

A NOTE ON BIRTH AND DEATH REGISTRATION OF MILITARY DEPENDENTS

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RESIDENCE allocation of certificates of birth and death to military dependents are a source of error in resident infant and neonatal death rates and in resident birth rates. This conclusion issues from an inquiry of the reason for substantial differences between the occurrence and the residence infant death rates of Pierce County, Washington State. Pairs of rates for the past five years are as shown in Table 1. All resident rates since 1951 are seen to be larger than corresponding occurrence rates.

Explanation of the difference in rates in terms of a difference in viability between infants born to Pierce County residents, and those born in Pierce County to non-residents, seemed impossible. The explanation therefore was sought in the registration procedure; in particular, in the procedures of the two armed service hospitals of the County. Certificates of birth and infant death issuing from the two hospitals in 1954 were each tabulated by the categories "Pierce-County Resident," "Resident of other County of Washington" and "Resident of other State." The results are shown in Table 2.

The two distributions agree fairly well in their proportions falling in "Other County of Washington," but are markedly different in the "Pierce County" and "Other State" categories. Fifty per cent of the births in the two hospitals are registered as occurring to mothers resident out of state. Only 6 per cent of the infant death certificates show out of state residence.

We have the strong suggestion that deceased infants whose mothers are described as residents of an "other state" on the

Table 1. Infant death rates, Pierce County, Washington.^a

	1951	1952	1953	1954	1955
Occurrence Rate	28.6	27.6	24.0	24.3	25.8
Residence Rate	28.3	28.8	27.5	29.0	33.0

^a Washington Vital Statistics, Summary, years 1951 through 1955.

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PLACE OF RESIDENCE SHOWN ON CERTIFICATE	BIRTHS (JAN.-JUNE)		INFANT DEATHS (JAN.-DEC.)	
	Number	Per Cent	Number	Per Cent
Pierce County	492	39	53	82
Other County of Washington	129	10	8	12
Other State	633	50	4	6
TOTAL	1,254	100	65	100

Table 2. Vital occurrences at two armed service hospitals, Pierce County, Washington, 1954.

birth certificate, generally are themselves described as residents of Pierce County on the death certificate. We take this to be the fact. An error is thereby produced in the resident infant death rate, for it is the assumption of the rate that resident infant deaths occur from among resident births.

The divergence of the mother's and infant's place of residence issues from the residence situation of the mothers. These are wives of armed service personnel stationed at Ft. Lewis and McChord Air Force Base. They generally reside in Pierce County, but only incidentally to the husband's military assignment. The place of "usual residence" named for the birth certificate tends, then, to be the home town or the place to which they expect to return upon the husband's military discharge. The place of "usual residence" named for a deceased infant tends, however, to be the mother's residence at the time of birth, and normally this is Pierce County.

Further, the difference in distribution by place of residence, of births and infant deaths occurring in the two hospitals, does account for the difference between the 1954 occurrence and resident infant death rates of Pierce County. Thirty-nine per cent of births in the Armed Services Hospitals (based on a six-months' sample) were resident of the County (Table 2). In 1954 a total of 65 infant deaths occurred in the two hospitals, 39 per cent of which is 25, the expected number of resident infant deaths should the place of residence shown on the birth and death certificates always agree. Fifty-three of the 65 infant death certificates actually indicated Pierce County residency, an excess of 28 over the expected number. Total resident births

of the County (1954) were 6,129 and total resident infant deaths 178. Reduction of the 178 by 28 gives a resident infant death rate of 24.5, very close to the occurrence rate of 24.3. We assume differences between the remaining pairs of rates to be likewise accountable.

A registration rule sufficient to eliminate the described error in the resident infant (and neonatal) death rate must produce agreement between mother's residence as shown on the birth certificate and infant's residence as shown on the death certificate. Current Federal registration rules (*PHYSICIAN'S HANDBOOK ON DEATH AND BIRTH REGISTRATION*, 10th Edition) make no such requirement. We are informed, however, by George Ormrod, State Registrar of Washington, that it is an accepted principle of registration that the residence of an infant is the residence of the mother. The 9th Edition of the *PHYSICIAN'S HANDBOOK* states: "When the deceased is an infant, give usual residence of the mother." A 1947 memorandum from the office of the Washington Registrar states: "Infants and children have the same residence as their parents. In the case of death of a newborn infant, its usual residence is the residence of its mother and not necessarily the place of birth or death even though as a living being it had never been in its mother's residence."

The principle above is quite clear and if observed in registration practice produces a valid infant death rate. However, it has tended not to be observed among displaced military dependents of Pierce County. The possibility that the consequent registration problem is general to other areas housing concentrations of military dependents is the basis of this article.

A conventional manner of meeting the problem is through matching all certificates of infant death with certificates of birth, correcting such death certificates as show a differing place of residence. An alternate policy is to require that birth certificates of military dependents show mother's current residence as the place of usual residence. Agreement of residence between certificates of birth and death is then a more or less automatic consequence of the habit of naming mother's current residence as the usual residence of the decedent infant. Should births always, or nearly always, occur at a military hospital,

the policy may be implemented simply by a request that the hospital put the policy in effect.

It may be objected that a current place of residence due to the husband's military assignment is not necessarily the place of "usual" residence. Appeal to the Federal registration rules does not decide this question, the term "usual residence" being amplified only by the circular definition: "Where the child's mother usually lives." We are inclined to believe that a current residence which may last or have lasted a good part of a twenty-four month draft period may reasonably be considered the "usual residence." In this usage we are supported by policy of the Federal Census which does count military dependents as residents of the place where they currently reside.

The second described policy is not merely an expedient for avoiding cross matching of birth and death certificates. Its primary advantage over the first is that correction is also made of the resident birth rate. Computation of birth rate requires consistency between policy for determining the residence of births and policy for determining the residence of the population. As Census enumerations count military dependents as resident of the place they currently live, births to military dependents should be enumerated likewise.

It is desirable to maintain consistency between registration policies of the different registration areas. The National Office of Vital Statistics should therefore be encouraged to publish a decision on the above matters.