

# The DU Issue

A public lecture given as an adjunct to 'Iraq: a nuclear war'  
to raise awareness of the dangers of Depleted Uranium Weapons  
(12 pp)

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4 February 1942 to 5 December 2008

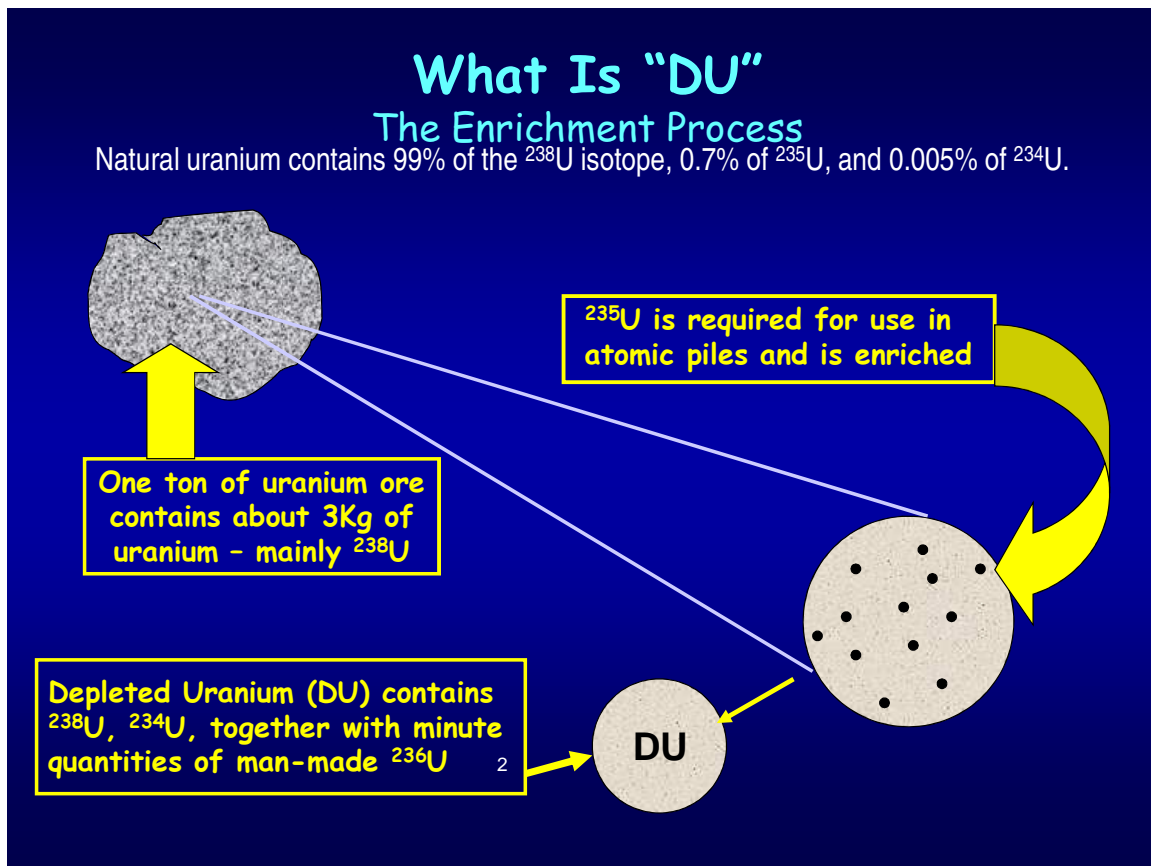
## **WARNING: Contains graphic illustrations**

Robert Anderson was a Quaker, teacher and writer. He was a Trustee of Physicians and Scientists for Global Responsibility ([www.psg.org.nz](http://www.psg.org.nz)), a member of Amnesty International, a Theosophist, and a campaigner for peace and disarmament. He believed everyone has the right to equality and respect, freedom of speech and religion. He lectured on many subjects to meet the public's right to be independently informed on issues of science, the environment and social justice, and was passionate about making this world a better place for the generations to come. He authored eleven books and regularly wrote for periodicals.

Enquiries for books written by Robert Anderson should be addressed to [connectedbooks@clear.net.nz](mailto:connectedbooks@clear.net.nz).



If you have heard my lecture 'Iraq: a nuclear war' (which can be viewed on this website) you will understand what the letters DU stand for: depleted uranium. You will also see that the term "depleted" is a misnomer. Depleted uranium – DU - is very dangerous stuff. What I want to show you here, is just why the world's scientists are so worried. Here is a reminder of just what is DU?



The process of extracting usable uranium for nuclear power plants, leaves a huge volume of waste: depleted uranium.

