not available. We do, however, know that malnutrition is widespread in the countryside and in refugee camps, so the potential for such abnormalities certainly exists.<sup>12</sup> <sup>14</sup>

## Birth defects

The teratogenic (fetus-deforming) effects of certain chemicals became a matter of public concern when Thalidomide was found to cause birth defects. Until 1965, 2,4,5-T (comprising 50 percent of Agent Orange) had never been tested for teratogenicity. Forty million pounds of this chemical have been sprayed in Vietnam,<sup>5</sup> without knowledge of its possible effects on man or animals. The widespread use of any chemical, without detailed knowledge of possible effects, poses grave dangers. In the case of 2,4,5-T the danger is now coming to light.

In late 1967, after two years of greatly accelerated herbicide application, Saigon newspapers began carrying front-page stories of a novel and increasingly common birth defect described as "egg-bundle-like fetus." Some newspapers reported a rise in the incidence of deformed babies in areas that had been sprayed, and questioned whether the defoliation might be causing this. These papers were closed by the Thieu government. These papers were closed by the Thieu government.

News leaks in October, 1969, forced the National Institutes of Health (NIH) to release reports demonstrating that 2,4,5-T was shown in 1965-1966 to be an exceptionally powerful teratogen. During the time the report was inexplicably suppressed by our government, millions of pounds of 2,4,5-T were used in Vietnam— and, incidentally, in the United States as well.

Producers of 2,4,5-T claimed the teratogenicity shown in these tests was due to a contaminant called "dioxin" (2,3,7,8-tetrachlorodibenzo-p-dioxin), which is found in commercial preparations of 2,4,5-T. Later studies have shown that both extremely pure 2,4,5-T and dioxin cause birth defects in the three species of experimental animals tested. Is, In hamsters, for example, commercial 2,4,5-T at dosages of 100 mg/kg (milligrams per kilogram of body weight) killed 80 percent of the fetuses and deformed many of the survivors. In rats, only 24 mg/kg deformed about 30 percent of the fetuses (seven-fold increase in deformations).

Chemical defoliation and destruction of Vietnamese forest, jungle and agricultural areas are carried out on a vast scale. Twelve percent of the land of South Vietnam has been deluged by many millions of pounds of powerful poisons.

