PFOS and PFOA
Williamtown RAAF site contamination

What is the issue?
The issue is that some related chemicals (perfluorinated compounds) have been used and remain in the environment around the Williamtown RAAF site. The Australian Defence Force (ADF) has informed the NSW government that the Williamtown site has been found to contain high concentrations of PFOS and other closely related chemicals. These chemicals are present on the site and over the past decades have slowly worked their way through the soil to the groundwater underneath the site. These substances have not only contaminated the RAAF site itself, but also land close to the site. Surface water samples from Dawsons Drain, Moors Drain, Upper Tilligerry Creek and Fourteen Foot Drain have been found to contain PFOS. Ground water and fish from the local creeks were tested for PFOS and were found to contain high levels. Tomago sands, a drinking water catchment site is close to the Williamtown site.

The NSW Government is investigating this issue. This fact sheet is interim advice by NSW Health and will be updated as further investigations are undertaken.

What areas are potentially affected?
See attached map for the area with potentially affected groundwater and for the location of fishery closures. Further testing will be undertaken to clearly identify areas of potential health risk.

What are PFOS and PFOA?
Perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) are man-made chemicals belonging to the group known as perfluorinated chemicals (PFCs). PFCs have been used by numerous industries and have been contained in products such as in textiles, leather products, metal plating, protective coating, cleaning products, pesticides and fire fighting foams.

PFOS and PFOA are both very stable chemicals that do not break down in the environment and can persist for a long time both in the environment and in humans.

What are the potential health effects of PFOS and PFOA?
Whether PFOS or PFOA causes adverse health effects in humans is currently unknown, but on current evidence, the potential for adverse health outcomes cannot be excluded. Studies of workers exposed to these chemicals have not consistently shown adverse health effects, though impact on blood cholesterol levels, thyroid function and liver size have been reported in some studies. Mothers exposed to high levels of PFOA in the drinking water did not have an increased risk of birth defects in their children. There are approximately 30,000 chemicals in use across Australia. For the vast majority of these, including PFOS and PFOA, very little is known about possible health effects in people.

Where there is not enough scientific evidence to assess health effects in humans, any effects in animals are then assessed. Certain laboratory experiments on rats have indicated some potential to promote cancer, but it is not clear if these results have implications for human health.

How are people exposed to PFOS and PFOA?
Studies in America have shown that almost everyone is exposed to low levels of PFOS and PFOA just by living in the modern world. People may be exposed to PFCs from the air, indoor dust, food, water, and various consumer products. Contaminated foods, particularly fish and eggs, are thought to be the main source of exposure.
What can I do to reduce my exposure?

Don’t eat fish, prawns or oysters from the following areas: Dawsons Drain, Moors Drain, Upper Tilligerry Creek, Fourteen Foot Drain and Fullerton Cove. See map for fishery closures.

If you live in the area with potentially affected groundwater indicated on the accompanying map additional precautions are advised:

• Don’t drink or prepare food with bore water from this area. It is safe to drink water from the reticulated water supply (town water).
• Don’t eat eggs from your own backyard
• Don’t drink milk from cows or goats grazing in this area

Is there a test to determine likely health effects?

While blood tests can provide a measure of PFOS, they are not recommended because they don’t predict level of health risk.

If you have any health concerns, please consult your general practitioner.

Further information
www.health.nsw.gov.au

Updated 11 September 2015