The vast quantities of depleted uranium waste are ideal for use in weapons production.

### Disposing of the vast quantity of DU left over is a problem.

What better solution than to use it in weapons?

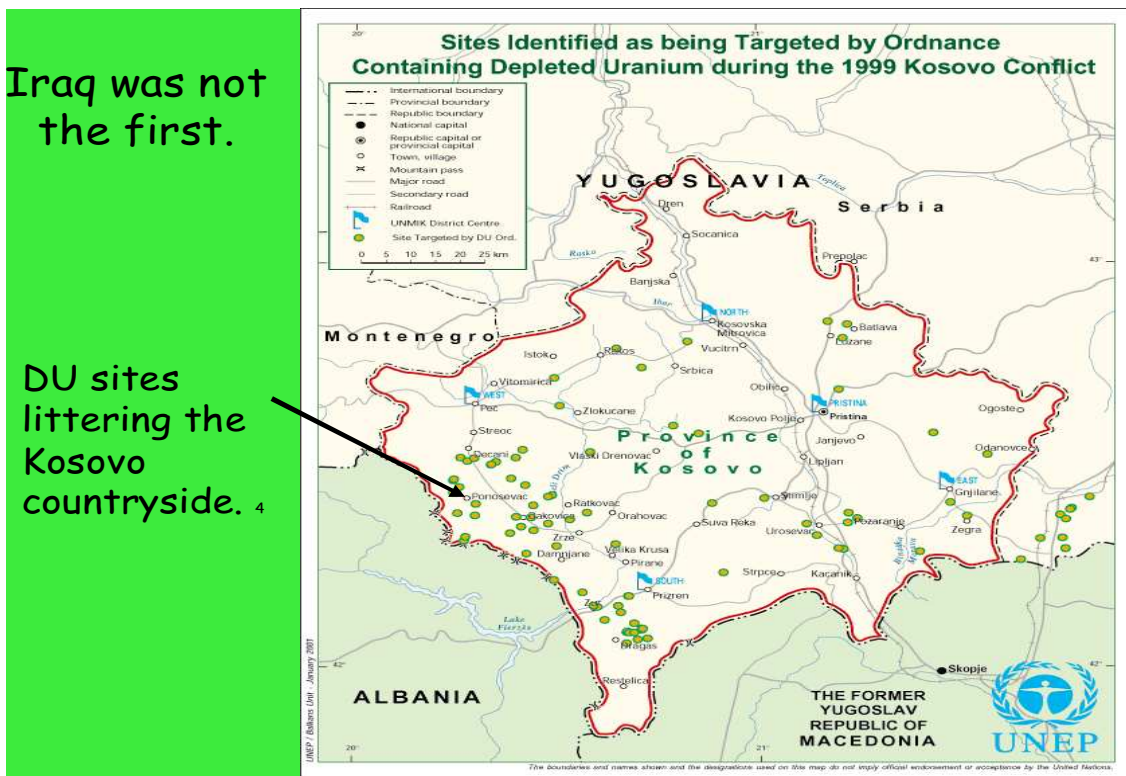
After 50 years of producing enriched uranium for nuclear bombs and reactors, the US has a waste stockpile of thousands of tons of depleted uranium. <sup>1</sup>



Almost three thousand tons of depleted uranium has now being used in Iraq alone.



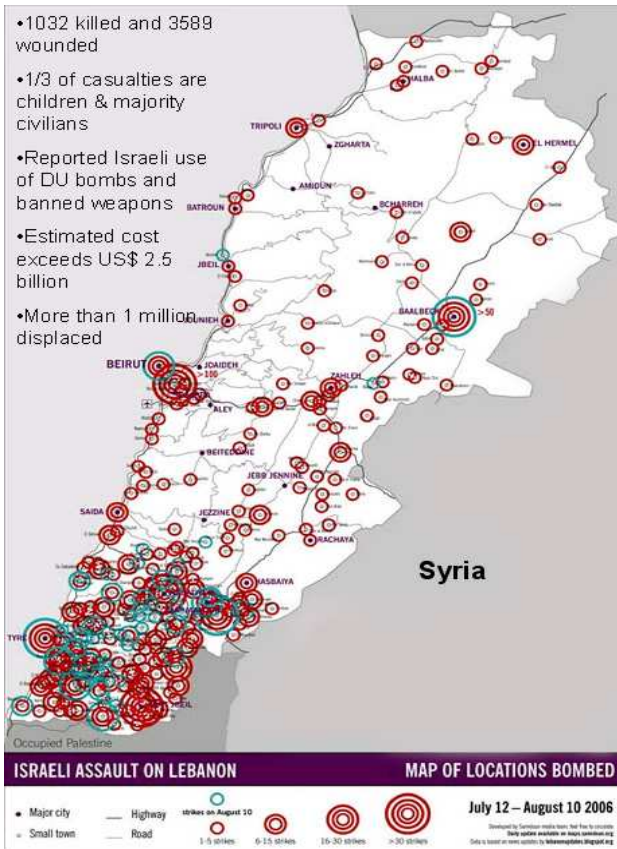
Let us just look in detail how much the military has been using worldwide.



