

## Iodine first aid is not enough

A FRENCH plan to distribute iodine tablets to people living near nuclear reactors has been criticised for not going far enough to safeguard the whole population against thyroid cancer in the case of a serious accident. On the eve of the tenth anniversary of the Chernobyl disaster, the French health ministry announced that it planned to distribute iodine to thousands of homes across the country within a 5-kilometre radius of nuclear reactors.

Radioactive iodine-131, which has a half-life of eight days, was one of the principal isotopes released by the Chernobyl explosion. It is blamed for the epidemic of thyroid cancers among children in Belarus, Ukraine and Russia. Swallowing stable iodine a few hours before radiation exposure can prevent this type of cancer by saturating the thyroid gland with iodine, so the radioactive isotope is not absorbed. Although an estimated 5 million people were given stable iodine tablets about four days after the Chernobyl reactor exploded on 26 April 1986, it came far too late.

According to Keith Baverstock, of the WHO European Centre for Environment and Health in Rome, as many as 16 000 children exposed to Chernobyl radiation will contract thyroid cancer in the next four decades. There have been 800 cases confirmed so far.

The Chernobyl thyroid cases "are tragic confirmation that the principal health risk of an accident of this type comes from radioactive iodine", said Hervé Gaymard, the French health secretary. They also showed the importance of "the early distribution of stable iodine", he said. Other countries, including Austria and Switzerland, already have iodine distribution programmes.

Jean-Louis Démarets of the independent radiation monitoring group CRII-Rad, believes the French decision to give out tablets to people living close to reactors is an important first step. "It's the first time France has officially admitted that there is a risk of a nuclear reactor accident and that is a good thing," he says. But he adds that restricting the measure to people living in the immediate vicinity of France's 19 reactor sites "shows the government still hasn't learnt the lessons of Chernobyl—because we were contaminated 2000 kilometres away". He wants everyone in France to have immediate access to iodine.

Claude Birraux, an MP who follows nuclear issues, agrees that iodine should be more widely distributed because the movement of radioactive clouds is unpredictable. "The 5-kilometre limit must not be too rigid," he says. **Tara Patel**

## The rise and rise of Pakistan's people

Fred Pearce, Karachi

PAKISTAN has the fastest rate of population growth of any large Asian nation. Over the next 50 years, its population is likely to jump from the world's seventh largest to third largest, leapfrogging the US, Russia, Indonesia and Brazil, and behind only China and India.

The main cause, says a study from the Washington-based group Population Action International, is an "abysmal social status for women" that leaves them ill-educated and often plain ill by comparison with both their menfolk and other women in neighbouring poor, rural countries such as India and Bangladesh.

Two years ago, prime minister Benazir Bhutto defied her country's Muslim fundamentalists to attend the UN's population conference in Cairo, where she spoke of her dream for Pakistan, "where every pregnancy is planned, and where every child conceived is nurtured, loved, educated and supported". But the reality, says the report, is that the country's women and girls continue to fall behind their sisters elsewhere.

On average, Pakistani women now have 5.9 children, a figure once typical of developing countries but now unusually high. In India and Bangladesh the average is now only 3.4.

Infant and maternal deaths in childbirth are also high. "Some 600 women die for every 100 000 live births," say the report's authors James Rosen and Shanti Conly. A

high death rate among young girls. For every 3 boys who die between the ages of 1 and 5, there are 5 girls who die. The report blames this on neglect of girls, who are more likely to go short of food and receive less healthcare than their brothers.

Only a fifth of Pakistani girls learn to read and write, half the rate for boys, and for girls in India. Only 35 per cent of girls attend primary school, half the rate for



boys, and below rates in India and Bangladesh. Worldwide, education of women is strongly correlated with contraceptive use and lower birth rates.

A generation ago, Pakistan was a pioneer of family planning in the developing world. Now it has fallen far behind. With few clinics in rural areas, only 18 per cent of Pakistani couples use contraceptives, compared to 41 per cent in India and 45 per cent in Bangladesh. The report warns

that recent government promises to set up village-based family planning services to reach rural women will only work if the problem of "conservative forces" in the countryside is addressed. Unless things change, the study predicts that by 2035 Pakistan's population will be growing faster than China's in absolute as well as percentage terms.

Perween Rahman, director of research at the Orangi Pilot Project, a large project in Karachi aimed at helping the poor to help themselves, says that Pakistanis did want family planning ser-

VICES. But, she says, "the conventional approach of setting up a family planning centre does not suit our segregated, illiterate, traditional women". In Orangi, training women at meetings in local homes had persuaded more than 50 per cent of couples to use family planning. □



Falling behind: girls consistently lose out to their brothers

Pakistani woman has a 3.5 per cent chance of dying while giving birth, compared with a 2.2 per cent risk for women in Bangladesh and 1.4 per cent in India.

Pakistan has one of the lowest ratios of women to men in the world, with only 93 females for every 100 males. One reason is