A Medical Problem of Vast Dimensions

March 26, 2011 by Helen Caldicott

As I write this on 25 March from Ottawa, two weeks since the earthquake and tsunami and the calamity that has befallen the Fukushima Nuclear Plant No 1, the situation has grown increasingly grave.

Despite the heroic efforts of the “Nuclear Samurai” – the TEPCO employees who have selflessly and heroically fought to stabilize the reactors and restore power – there are worrying signs that signal dangerous instability continues to reign.

Among them, the announcement today that one of the reactor cores may have suffered a break that could have released large amounts of radiation at the plant; the widening of the exclusion zone to 30 kilometers; and the US government ban on certain milk and vegetables from that area from importation.

In truth, as I say in this just-published CNN Opinion piece, nuclear power and its deleterious effects are a medical problem of vast dimensions — the greatest public health hazard the world will ever see. Tragically, the “Nuclear Samurai” work for a company — TEPCO — that has been exposed as having ignored mandatory safety checks at Fukushima; as allowing spent fuel rods far in excess of the number that was deemed prudent to be stored on site; and as being evasive and unforthcoming about the real facts of the unfolding emergency.

What we have also seen is a second tsunami of a different kind — a tidal wave of blow-back from the nuclear industry around the world, which has been rocked back on its heels by Fukushima but is now regrouping. There are claims that radiation is good for you; that nuclear power is still the only answer to global warming; and that fears about the safety of nuclear power are unwarranted and panic-stricken.

Let us be clear: there are billions and billions of dollars at stake for the nuclear industry, which has, as I’ve written earlier, managed to bamboozle governments around the world, much of the press, and many ordinary citizens into believing that nuclear power is green and clean. Nothing could be further from the truth. The industry will not walk away from that money without a fight.

Nuclear radiation ‘the greatest public health hazard’

Posted on March 25, 2011 by admin

CNN: What is the health risk for people living near the Fukushima Daiiichi plant? (Interview)

Helen Caldicott: The risk cannot be determined with any accuracy yet, because it is not clear how much radiation has or is escaping. NPR reported last week that 17 workers have suffered what the Japanese government called “deposition of radioactive material” to their faces. And some plant workers have already been hospitalized for exposure to radiation, which means they received a huge dose of radiation.

Containment vessel may be leaking radioactive material

High levels of exposure can cause acute radiation sickness, a syndrome first recognized by the medical profession after Hiroshima and Nagasaki. It can have terrible effects. In two weeks, victims’ hair begins to drop out. They develop hemorrhaging under the skin, severe nausea and diarrhea and may eventually die from bleeding or infection.

If a meltdown occurred at the plant, a large number of people could be exposed to high doses of radiation in this region, one of the most heavily populated in Japan. (After the March 11 earthquake, the Japanese government evacuated people living within a 20-kilometer radius to mitigate the possibility.)
Men exposed to such a dose would be rendered sterile, women would stop menstruating, and spontaneous abortions would likely occur. Babies could be born with microcephaly, with tiny heads and mental disabilities. Many people would develop acute shortness of breath from lung damage. In five years, there would be an epidemic of leukemia, and in 15 years, solid cancers would start appearing in many organs: lung, breast, thyroid, brain and bone.

Read the rest: Nuclear radiation ‘the greatest public health hazard’


Nuclear radiation 'the greatest public health hazard' March 25, 2011 -- Updated 1943 GMT (0343 HKT)
Helen Caldicott says it is impossible to have a safe nuclear power plant. STORY HIGHLIGHTS

Helen Caldicott is a longtime activist against nuclear weapons, nuclear power
She says Japan accident could pose grave health dangers for workers, those living nearby
She says even with small radiation release, cancer will increase; children more at risk
Caldicott: Media interview physicists, but event has vast medical dimensions

RELATED TOPICS
Fukushima Daiichi
Industrial Accidents and Disasters
Nuclear Energy
Radiation Exposure

(CNN) -- When she was an adolescent, Helen Caldicott says, she read the nuclear apocalypse novel "On the Beach." The story was set in the aftermath of an atomic war; the protagonists must await the arrival of a deadly fallout cloud.