That is right. Iraq is not the only country polluted with DU as you can see from this map of Kosovo and Bosnia. Depleted uranium weapons have been used in wars since and including the 1991 Gulf War. Large areas of countries now or previously in war zones are littered with depleted uranium dust; minute dust particles, nanoparticles of depleted uranium. It is dangerous material. You cannot escape it. It gets into the lungs when you breathe and into the gastic system on food.

As soon as the hostilities began in Lebanon, the US supplied the Israelis with DU bunker buster and other DU ammunnition to their forces. And they used them as you can see from this next slide.





Depleted uranium weapons have now been used in Lebanon <sup>5</sup>



This level of bombardment was not necessary, but gave the Israeli army the excuse to saturate the population with thousands of cluster bombs and depleted uranium.

This scene is tragic. The legacy the war will have left may take lives eventually and most probably with a disease that would take a long time to kill them. This scene illustrates the absolute ruthlessness of those who think themselves “in the right” to make war under their terms, and perhaps helps us to understand the utter barbarity of war.



War is always horrific but some make it even more so going beyond simply “obeying orders”

Although claiming these children were killed by a bomb when doctors examined them at the mortuary they were horrified to find they had been shot through the head or chest.

This was the massacre of Haditha.

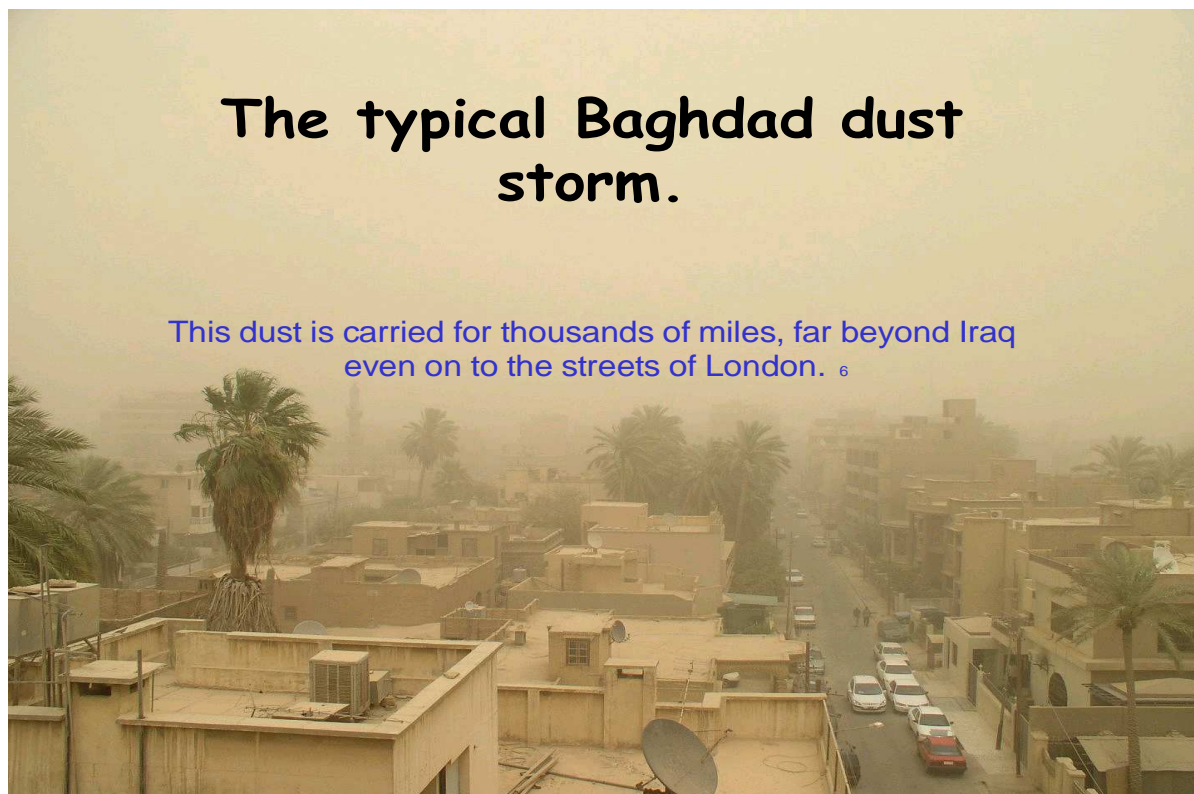
Author Paul Rockwell, wrote that troops are not only “expected to follow unlawful orders, they are also expected to bear life-long burdens of shame, guilt, and legal culpability for the arrogance of their own commanders -- who dispense life and death from an office

