INMATES AFFLICTED

Actually, the records show that by the end of May, at the time he spoke, 37 inmates had been hospitalized at Atmore and six sent to the infirmary at Draper, all with the same symptoms.

It was not then mandatory in Alabama to report hepatitis cases to the public health authorities, and in that respect Dr. Long overlooked not only the cases at

Atmore and Draper but also those at Kilby.

Dr. Ira Myers, the state's public health officer, told the National Communicable Disease Center as late as June 5 that an epidemic "apparently" was under way in the prisons. There was, he said, "no direct confirmation."

The exact number of hepatitis cases in the five prisons was never established and is never likely to be. Too many medical histories vanished, too many were never completed, and too many were improperly kept by "inmate doctors."

Some 544 cases were firmly established, and that conservative figure is the one most often used. But the communicable disease center records also contain estimates of more than 800 and evidence that the figure could run to more than 1.000.

The number of deaths is similarly undetermined. In addition to at least the four in Alabama, there were reports of at least one in Arkansas and at least one in Oklahoma.

The dimensions of the disease were more clearly and precisely stated in sets of percentages, or "attack rates," that measured the incidence of hepatitis among those who gave plasma and those who did not.

At Kilby, for example, 28 per cent of the men who participated in Dr. Stough's program came down with the disease. For those who did not take part, the rate

was only 1 per cent.

The rate for participants in one of the barracks at Kilby was 39.1 per cent. At the four other centers, the illness struck between 20 per cent and 26 per cent of the donors and from 0.9 per cent to 1.8 per cent of the nondonors.

FIRST ALLIED TO JAUNDICE

The Federal investigators, reflecting scientific caution, initially referred to the prison cases as "illnesses associated with jaundice." A number of their records employed this phrase.

Jaundice means a yellowish skin, and while it is a symptom of hepatitis, its presence is not conclusive. After extensive testing and study, however, the Gov-

ernment doctors concluded:

"The illnesses seen in these prisons seemed to be indistinguishable with viral hepatitis. It is not felt that any serious question of the nature of the illnesses need be entertained."

Hepatitis is a threat in every blood and plasma program, but the careful use of properly designed equipment can reduce the danger virtually to zero. Dr. Stough managed a double play: technique and apparatus both were cited in the epidemics.

The details are complicated, but the general picture drawn by the experts was reflected by K. T. Kimball, an executive of Fenwal Laboratories who had observed some of the plasma operations and who reported to Dr. Johnson of the Atlanta

center, according to a written memorandum, as follows:

"Mr. Kimball directed the conversation to the general level of care exercised by Dr. Stough's technicians. He felt that collection of large amounts of plasma in a rapid operation using equipment of simpler design that Dr. Stough approved might easily lend itself to a high level of contamination of technicians' hands and surfaces of tables, equipment, and the actual bags and tubing used in the procedure.

"He felt that contamination of these objects by the plasma of all donors could have occurred, and that absence of strict medical supervision could easily have led to short cuts in and inadequacies of sterile technique."

SAYS HE WAS "APPALLED"

This was equally apparent to Byron Emery, an official of Cutter Laboratories who also visited some of Dr. Stough's operations and who also talked with Dr. Johnson. Another Federal memorandum reported:

"Mr. Emery stated that when he visited Alabama in April, 1964, he was 'appalled at the situation' he found. He said the plasmapheresis rooms were 'sloppy' and that gross contamination of the rooms with donors' plasma was evident.