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Hepatitis, Blood Transfusions, and Public Action

Marc A. Franklin*

Elsewhere I have explored the liability theories available to persons who contract hepatitis as the result of a blood transfusion.¹ This article will consider what the law might do, beyond tort liability, to reduce the incidence of death and injury from this disease, which is, by far, the most serious risk of blood transfusions.² A short summary will indicate the nature of the problem.

In the United States, some six million units of whole blood are drawn annually from several sources.³ About one-tenth comes from "altruistic" donors

Much of the substance of this article was first delivered as the Eighth Annual Pope John XXIII Lecture at Catholic University School of Law on November 6, 1971. Dr. J. Garrott Allen and Dr. Judith G. Pool of the Stanford University Medical Center have been very helpful during the preparation of this article—as have the administrators of several local blood banks. Susan L. Cooper and D. McCarty Thornton IV, students at the Stanford Law School, undertook much of the field work and supplementary research. Sharon L. Foster, Stanford, A.B. 1971, did much of the psychological research upon which this article draws. Although all have been very helpful, they bear no responsibility for the suggestions discussed in the text.

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N.B.: Correspondence, interviews, and unpublished studies cited herein, unless noted otherwise, are on file at the Catholic University Law Review office.

1. Franklin, *Tort Liability for Hepatitis: An Analysis and A Proposal*, 24 STAN. L. REV. 439 (1972). That article extensively discusses the medical aspects of the problem.

2. Several dangers other than hepatitis—including reactions caused by transfusion of incompatible blood, circulatory overload, bacterial contamination of donor blood, transmission of other diseases such as malaria and syphilis, and infection due to unsterile instruments—are involved in blood transfusions, but they occur very rarely. See generally AMERICAN MEDICAL ASSOCIATION, COMMITTEE ON TRANSFUSION AND TRANSPLANTATION, GENERAL PRINCIPLES OF BLOOD TRANSFUSION 9-17, 67-74 (2d ed. 1970) [hereinafter cited as TRANSFUSION COMMITTEE REPORT].

3. R. TITMUSS, THE GIFT RELATIONSHIP 47-69, 90-91 (1971) [hereinafter cited as TITMUSS]. An additional two million units of blood are drawn annually by plasmapheresis, a process in which about two pints of blood are withdrawn from the donor, the plasma removed, and the red cells returned to the donor's body. This process, which can be safely repeated even twice a week, has given rise to an entirely new class of professional donor with its own problems and dangers beyond the scope of this article. See generally Hartney, *Plasmapheresis Operations in the United States—1968*, 213 J.A.M.A. 1023 (1970). "Blood," as used in this article, refers to whole blood.

who give their blood entirely gratis. Half of the total is volunteered by either assurance donors or replacement donors. Assurance donors contribute annually to a blood bank, often under a group blood plan, in return for the right to draw blood if needed for themselves or their families during the following year. The replacement donor, on the other hand, is usually donating blood on behalf of someone who has already received a transfusion and may be facing a charge of \$25.00 per unit on any blood that is not replaced. Since these groups have not been giving enough blood to meet the greater demand created by new surgical techniques, reliance is increasingly placed upon donors who are paid, usually five to ten dollars in cash, at the time they donate. As much as one-third of our blood now comes from paid donors and most of this is drawn and used in urban areas.⁴

This article is addressed primarily to the serious health problem caused by using paid donors whose blood is ten times more likely to carry hepatitis than "volunteer" blood.⁵ In the United States at least 3,000 persons per year die from transfusion-associated hepatitis.⁶ At present, scientific testing of blood donations can detect only one-fourth of the contaminated units, and there is no effective immunization for prospective recipients.⁷ In view of the substantial