Author of *Ten Excellent Reasons Not To Join The Military*

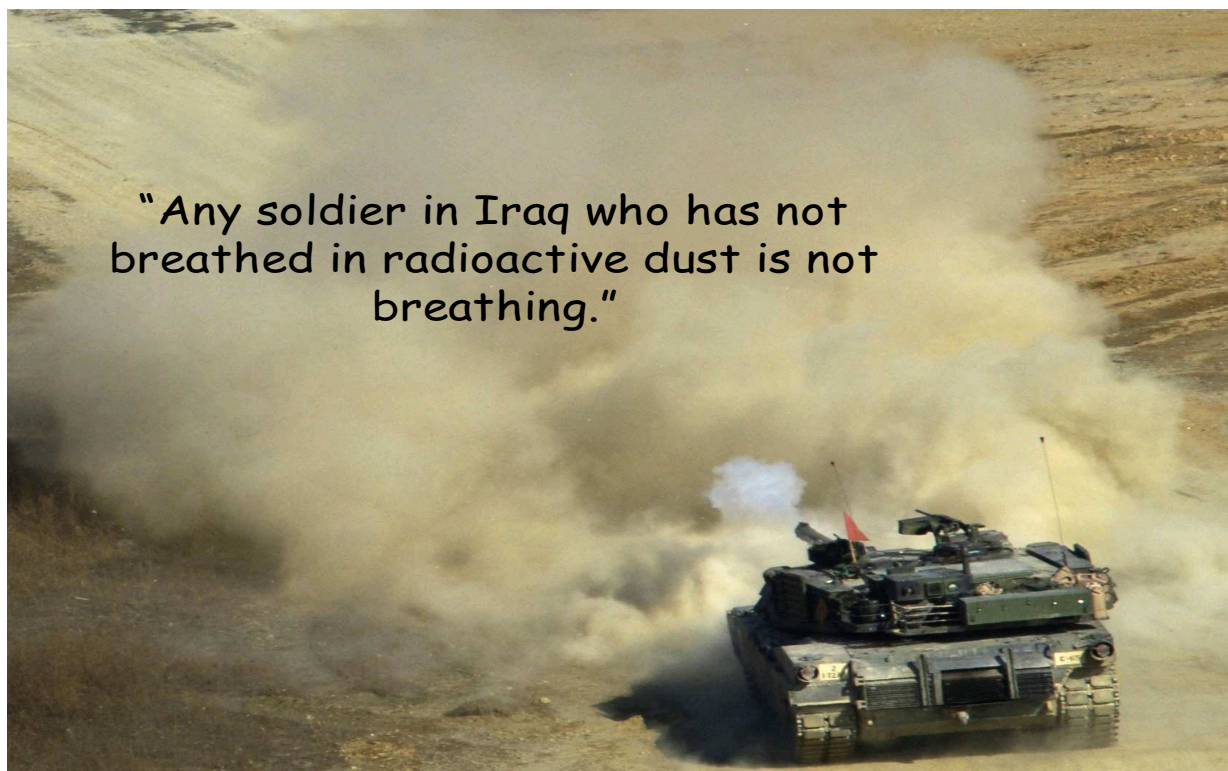
computer.” <sup>21</sup>



The radiation in the world's atmosphere has been increasing ever since we started using and testing nuclear materials. This has led to cancer increases that are far beyond what medicine considers normal, particularly lung cancer. Today, we have to contend with the added burden of the ultra fine dust from DU weapons. We are poisoning planet Earth. Sand storms help carry radioactive particles into the atmosphere and thence around the globe.



Thousands of US soldiers are now dying with lung cancer from breathing this contaminated dust.



Let us just look at what makes this material so utterly dangerous. DU dust can literally travel the globe. Within one week of the first day of hostilities in the Iraq War, radioactive dust was detected in the atmosphere in the UK.

## Threatening our survival

Nobel Prizwinner, Dr Herman Muller has shown how the human race's continuous exposure to so-called "low-level" radiation is causing a gradual reduction in its ability to survive, as successive generations are genetically damaged.



