essarily represent sales for the same time period, although the two are closely related over a longer time span.

Senator Nelson. I would assume that is the case, since in June of 1968, you certified zero, which we assume meant that it was still used

in the United States, but that some had been left on the shelf.

Dr. Ley. That is correct. The California data indicated that on the average in the patients who have received chloramphenical there are a very small amount of the drug was given, approximately four to four and a half grams. However, in treatment of typhoid fever and salmonellosis, a very typical total dosage for an adult would be a total of 50 grams of the drug, approximately 4 grams per day over an extended period of 10 to 12 to 14 days.

Senator Nelson. Was that a small number of people percentage-

Dr. Ley. That is a small number of people. In terms of salmonella infections, amounts in the order of 30 grams over a period of a week would be typical. The estimates of how many people received the drug are based, to my best knowledge—and Mr. Gordon, I think is well aware of this—on dosage levels of the order of 4 grams per patient.

Senator Nelson. Pardon me?

Dr. Ley. The estimate of the number of patients receiving the drug is made on the basis of an average dose of about 4 grams per patient. Senator Nelson. It was my understanding 9.5.

Dr. Ley. 9.5?

Senator Nelson. I may be wrong about that. My memory was 9.5. There is a significant difference.

Mr. Gordon. The California study showed that the average dose was 9.55 grams.

Senator Nelson. I suppose none of these statistics are very firm.

Dr. Ley. They're not.

Senator Nelson. I notice some dosages are as low as 4 grams and you have cited instances of 30 and 50. In any event, a very large num-

ber of people are receiving it?

Dr. Ley. However, I would point out, Senator, that if you take a dosage for the material certified last year, for example, and if you accept for the systemic form of therapy an average dose of 10 grams, the number of patients who would be treated by that amount would be somewhat less than the 4 million figure. I would be between 1 and 2 million on the basis of last year's certification.

Senator Nelson. And the year before that?

Dr. Ley. The year before that would be close to 4 million.

Senator Nelson. Doesn't that dramatic drop indicate that it was being more widely used in 1967 for nonindicated cases than in 1968?

Dr. Ley. I cannot draw any other conclusions, Senator.

We know from discussions between our staffs, Mr. Chairman, that you are interested in a month-by-month listing of the quantities of the drug certified. I submit such a listing for the record.

Senator Nelson. It will be printed in the record.

(The information follows:)