It was a formative event, she says, and later, in medical school, the connection between health and nuclear energy would galvanize her. "I learned about genetics and radiation in first-year medicine and became acutely aware of nuclear weapons, nuclear war and the damage radiation does to genes and all life forms."

Caldicott went on to become one of the most vocal, ubiquitous and controversial opponents of nuclear power during the anti-nuclear movement of the 1970s and 1980s.

The crisis at the Fukushima Daiichi Nuclear Power Station, severely damaged after the earthquake and tsunami in Japan, has given a fresh urgency, she says, to a "medical problem of vast dimensions," highlighted by reports that emerge daily on the spread of radiation.

A pediatrician, Caldicott came from her native Australia to become an instructor on the faculty of Harvard Medical School, where she specialized in the treatment of cystic fibrosis at the Children's Hospital Medical Center. She soon helped revive the moribund Physicians for Social Responsibility, a health organization dedicated to halting the proliferation and use of nuclear weapons and nuclear power.

While she was president, from 1978 through 1984, the group grew to 23,000 physician members and in 1985 shared in a Nobel Peace Prize with International Physicians for the Prevention of Nuclear War. "We led the nuclear weapons freeze movement with many other professional groups," she said. "I think we helped to end the Cold War."

Caldicott, who lives in Australia and the U.S., remains engrossed in the anti-nuclear issue, heads the Helen Caldicott Foundation for a Nuclear-Free Planet and regularly lectures around the world on its dangers. She's written seven books, including "If You Love This Planet: A Plan to Heal the Earth" and "Nuclear Power Is Not the Answer."
CNN spoke with Caldicott ahead of a talk she was giving in Camden, New Jersey.

CNN: What is the health risk for people living near the Fukushima Daiichi plant?

Helen Caldicott: The risk cannot be determined with any accuracy yet, because it is not clear how much radiation has or is escaping. NPR reported last week that 17 workers have suffered what the Japanese government called "deposition of radioactive material" to their faces. And some plant workers have already been hospitalized for exposure to radiation, which means they received a huge dose of radiation.

Containment vessel may be leaking radioactive material

High levels of exposure can cause acute radiation sickness, a syndrome first recognized by the medical profession after Hiroshima and Nagasaki. It can have terrible effects. In two weeks, victims' hair begins to drop out. They develop hemorrhaging under the skin, severe nausea and diarrhea and may eventually die from bleeding or infection.

If a meltdown occurred at the plant, a large number of people could be exposed to high doses of radiation in this region, one of the most heavily populated in Japan. (After the March 11 earthquake, the Japanese government evacuated people living within a 20-kilometer radius to mitigate the possibility.)

Men exposed to such a dose would be rendered sterile, women would stop menstruating, and spontaneous abortions would likely occur. Babies could be born with microcephaly, with tiny heads and mental disabilities. Many people would develop acute shortness of breath from lung damage. In five years, there would be an epidemic of leukemia, and in 15 years, solid cancers would start appearing in many organs: lung, breast, thyroid, brain and bone.

Opinion: U.S. nuclear plants are safe

Even if the release is not huge, the incidence of cancer and leukemia will increase in the population. Children are 10 to 20 times more sensitive to the carcinogenic effects of radiation than adults, and fetuses thousands of times moreso because their cells are rapidly dividing and are thus vulnerable to genetic mutations. Genetic diseases, like cystic fibrosis, diabetes, dwarfism and metabolic disorders, will be passed on to future generations.

There is no way to decontaminate exposed people once they inhale or ingest radioactive elements, which are dispersed throughout the body to many different organs.

CNN: How is this disaster comparable to the accidents at Chernobyl and Three Mile Island?