"The spreading and accumulation of even tiny genetic mutations pass through family lines, provoking allergies, asthma, juvenile diabetes, hypertension, arthritis, high blood cholesterol conditions, and muscular and bone defects."

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Here is one example.

## The spreading threat

### Los Angeles Times

front-page report 16 September 2006

There are now more than 41 million Americans with blood glucose abnormalities "that indicate they may soon develop diabetes."

According to radiation scientist Leuren Moret. "The data is coming in country by country confirming my discovery of a global epidemic of diabetes which began with Hiroshima and Nagasaki in 1945 and has continued to increase during atmospheric testing, nuclear power plant operations, and very sharply since depleted uranium was introduced in 1991. Govt. data from Japan, the US, India, and now Europe confirm large increases in diabetes since 1991, in most cases, the highest increases since 1945."



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So what makes DU such a potential danger? Let us have a look.

## What makes DU such a potential hazard?

DU is a heavy metal that is radioactive. It is roughly twice as dense as lead (1.7). It has a chemical toxicity that causes severe adverse health effects.

It is pyrophoric and burns its way through armour at a temperature of 3000-5000°C. At this temperature, it forms ultra-fine nano-sized particles of radioactive dust which rise into the upper atmosphere to be carried round the globe. 9



To summarise:

### SUMMARISING DU WEAPONRY

- \* DU weapons are very effective kinetic energy penetrators but even more effective bioweapons since uranium has a strong chemical affinity for phosphate structures concentrated in human DNA.
- \* DU is the Trojan Horse of nuclear war - it keeps giving and keeps killing. There is no way to clean it up, and no way to turn it off because it continues to decay into other radioactive isotopes in over 20 steps.
- \* The US has illegally conducted four nuclear wars since 1991 - in Yugoslavia, Afghanistan and twice in Iraq - calling DU "conventional" weapons when in fact they are nuclear weapons. 9

Is this type of warfare legal?

N.B. Since this lecture was given, DU weapons are reported to have been used elsewhere, notably in Lebanon and Libya.

Obviously this type of ware is not legal.

## THE LEGALITY ISSUE

- \* DU weaponry violates all international treaties and agreements, Hague and Geneva war conventions, the 1925 Geneva gas protocol, US laws and US military law.
- \* Since 1991, the US has released the radioactive equivalent of at least 400,000 Nagasaki bombs into the global atmosphere. That is 10 times the amount released during atmospheric testing or the equivalent of 40,000 Hiroshima bombs.
- \* The US has permanently contaminated our global atmosphere with radioactive pollution having a half-life of 4.5 billion years. <sup>10</sup>

Official statements issued to mislead the public made by the likes of the Pentagon and Ministry of Defence are exposed by such photographs as these.

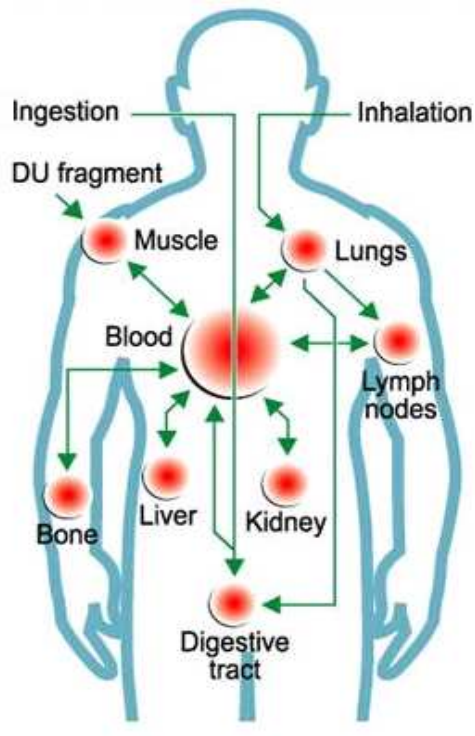
**This picture clearly refutes the Pentagon lies**



Label warning of radiation risk! <sup>11</sup>

So how does this uranium damage our bodies? There are three ways in which this material can enter the human system