4. For data on percentage of blood received from each donor type, see TITMUS 94.

5. Ratios of hepatitis cases from commercial blood as compared with volunteer blood were found in various clinical studies as follows: 10:1, prison to volunteer in Chicago Allen, Dawson, Sayman, Humphreys, Benham & Havens, *Blood Transfusions and Serum Hepatitis*, 150 ANNALS OF SURGERY 455 (1959); 70:1, addict and commercial to volunteer in New Jersey Cohen & Dougherty, *Transfusion Hepatitis Arising from Addict Blood Donors*, 203 J.A.M.A. 427 (1968); 11:1, commercial fibrinogen added to volunteer blood compared to unmixed volunteer blood in Seattle. Boeve, Winterscheid & Merendino, *Fibrinogen-Transmitted Hepatitis in the Surgical Patient*, 170 ANNALS OF SURGERY 833 (1969); 11:1, commercial to volunteer in Washington, D.C. Walsh, Purcell, Morrow, Chanock & Schmidt, *Post-Transfusion Hepatitis After Open-Heart Operations*, 211 J.A.M.A. 261 (1970). The clinical studies are supported by reports based on the tests discussed in the text at note 7, *infra*: 12:1, commercial to volunteer in New York City Cherubin & Prince, *Serum Hepatitis Specific Antigen (SH) in Commercial and Volunteer Sources of Blood*, 11 TRANSFUSION 25 (1971); 15:1, prison to volunteer in Boston letter from A. Kliman, Director of the Massachusetts Red Cross Blood Program, in 284 NEW ENG. J. MED. 109 (1971). One unpublished study suggests that the rate may be as low as 6:1, commercial to volunteer letter from Dr. Roderick Murray, Director, Maryland State Division of Biologics Standards, to Dr. J. Garrott Allen, Professor of Surgery, Stanford University Medical Center, July 23, 1971 [hereinafter all reference to Dr. Allen, unless noted otherwise, is made to his capacity as Professor of Surgery, Stanford University Medical Center].

By screening out all HAA positive donors and all commercial donors, one blood bank reduced the hepatitis rate among heart surgery patients by 80 to 90 percent. Letter from Dr. Robert H. Purcell, Maryland State Laboratory of Infectious Diseases, to Dr. Allen, July 8, 1971.

6. Since reporting is incomplete, the figures "may be much higher." National Academy of Sciences—National Research Council, *Statement on Laboratory Screening Tests for Identifying Carriers of Viral Hepatitis in Blood-banking and Transfusion Services*, 10 TRANSFUSION 1, 2 (1970).

7. Testing is based on an association between the presence of an antigen in the blood and the presence of the disease. See, e.g., Blumberg, Sutnick, London & Millman, *Australia Antigen and*

difference in incidence of hepatitis attributable to paid and unpaid donors, the elimination of paid donors could mean a 90 percent reduction in the incidence of transfusion-associated hepatitis, saving several thousand lives and avoiding the long and serious incapacitation of many victims who survive. But the enormity of this undertaking should not be underestimated: society would have to locate a new source for the two million units of blood that are now bought for cash each year.⁸

Hepatitis, 283 *NEW ENG. J. MED.* 349, 352 (1970); Prince & Burke, *Serum Hepatitis Antigen (SH): Rapid Detection by High Voltage Immunolectromorphosis*, 169 *SCIENCE* 593 (1970); *N.Y. Times*, Mar. 24, 1971, at 1, col. 1. The Red Cross began requiring the HAA test on Apr. 1, 1971. Interview with Dr. Donald Avoy, Medical Director, American Red Cross Four County Blood Bank, San Jose, Calif., Apr. 1, 1971. American Red Cross News Service release of Mar. 2, 1971. The American Association of Blood Banks followed suit in Fall, 1971. Massachusetts, by regulations of its Department of Public Health effective Jan. 1, 1971, became the first state to require HAA testing. Note, 7 *TRIAL* 62 (Nov./Dec. 1971).

Research is being directed toward developing a technique for immunizing recipients against the disease but this is not likely to occur soon. *N.Y. Times*, Mar. 24, 1971, at 1, col. 1.

8. "Cash" here also includes such devices as non-negotiable vouchers. At least one large commercial blood bank operating in several states pays for a unit of blood with five dollar non-negotiable vouchers. These are redeemable only at nearby liquor stores, some of which require a purchase before they will cash the voucher. See *Chicago Tribune*, Sept. 14, 1971, at 1, col. 1; *Washington Evening Star*, Nov. 17, 1971, § C, at 1, col. 4.