Caldicott: The radiation monitors at Three Mile Island went off the scale within minutes of the accident, so releases were only guesstimates by physicists. But almost certainly, radioactive elements like strontium 90, cesium 137 and tritium escaped. Chernobyl had a full meltdown and rupture of the containment vessel, and fallout contaminated 40% of Europe and England.

There are six reactors at the Fukushima Daiichi Plant No. 1 in Japan, and their spent fuel pools, which contain highly radioactive fuel rods, are also at risk of melting down. These pools contain two to 10 times more radiation than in the reactor core, which itself contains as much long-lived radiation as 1,000 Hiroshima bombs.

CNN: Is it possible to have a safe nuclear power plant?

Caldicott: No. They are very complicated machines containing the energy released when an atom is split: Einstein's formula $E=mc^2$, the mass of the atom times the speed of light squared. Anything can go wrong: natural disasters, failure of cooling systems, human and computer error, terrorism, sabotage. Radioactive
waste must be isolated from the ecosphere for half a million years or longer, a physical and scientific impossibility, and as it leaks it will concentrate in food chains, inducing epidemics of genetic diseases, leukemia and cancer in all future generations, the greatest public health hazard the world will ever see.

Einstein said, "The splitting of the atom changed everything save man's mode of thinking; thus we drift towards unparalleled catastrophe." He also said, "Nuclear power is a hell of a way to boil water."

CNN: Doesn't every form of energy production involve some risk, as we saw with the oil spill in the Gulf?

Caldicott: Well, that was dreadful. But to leave a legacy of huge vats of leaking radioactive waste around the world, inducing epidemics of malignancy and random compulsory genetic engineering, is a legacy for which future generations will be distinctly ungrateful.

CNN: Is there any other aspect of this event that we should be paying attention to and are not?

Caldicott: No, except that the media keep interviewing nuclear engineers and physicists, but in truth this is a medical problem of vast dimensions.


Japan reactor core may be leaking radioactive material, official says
By the CNN Wire Staff
March 25, 2011 -- Updated 1735 GMT (0135 HKT)

Japan nuclear core may be leaking STORY HIGHLIGHTS

NEW: Japan nuclear agency: Screeners have examined 87,813 people for exposure
NEW: Work stops at two other reactors with high radiation levels in water, utility says
Discovery of contaminated water suggests nuclear core leak, Japan officials say
Three workers who stepped in the water were exposed to radiation

Tokyo (CNN) -- Authorities in Japan raised the prospect Friday of a likely breach in the all-important containment vessel of the No. 3 reactor at the stricken Fukushima Daiichi nuclear power plant, a potentially ominous development in the race to prevent a large-scale release of radiation.

Contaminated water likely seeped through the containment vessel protecting the reactor's core, said Hidehiko Nishiyama of the Japan Nuclear and Industrial Safety Agency.

Three employees working near the No. 3 reactor Thursday stepped into water that had 10,000 times the amount of radiation typical for a nuclear plant, Nishiyama said. An analysis of the contamination suggests "some sort of leakage" from the reactor core, signaling a possible break of the containment vessel that houses the core, he said.

The workers have been hospitalized and work inside the reactor building has been halted, according to the agency.

Work inside two other reactor buildings also had to stop and workers had to be pulled back Friday after the discovery of high levels of radiation in water at those locations, a Tokyo Electric Power Company official said Saturday. Water is still being pumped into the containment vessels, the utility official said.

Nuclear power experts cautioned against reading too much into the newest development, saying the workers exposed to radioactive water might not suffer injuries any more serious than a sunburn.
Moreover, evidence of radioactivity in the water around the plant is not necessarily surprising given the amount
of water sprayed onto and pumped into the reactors, said Ian Hutchinson, professor of nuclear science and
engineering at the Massachusetts institute of Technology.

Japan's nuclear emergency

Children swept away from school

How long will radiation remain in Japan?

Anderson family aims to help Japan

RELATED TOPICS

Japan
Nuclear Energy
Earthquakes
Tsunamis

"I am not particularly alarmed," he said.