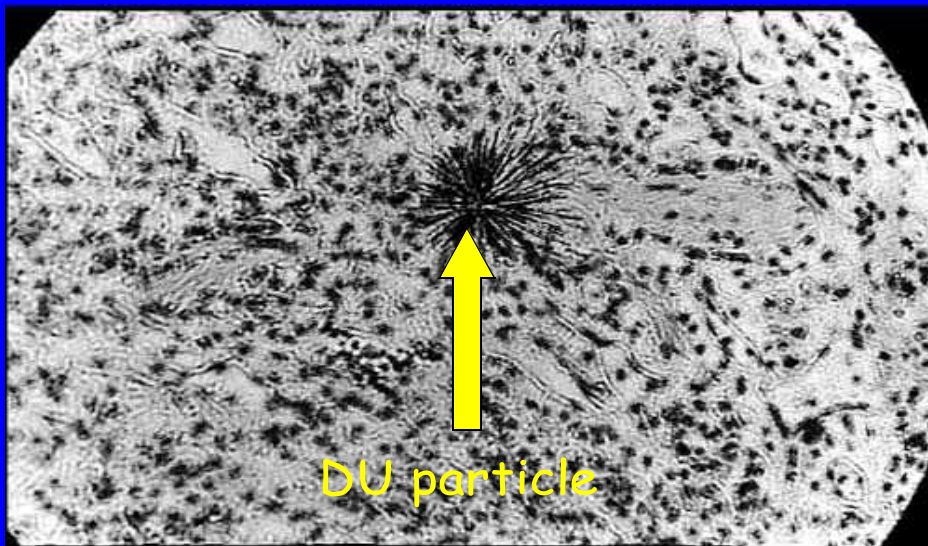
## Where Does DU Go?

When it burns, DU forms ceramic uranium-oxide nanoparticles that are easily inhaled and rise in the heat to contaminate our world's atmosphere.

Once inhaled, depleted-uranium particles irradiate the internal organs and do irreparable damage. <sup>12</sup>

Look at a particle lodged in the deep recesses of the human lung.

## A microscopic particle of DU irradiating surrounding tissues.



The radioactivity persists for over 45 billion years, killing millions of every age for millennia to come. This is a crime against humanity which ranks with the worst atrocities of all time. <sup>13</sup>

For Iraqi children the inevitable results of this contamination are grim indeed.

## Frequently occurring cancers require surgery for limb removals <sup>14</sup>



Let us also look at the nuclear situation in the Northern hemisphere. Firstly the USA.