Another way to narrow the gap between supply and demand for blood is to reduce the demand. In addition to the utilization of surgical techniques that minimize the need for blood, this might be done by reducing wastage, now estimated at 10 to 12 percent. Interview with Mr. Robert Freeman, Director of Fiscal Operations, Red Cross Blood Program, Washington, D.C., Oct. 1, 1971 [hereinafter cited as Freeman Interview]. The New York City wastage rate is reported to be 11 percent. *N.Y. Times*, Mar. 30, 1971, at 19, col. 4. See also Churg, Steinlauf, Brill, Gannon, Ellis, Sobel & Weiss, *Passaic Valley Blood Program*, 11 *TRANSFUSION* 102 (1971). Wastage occurs when whole blood is not used within 21 days of collection. Such outdated blood is not entirely useless. It can be broken down into its component parts that can be preserved and used separately. Only the red cells must be discarded. See generally note 6, *supra*, at 2-9. Wastage may be reduced by the freezing of blood but this is expensive and is now being done only for rare blood. Freeman interview.

Some regard all but the purely altruistic donors as "paid." See Alsever, *Hepatitis Following Blood Transfusion: A Comparison of Paid and Replacement Blood Donors*, 9 *THE BULLETIN, SOUTH CENTRAL ASSOCIATION OF BLOOD BANKS* 5 (July/Aug. 1969). But for health purposes it is appropriate to classify altruistic, assurance donors and replacement donors as volunteers. Their motivations may differ, but blood drawn from these donors is substantially less likely to transmit hepatitis than that of those who receive cash when they "donate" their blood. See American National Red Cross Organization and Administration, BPD (4.27) Oct. 1, 1970. Even with the new test, some observers would rather take the untested blood voluntarily given by a friend or relative, than tested blood from a commercial blood bank. For clinical studies comparing commercial with volunteer blood, see note 5, *supra*.

There may be several explanations for this disparity. The most common is that commercial blood banks in large urban centers are located in slums where they get blood from donors who are likely to be in poor health and to live under substandard health conditions conducive to hepatitis. Some have no fixed addresses and cannot be notified if their blood has been found to be dangerous. Others may have an incentive to lie in order to earn the cash. Such hepatitis is also widespread among those who use needles in conjunction with drugs, which, under current circumstances, makes

How can two million more pints of safe blood be obtained each year? Two extensive studies of non-paid donors were conducted in 1964. In one, 13,553 Red Cross donors answered questionnaires.⁹ Among the most significant results were that almost 80 percent of those responding were male and three of every four were repeat donors. Sixty percent of the repeaters had previously given between one and seven times; 30 percent had donated eight to 23 times. Eighty percent stated that their most important reasons for giving blood were: "A sense of duty;" "Right thing to do;" "Help a worthy cause;" "Save lives." About ten percent emphasized the accumulation of assurance credits. These results were echoed in a study of 5,600 donors in San Francisco.¹⁰ In that survey, over 80 percent had given before and more than half had previously donated at least three times.¹¹ These repeat-donor figures suggest that, with 100

donors from several segments of society suspect. See, e.g., Cohen & Dougherty, *Transfusion Hepatitis Arising from Addict Blood Donors*, 203 J.A.M.A. 427 (1968); Dismukes, Karchmer, Johnson & Dougherty, *Viral Hepatitis Associated with Illicit Parenteral Use of Drugs*, 206 J.A.M.A. 1048 (1968).

A related explanation for the disparity in risk asserts that hepatitis may be rampant among those who have inadequate diets and sanitation, but adds that it may go undetected—either because when incurred by children its symptoms are minimal, or because adequate medical care is usually unavailable in these areas. Those contracting serum hepatitis remain carriers indefinitely, which explains why many persons raised in marginal circumstances may be carriers as adults. Lederberg, *the Dilemma of Tainted Blood*, Washington Post, Aug. 1, 1971, § B, at 2, col. 1.

The concern with paid donors may not extend to the entire class of persons who are paid. While this may hold true for paid donors at urban commercial blood banks, Blood Services, Inc., operating primarily in the Southwestern and Midwestern States, relies heavily on paid donors and contends that they are safer as a group than replacement donors. Korzekwa, Jordan & Alsever, *The Blood Donor: I. Who Are Our Blood Donors?*, 240 AM. J. MED. SCI. 36 (1960); Alsever, *The Blood Donor: II. Blood Donors Associated with Homologous Serum Hepatitis*, 240 AM. J. MED. SCI. 48 (1960). This view may be supported by a quotation from a husband and wife who are paid donors; they responded as follows in an interview:

My wife and I come down here every nine weeks just like clockwork. We get a calendar the first of each year and circle every ninth week. We get \$10 apiece each time. That's not bad, \$20 each time . . . You know, some people look down on us paid donors, but after all, they need our blood, and they're willin' to pay—so why should we give it to 'em for nothin'? We're not like a lot of paid donors—you know, winos and addicts.