The reactor thought to be leaking contaminated water is the same one cited in the dramatic evacuation last
week of a small crew of workers who had stayed behind after the plant's owner pulled most employees from
the area. The workers were pulled back March 16 after white smoke began billowing from the reactor and
radiation levels spiked.

At the time, the Japanese nuclear safety agency said it suspected damage to No. 3's containment vessel, but a
government spokesman the next day said there had been no indication of a "major breach of containment."

That reactor is of particular concern, experts have said, because it is the only one at the plant to use a
combination of uranium and plutonium fuel, called MOX, that is considered to be more dangerous than the
pure uranium fuel used in other reactors.

Plant workers were also carefully watching the plant's No. 1 reactor, concerned that an increase in pressure
noted inside that reactor could be a troublesome sign. Earlier, buildups of hydrogen gas had driven up
pressure that led to explosions at three of the nuclear plant's reactors, including the No. 1 unit.

Nishiyama conceded that "controlling the temperature and pressure has been difficult" for that reactor, which
on Friday had been declared stable.

The hospitalized employees were working to reconnect power to the No. 3 reactor building when they
encountered water that was about 5 inches (15 centimeters) deep. Water rushed over the boots of two
workers, who may have received what is called a "beta burn." The third worker had taller boots but was
hospitalized as a precaution, according to Nishiyama.

The two workers whose skin was exposed to the contaminated water had the highest levels of radiation
recorded so far, the power company said.

One, in his 30s, was exposed to 180.7 millisieverts and the other, in his 20s, tested at 179.37 millisieverts.

Nishiyama said the third man -- who was exposed to 173 millisieverts but at first did not go to the hospital
because his boots were high enough to prevent water from touching his skin -- has also gone to the same
research hospital out of "an abundance of caution."
Beta rays given off by radioactive substances don’t penetrate deeply into materials, including flesh, said Nolan Hertel, a professor nuclear engineering at Georgia Tech. Consequently, the danger is relatively limited, he said.

"Basically, a beta burn would be akin to a bad sunburn," he said.

Some 17 people have been exposed to 100 or more millisieverts of radiation since the plant’s crisis began two weeks ago following a 9.0-magnitude earthquake and subsequent tsunami struck.

A person in an industrialized country is naturally exposed to 3 millisieverts of radiation a year.

But Japan’s Health Ministry recently raised the maximum level of exposure for a person working to address the crisis at the nuclear plant to a rate of 250 millisieverts per year from the previous 100-millisievert standard.

In the Fukushima Prefecture where the plant is located, officials had screened 87,813 people for radiation exposure as of Thursday, NISA said in a news release. Of those 98 people had tested above limits for exposure, but once their clothes were removed and other measures taken, the exposure levels dropped and there was no effect on health.

The agency also said screeners have examined thyroid glands of 66 children ranging in age from 1 to 15 and found that the "level of exposure of no problem."

The thyroid gland, particularly in children, can readily absorb radiation, health experts say.

It’s not entirely clear where the contaminants in the water came from, according to Nishiyama. But he said that based on the composition of the radioactive material in the water, the likely source appears to be the reactor core and not the open-air spent fuel pool onto which workers have sprayed tons of water in recent days in an effort to keep it cool.

He said it if the water is from the reactor core, the problem may not be a crack in containment vessel, but rather seepage from vents or valves. The containment vessel is still holding pressure, he said, a sign that it may not be cracked.

The incident raised questions about radiation control measures at the plant as 536 people -- including government authorities and firefighters -- continued working there Friday, according to an official with Tokyo Electric.

The high measure prompted a top official with Nishiyama’s agency to urge Tokyo Electric to "improve its radiation management measures."

Workers are undertaking various measures to prevent the further release of radioactive substances into the air and beyond.

Nishiyama said officials hope to start pumping in fresh water -- rather than the corrosive seawater they have been using -- to cool the spent-fuel pool at the No. 1 reactor and other locations.

Such pools have nuclear fuel rods that can emit radiation if the water that normally surrounds them leaks out or boils off, which is more likely to happen without any functional cooling system in place.