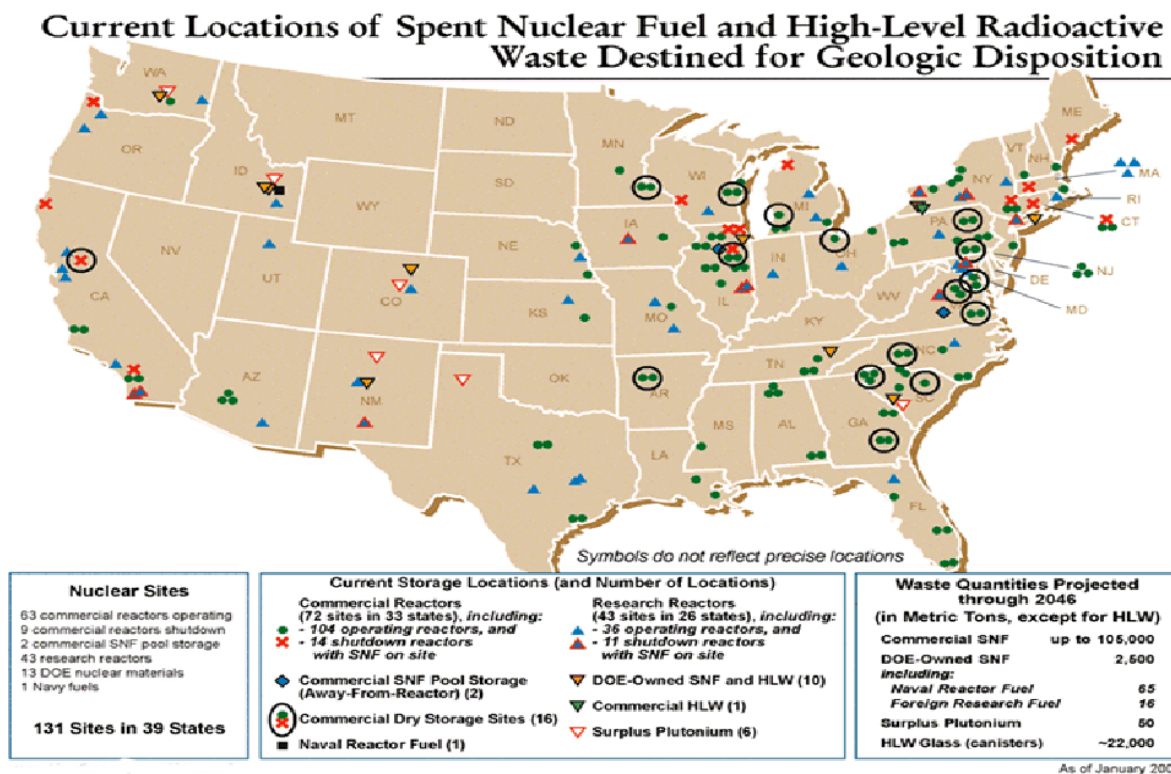
## And Iraqi mothers are not alone



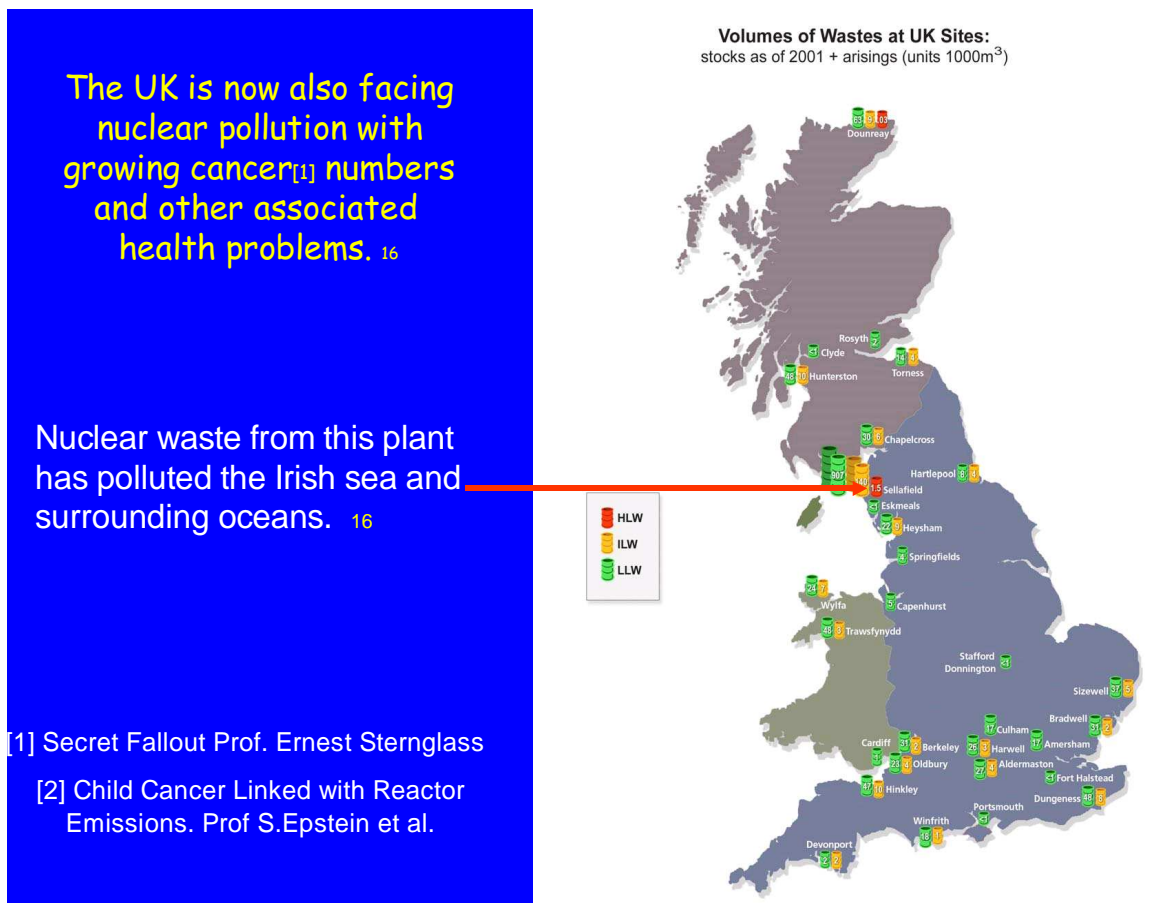
Darrell Clark served as a paratrooper. Following Operation Desert Storm along with an estimated 45,000 of his comrades, Darrell has developed symptoms - in his case, asthma and recurring pneumonia - linked to 'Gulf War Syndrome.' And, like a growing number of Gulf War veterans, he has fathered a child with devastating birth defects.<sup>19</sup>

Soldiers from the UK have reported the same sicknesses and the same malformations in their children born since their return from war zones.

On this next slide, you can clearly see the vast areas of the US that are subject to nuclear contamination. These are storage sites, power stations, and so on. The military firing ranges testing DU weapons are not shown but the deserts and Fort Bragg are used for testing. The small red triangles denote plutonium; thousands of times more poisonous than DU.