If you want to see some of them guys, go down to the commercial blood bank. . . .

S. Condie, *The Social Psychology of Blood Donor Behavior* 170-71 (1969) (unpublished thesis, University of Pittsburgh).

9. THE AMERICAN NATIONAL RED CROSS, SELECTED READINGS IN DONOR MOTIVATION AND RECRUITMENT I (undated) [hereinafter cited as RED CROSS STUDY].

10. London & Hemphill, *The Motivations of Blood Donors*, 5 TRANSFUSION 559 (1965) [hereinafter cited as London & Hemphill].

11. Half of the San Francisco donors personally knew someone who needed a transfusion. As to their motivation, the women, the young, and the highly educated attributed their giving to general humanitarian sentiments. Concern about possible future blood needs most strongly appealed to men and to those with low education and low income. One serious problem was revealed in the San Francisco study: widespread misinformation concerning blood donation and blood banking even among donors. London & Hemphill 563-65.

million eligible donors in the country,¹² the four million unpaid units each year could well be donated by no more than two million persons. This might, in part, reflect a reluctance to donate, but it also implies a large group from which new donors might be sought.

Unfortunately, comparable information about non-donors is not available. In the San Francisco study, it was found that non-donors felt stigmatized and refused requests for interviews based on such a categorization.¹³ The Red Cross survey asked donors to give their explanation for the unwillingness of others to donate. Fifty-seven percent said fear; 13 percent emphasized inconvenience; 12 percent said lack of understanding of the importance of giving; and 11 percent cited indifference to the needs of others. When asked how to get more donors, half stressed educating the public about the importance of giving, while 15 percent stressed dispelling fear.¹⁴

Apart from the occasional newspaper feature story about paid donors in urban centers,¹⁵ little information is available about paid donors. The San Francisco study included some paid donors¹⁶ who tended to be younger than the volunteer group and more disproportionately male.

In a Pittsburgh study¹⁷ respondent donors were classified as assurance, replacement, or paid. The paid donors were 90 percent male, and mostly young, single, unemployed,¹⁸ or if employed, working class. More than one-fourth had family incomes of less than \$4,000 per year.¹⁹ Surprisingly, the study also found that nine percent of paid donors had incomes of more than \$12,000 per year.²⁰

12. Over half the population is within the eligible age category of 18 to 65, but allowance must be made for those who may be physically unable to donate. BUR. OF CENSUS, UNITED STATES DEP'T OF COMMERCE, STATISTICAL ABSTRACT OF THE UNITED STATES 1970, at 10 (1970).

13. *Id.*

14. RED CROSS STUDY 4.

15. See, e.g., Chicago Tribune, Sept. 12, 1971, at 1, col. 1; Sept. 13, 1971, at 1, col. 7; Sept. 14, 1971, at 1, col. 2; Sept. 15, 1971, at 1, col. 6; N.Y. Times, Feb. 7, 1971, at 1, col. 4; July 19, 1970, at 1, col. 6; Washington Evening Star, Nov. 17, 1971, § C, at 1, col. 4.

16. At the time of its 1964 study the Irwin Memorial Blood Bank was utilizing paid donors to provide eight percent of its blood. London & Hemphill 560. Such donors now yield less than 1 percent of Irwin's blood and are usually only those with rare blood types who may be called in frequently and at inconvenient times. Interview with Mrs. Bernice Hemphill, Managing Director, Irwin Memorial Blood Bank, San Francisco, Calif., June 3, 1971 [hereinafter cited as Hemphill Interview].

17. Condie & Maxwell, *Comparative Demographic Profiles: Voluntary and Paid Blood Donors*, 10 TRANSFUSION 84 (1970).

18. "Unemployed" was defined to include housewives and students. *Id.* at 85.

19. *Id.* Among replacement and assurance donors barely one-tenth were at that level. Perhaps reflecting the employment situation and the income situation, the study found that while one-fourth of the paid donors were "Afro-Americans," this group accounted for only 10 to 12.5 percent of the replacement and assurance categories.

20. *Id.* 18 percent of the donors in the other groups had incomes exceeding \$12,000 per year.