Switching to fresh water, instead of seawater, is also a priority for the No. 2 reactor’s core (as well as for its spent fuel pool), Nishiyama said. The aim is to prevent further corrosion and damage inside, which may be worsened by the buildup of salt.
A U.S. military barge loaded with fresh water to help cool the reactors left Yokosuka Navy Base at 11 a.m., said Jose Schmitt, commander of Fleet Activities at Yokosuka. A Japanese ship will escort the barge to the Fukushima plant; U.S. personnel are not involved in the escort or distribution of the water, according to Maj. Joseph Macri, a spokesman for U.S. Forces Japan.

The U.S. military assistance follows a request by Japanese government and utility authorities for large amounts of fresh water.

Beyond the seawater/saltwater issue, water in and around the Nos. 1 and 2 reactors had "high radiation levels," Nishiyama said Friday -- though not as high as that of the No. 3 unit.

Thursday's incident has further made the latter reactor a prime focus, and Nishiyama said Friday that "radiation levels are high" in some locales near that unit.

He said that authorities were considering "other routes" to accomplish their goals of restarting the cooling systems around No. 3, keeping its spent nuclear fuel pool in check and other aims. Later in the day, Nishiyama said authorities hadn't yet determined how to get around the obstacle.

Firefighters from Tokyo and Kawasaki were expected to resume spraying toward the No. 3 reactor and its fuel pool on Friday afternoon, according to Nishiyama.

Efforts also continue at the Nos. 4, 5 and 6 reactors -- each of which have their own concerns, though less pronounced because the units were on scheduled outages when the quake struck. None of these three units had nuclear fuel inside their reactors, though efforts are ongoing to control temperatures inside the spent fuel pools.

On Friday morning, a concrete pump truck was used once again to inject seawater into the No. 4 unit's fuel pool.

CNN's Jennifer Rizzo contributed to this report.
Nuclear radiation 'the greatest public health hazard'

March 25, 2011 -- Updated 1943 GMT (0343 HKT)

Helen Caldicott says it is impossible to have a safe nuclear power plant.

STORY HIGHLIGHTS

- Helen Caldicott is a longtime activist against nuclear weapons, nuclear power
- She says Japan accident could pose grave health dangers for workers, those living nearby
- She says even with small radiation release, cancer will increase; children more at risk
- Caldicott: Media interview physicists, but event has vast medical dimensions

RELATED TOPICS

- Fukushima Daiichi
- Industrial Accidents and Disasters
- Nuclear Energy
- Radiation Exposure

(CNN) -- When she was an adolescent, Helen Caldicott says, she read the nuclear apocalypse novel "On the Beach." The story was set in the aftermath of an atomic war; the protagonists must await the arrival of a deadly fallout cloud.

It was a formative event, she says, and later, in medical school, the connection between health and nuclear energy would galvanize her. "I learned about genetics and radiation in first-year medicine and became acutely aware of nuclear weapons, nuclear war and the damage radiation does to genes and all life forms."

Caldicott went on to become one of the most vocal, ubiquitous and controversial opponents of nuclear power during the anti-nuclear movement of the 1970s and 1980s.
The crisis at the Fukushima Daiichi Nuclear Power Station, severely damaged after the earthquake and tsunami in Japan, has given a fresh urgency, she says, to a "medical problem of vast dimensions," highlighted by reports that emerge daily on the spread of radiation.

A pediatrician, Caldicott came from her native Australia to become an instructor on the faculty of Harvard Medical School, where she specialized in the treatment of cystic fibrosis at the Children's Hospital Medical Center. She soon helped revive the Physicians for Social Responsibility, a health organization dedicated to halting the proliferation and use of nuclear weapons and nuclear power.

While she was president, from 1978 through 1984, the group grew to 23,000 physician members and in 1985 shared in a Nobel Peace Prize with International Physicians for the Prevention of Nuclear War. "We led the nuclear weapons freeze movement with many other professional groups," she said. "I think we helped to end the Cold War."

