

years of age, in the United States in 1963 were as follows:

Age (years)	Deaths per million
15-19 -----	1
20-24 -----	2
25-29 -----	2
30-34 -----	4
35-39 -----	9
40-44 -----	15
15-44 -----	5

It should be realized that mortality statistics for this group of conditions are probably unreliable. This is in part because the classification of causes of death is based upon what is considered the underlying cause. The certifying physician's judgment and the care which he takes in recording these underlying causes are variables which cannot at present be assessed. Thus, for example, we do not know how often he fails to record on the death certificate such underlying causes as surgery, the puerperium, trauma, heart disease, and hypertension when these are present.

In spite of the limitations of statistics based on death certification, it is pertinent to compare the reported number of deaths from thromboembolic disease among women taking oral contraceptives with the number that might be expected from the above statistics. If, among women taking steroid compounds, the reported number of deaths is significantly greater, a causal relationship is suggested.

3. The number of deaths attributed to diseases of the veins (ICD 460-468), most of which are deaths from pulmonary embolism, and the corresponding death rates among women of reproductive age in the United States increased substantially from 1950 to 1964. However, parallel increases of equal magnitude have occurred among males, suggesting that the upward trend reflects changes in diagnostic practice, death certification, or causes applicable to both sexes.

Death rates from cerebrovascular accidents (ICD 330-334) have increased among nonwhite women (fewer of whom use oral contraceptives than white women), but have not changed among white women.

4. The pharmaceutical industry has estimated the numbers of women taking oral contraceptives, based on the numbers of tablets distributed in the

United States. The approach is straightforward: Since each user takes 20 tablets per cycle and the average woman has 13 cycles per year, the number of tablets sold, divided by 260, gives the average number of users during the year. The following estimates have been prepared by this method for the period 1961-65:

1961 -----	408,000
1962 -----	1,187,000
1963 -----	2,235,000
1964 -----	3,950,000
1965 -----	5,000,000

5. Another estimate of the number of women taking oral contraceptives is based on the responses of a nationwide sample of about 5,600 married women, interviewed in late 1965 (Westof and Ryder, 1966). According to this survey, about 3,800,000 women were using oral contraceptives at the time of the interview and an additional 2,600,000 had been taking them previously but had stopped medication, with or without the intention to resume use at a later date.

The difference between the industry estimate (5 million in 1965) and the survey estimate (3,800,000) may be explained, at least in part, by the inclusion of several categories of women in the former but not in the latter. These are: (1) Married women over 45; (2) unmarried women; and (3) women for whom steroid compounds have been prescribed for therapeutic reasons but who do not know the nature of the medication. In addition, it is possible that the industry estimate is inflated by the growth of inventories in the hands of distributors and/or retailers. On the other hand, some of the women interviewed in the survey may have withheld the relevant information.

6. Oral contraceptives are much more widely used among younger than among older women. According to the 1965 survey, 26 percent of married women under 30 years of age were current users, compared with 8 percent of those over 30. Among the current users, two out of three were less than 30 years old and two out of five were less than 25 years old.

7. In August 1962, some 275,000 letters were sent by the G. D. Searle Co., makers of Enovid, to physicians, druggists, and other pertinent persons throughout the United States requesting that "any thromboembolic occurrence in women receive-