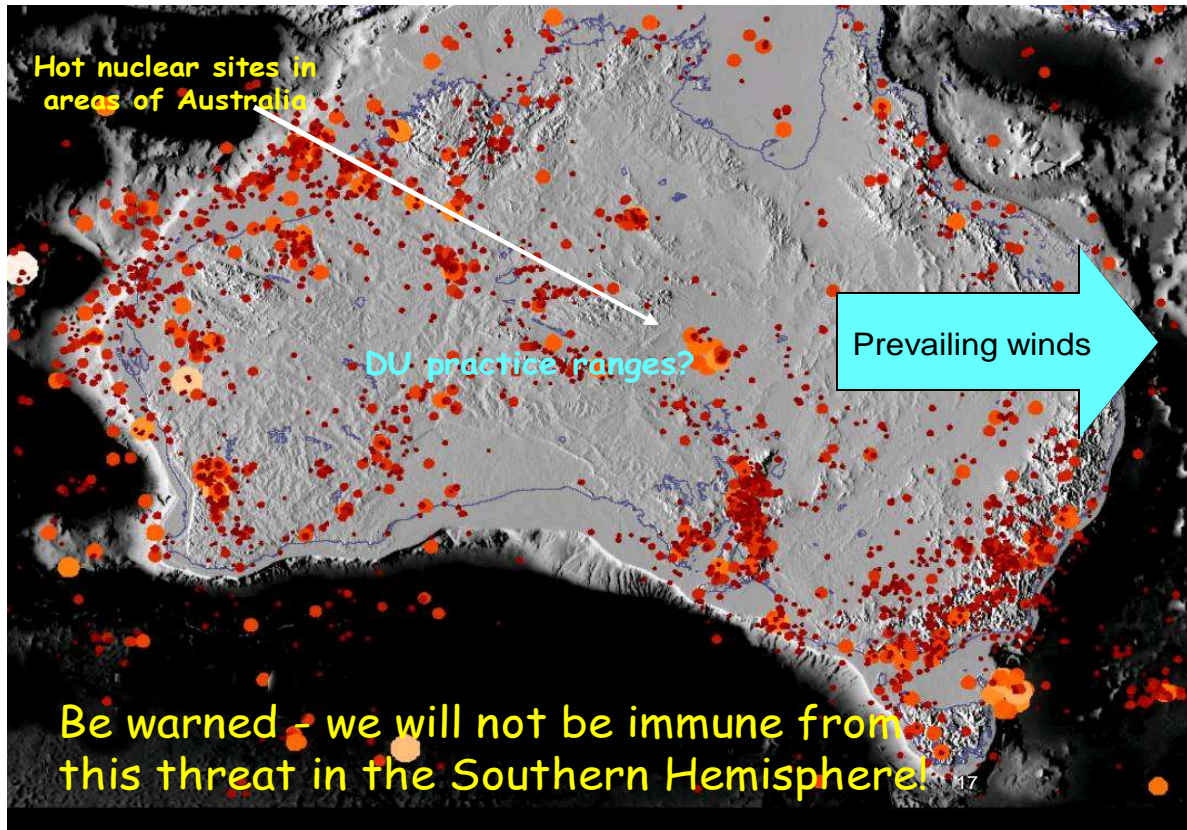
The UK is in a somewhat similar position.





Let me tell you a story illustrating the dangers coming to light. Fishermen in the Irish Sea have been hauling in lobsters contaminated with nuclear radiation. The reason? DU weapons have been tested in Scotland on the Solway Firth.

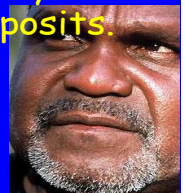
What of the Southern hemisphere? Are we safe from this scourge tucked away down here? Let me dispel any feelings you may have of complacency regarding our safety. We have a neighbour with a lot of natural uranium to sell. John Howard is keen to sell this to China. [Friends of the Earth have warned that the International Atomic Energy Agency (IAEA) will never be given access to China's nuclear programme so there would be no monitoring.] Howard is unperturbed over the testing of DU ammunition in Australia. If we look at a satellite image of Australia we see just how radioactively hot she is.



We could all learn from Australia's aborigine people. They have the right idea.

## The land of the yellow Emu vomit

Europeans first identified uranium in Australia around 1890. But the ancient people of the northern Flinders Ranges of South Australia, whose land had sustained them for millennia, were well aware of "yellow cake." In many of their ancestral dreaming stories, they would talk of "sickness country" - areas that have large uranium deposits.



The aboriginal people tell a story of "rancid yellow Emu vomit" - in particular pockets across the eastern side of their land. Elders advised their people to avoid these areas at all costs, and to "lay low" when the east wind was blowing.