Caldicott, who lives in Australia and the U.S., remains engaged in the anti-nuclear issue, heads the Helen Caldicott Foundation for a Nuclear-Free Planet and regularly lectures around the world on its dangers. She's written seven books, including "If You Love This Planet: A Plan to Heal the Earth" and "Nuclear Power Is Not the Answer."

CNN spoke with Caldicott ahead of a talk she was giving in Camden, New Jersey.

CNN: What is the health risk for people living near the Fukushima Daiichi plant?

Helen Caldicott: The risk cannot be determined with any accuracy yet, because it is not clear how much radiation has or is escaping. NPR reported last week that 17 workers have suffered what the Japanese government called "deposition of radioactive material" to their faces. And some plant workers have already been hospitalized for exposure to radiation, which means they received a huge dose of radiation.

Containment vessel may be leaking radioactive material

High levels of exposure can cause acute radiation sickness, a syndrome first recognized by the medical profession after Hiroshima and Nagasaki. It can have terrible effects. In two weeks, victims' hair begins to drop out. They develop hemorrhaging under the skin, severe nausea and diarrhea and may eventually die from bleeding or infection.

If a meltdown occurred at the plant, a large number of people could be exposed to high doses of radiation in this region, one of the most heavily populated in Japan. (After the March 11 earthquake, the Japanese government evacuated people living within a 20-kilometer radius to mitigate the possibility.)

Men exposed to such a dose would be rendered sterile, women would stop menstruating, and spontaneous abortions would likely occur. Babies could be born with microcephaly, with tiny heads and mental disabilities. Many people would develop acute shortness of breath from lung damage. In five years, there would be an epidemic of leukemia, and in 15 years, solid cancers would start appearing in many organs: lung, breast, thyroid, brain and bone.

Opinion: U.S. nuclear plants are safe

Even if the release is not huge, the incidence of cancer and leukemia will increase in the population. Children are 10 to 20 times more sensitive to the carcinogenic effects of radiation than adults, and fetuses thousands of times more so because their cells are rapidly dividing and are thus vulnerable to genetic mutations. Genetic diseases, like cystic fibrosis, diabetes, dwarfism and metabolic disorders, will be passed on to future generations.

There is no way to decontaminate exposed people once they inhale or ingest radioactive elements, which are dispersed throughout the body to many different organs.
CNN: How is this disaster comparable to the accidents at Chernobyl and Three Mile Island?

Caldicott: The radiation monitors at Three Mile Island went off the scale within minutes of the accident, so releases were only guesstimates by physicists. But almost certainly, radioactive elements like strontium 90, cesium 137 and tritium escaped. Chernobyl had a full meltdown and rupture of the containment vessel, and fallout contaminated 40% of Europe and England.

There are six reactors at the Fukushima Daiichi Plant No. 1 in Japan, and their spent fuel pools, which contain highly radioactive fuel rods, are also at risk of melting down. These pools contain two to 10 times more radiation than in the reactor core, which itself contains as much long-lived radiation as 1,000 Hiroshima bombs.

CNN: Is it possible to have a safe nuclear power plant?

Caldicott: No. They are very complicated machines containing the energy released when an atom is split: Einstein’s formula $e=mc^2$, the mass of the atom times the speed of light squared. Anything can go wrong: natural disasters, failure of cooling systems, human and computer error, terrorism, sabotage. Radioactive waste must be isolated from the ecosphere for half a million years or longer, a physical and scientific impossibility, and as it leaks it will concentrate in food chains, inducing epidemics of genetic diseases, leukemia and cancer in all future generations, the greatest public health hazard the world will ever see.

Einstein said, "The splitting of the atom changed everything save man's mode of thinking; thus we drift towards unparalleled catastrophe." He also said, "Nuclear power is a hell of a way to boil water."

CNN: Doesn't every form of energy production involve some risk, as we saw with the oil spill in the Gulf?

