IOM has undertaken the task to provide a clear definition of any "no-fault" health conditions associated with CLCW, including a more precise explanation of renal toxicity as a result of solvent exposure.

As stated in the IOM report, among the contaminants at Camp Lejeune, trichloroethylene (TCE) and perchloroethylene (PCE or PERC) were the most likely to be responsible for acute kidney injury and potentially subsequent chronic renal disease. In general, human and animal studies demonstrate that high-dose exposures are required for acute renal effects to be observed and that such effects are variable among species. The IOM report noted, "There is no evidence for an increased incidence of chronic kidney disease in those who resided at Camp Lejeune during the time of the contaminated drinking water." This finding was primarily attributed to the fact that the documented levels of PCE and TCE in the drinking water at Camp Lejeune were much lower than those in human and animal studies reviewed, and the duration of exposure would likely have been much shorter for Camp Lejeune residents.

The clinical guidance and algorithm for renal toxicity requires that the clinician assess the likely cause of a claimed chronic kidney disease (CKD). If attributable to a known cause other than solvent toxicity and the evaluation shows that the patient's kidney disease is compatible with another etiology, such as diabetic nephropathy or hypertensive nephrosclerosis, it is unlikely that solvent exposure at Camp Lejeune was the causative

agent. If there is no apparent evidence for alternate causation, CKD due to toxic exposure could be opined.

The IOM found 14 “kidney conditions” or “renal toxicity conditions” that have been clearly and scientifically identified as being NOT related to CLCW exposure. For adult exposure consistent with that of a service member age 18 or older, excluded conditions are:

- Diabetic nephropathy
- Hypertensive nephrosclerosis
- Acute tubular necrosis resulting from hypotension, rhabdomyolysis, or nephrotoxic agents (e.g.,chemotherapeutics, IV radiocontrast media, immunosuppresses)
- Atheroembolic renal disease
- Glomerulonephritis associated with IgA nephropathy, post-infection, membranous, membranoproliferative, other systemic diseases
- HIV-associated nephropathy
- Immune-mediated renal disease
- Interstitial renal disease caused by an allergic reaction or analgesic agents
- Light-chain disease
- Polycystic kidney disease
- Prerenal disease, volume depletion, congestive heart failure, liver failure
- Renovascular disease

RECOMMENDATION: Following the IOM report findings, to avoid unnecessary burden on claimants and Agency resources, we recommend VBA consider not referring claims for additional and unnecessary medical evaluation and opinions for the 14 “kidney conditions” or “renal toxicity conditions” that have already been clearly and scientifically identified as being not related to CLCW exposure where there has been no documented clinical nexus stating otherwise. A common understanding that renal toxicity has been defined as the medical diagnosis Chronic Kidney Disease (End-Stage Renal Disease, Chronic Renal Insufficiency, and Chronic Renal Failure) will assist VBA and VHA in evaluating under CLCW only claims where there is a potential finding of in-service environmental solvent exposure.

POINT OF CONTACT:

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