Caldicott: Well, that was dreadful. But to leave a legacy of huge vats of leaking radioactive waste around the world, inducing epidemics of malignancy and random compulsory genetic engineering, is a legacy for which future generations will be distinctly ungrateful.

CNN: Is there any other aspect of this event that we should be paying attention to and are not?

Caldicott: No, except that the media keep interviewing nuclear engineers and physicists, but in truth this is a medical problem of vast dimensions.

A Medical Problem of Vast Dimensions
Posted on March 26, 2011 by admin
As I write this on 25 March from Ottawa, two weeks since the earthquake and tsunami and the calamity that has befallen the Fukushima Nuclear Plant No 1, the situation has grown increasingly grave.

Despite the heroic efforts of the “Nuclear Samurai” – the TEPCO employees who have selflessly and heroically fought to stabilize the reactors and restore power – there are worrying signs that signal dangerous instability continues to reign.

Among them, the announcement today that one of the reactor cores may have suffered a break that could have released large amounts of radiation at the plant; the widening of the exclusion zone to 30 kilometers; and the US government ban on certain milk and vegetables from that area from importation.

In truth, as I say in this just-published CNN Opinion piece, nuclear power and its deleterious effects are a medical problem of vast dimensions — the greatest public health hazard the world will ever see.
Tragically, the “Nuclear Samurai” work for a company — TEPCO – that has been exposed as having ignored mandatory safety checks at Fukushima; as allowing spent fuel rods far in excess of the number that was deemed prudent to be stored on site; and as being evasive and unforthcoming about the real facts of the unfolding emergency.

What we have also seen is a second tsunami of a different kind – a tidal wave of blow-back from the nuclear industry around the world, which has been rocked back on its heels by Fukushima but is now regrouping. There are claims that radiation is good for you; that nuclear power is still the only answer to global warming; and that fears about the safety of nuclear power are unwarranted and panic-stricken.

Let us be clear: there are billions and billions of dollars at stake for the nuclear industry, which has, as I’ve written earlier, managed to bamboozle governments around the world, much of the press, and many ordinary citizens into believing that nuclear power is green and clean. Nothing could be further from the truth. The industry will not walk away from that money without a fight.

This entry was posted in Articles. Bookmark the permalink.
← Nuclear radiation ‘the greatest public health hazard’

**Statement by Dr Caldicott**

**Posted on March 16, 2011 by admin**

“I have become Death, the destroyer of worlds”.

**Robert Oppenheimer, quoting the Bhagavad Gita, on witnessing the first atomic bomb test, 1945**

As I write this – on the afternoon of March 16 in the United States – the situation at the Fukushima Nuclear Plant No. 1 is, tragically, looking increasingly grim. Radiation levels are increasing, mass evacuations in the area surrounding Fukushima are underway; and experts are speculating – with trepidation, but understandable caution – about how far the radiation will spread, both within Japan and to other parts of the planet.

My heart goes out to the people of Japan who are of course suffering under the double blow of the effects of the earthquake and tsunami, as well as the threat from the Fukushima reactors.

They are dealing stoically and with great dignity with conditions that are severely challenging. And I want to pay special tribute to the incredibly brave band of TEPCO workers who are fighting to bring the situation at the plant under control. Their efforts are heroic, their courage beyond measure.

The world is now paying – and will pay however severe Fukushima turns out to be – a grave price for the nuclear industry’s hubris and the arrogance and greed that fueled their drive to build more and more reactors.

What’s more, having bamboozled gullible politicians, the media, and much of the public into believing that it is a “clean and green” solution to the problem of global warming, the nuclear industry has operated facilities improperly, with little or no regard for safety regulations, and they have often done this with the connivance of government authorities.

Nuclear power is not the answer to global warming; it is not clean, it is not green; it is not safe; and it is not renewable. It is instead “a destroyer of worlds.” It is time the global community repudiated it – however economically painful in the short term that taking such a step would be. There is no other choice for the sake of future generations.
Caldicott: Japan may spell end of nuclear industry worldwide