Psychological experiments have been designed to learn what causes people to engage in helpful behavior. Willingness to donate blood has been experimentally used because it is one of the easiest pro-social acts to test.²¹ Although most of these experiments go only so far as a statement of willingness to donate blood, the findings illustrate much about motivation toward this type of behavior.

A 1969 study in Chicago²² was designed to compare the effectiveness of several types of letters soliciting blood donors. All were identical except for the second paragraph, which gave the rationale for donating. One version depicted it as a social responsibility. A second highlighted the self-esteem involved. A third underscored the shame of not giving. The fourth emphasized the financial benefits that would accrue. Each version was sent to 324 persons who were asked to return a stamped, self-addressed postcard if they were interested in pursuing the question of blood donation. Of the more than 1,200 persons addressed at random from the telephone book, a total of 15, barely two percent, responded.²³

Undaunted, the same experimenter tried another technique.²⁴ He asked donors to suggest friends who had not previously given blood but who might be persuaded to do so. The donor was asked whether he would allow his name to be used in the solicitation. It was thought that both the role of the prior donor as a model and the possible shame of letting this person down would spur donations. Two hundred names were obtained and divided randomly into two groups. Of the 100 solicited by personal reference, 13 were willing to give, as were eight of the 100 prospects who received letters that did not use the prior donor's name. The total response of ten percent suggests, at least, that the use of prospects named by former donors is a much better route to new donors—whether or not the former donor's name is used—than a random appeal using the telephone directory.

Another study²⁵ tested the hypothesis that those who are self-satisfied are more likely than others to engage in helpful behavior. Subjects were divided equally into two groups, those told that they were taking a health test, and those told that they were taking a test of creative ability. Within each group, half were arbitrarily informed that they had done very well and the other half were told that their performances were average. After the apparent end of the

21. *But see* B. LATANÉ AND J. DARLEY, *THE UNRESPONSIVE BYSTANDER* (1970).

22. J.H. Bryan, *Assessment of Two Techniques of Blood Donor Solicitations*, (1969) (unpublished study).

23. *Id.* at 4.

24. *Id.* at 5-9.

25. Kazdin & Bryan, *Competence and Volunteering*, 7 *J. EXPER. SOC. PSYCH.* 87 (1971).

experiment, each subject was invited to give blood. A person who had “done well” on either test was far more likely to be willing to donate blood than the others. Clearly, the individual’s willingness to help others was increased by his sense of self-assurance.

Another inquiry²⁶ explored guilt as a motivation for blood donations. Two groups of subjects were assigned tasks that were, in fact, impossible. In one group, the subjects were told that their failure to do the tasks would adversely affect the grade given to a psychology graduate student. The other group was told that their success or failure would not affect his grade. After all the efforts had ended in failure and the experiment had apparently ended, each subject was asked to donate blood at a nearby hospital. The first group was substantially more likely to agree than were those who were not made to feel guilty—even though they were not making amends toward the person hurt, but, rather, helping an unidentified third party.

This discussion of donors and their motivation leads next to the question of what can be done to alter the current situation and to the possible roles that exist for government. First, we consider the existing blood banks. Although the Red Cross has high visibility in the field of blood collection through some 60 rather autonomous local blood drawing centers, it draws only about half the blood—three million units—used in the United States. About 20 percent is collected by community blood banks serving one or more of the hospitals in a particular area. The remaining share of the six million pints drawn annually comes mainly from the commercial banks.²⁷

Patterns of collection vary so much even within a single geographical unit that generalizations are of little value. In San Francisco, for example, the supply is entirely volunteer, while just across the bay, in Berkeley and Oakland, half the supply comes from paid donors. Nevertheless, when considering changes that might be made by existing blood bank services, four models tend to emerge. These follow current boundaries of geographical distribution, since only the Red Cross has the potential to function on a nationwide basis and it has shown little inclination to do so.²⁸ While these models are not all mutually

26. Darlington & Macker, *Displacement of Guilt-Produced Altruistic Behavior*, 4 J. PERS. AND SOC. PSYCH. 442 (1966).

27. *Supra* note 6, at 21; American Red Cross News Service release of Mar. 2, 1971.

28. The Red Cross has developed no goals for expansion. Between 1949 and 1966 the Red Cross established 56 regional blood centers. Since 1966 only three new centers have been added, primarily because centers will be established only upon local request, regardless of the quality of blood available in the area. The Red Cross does not compete with existing blood banks even if they rely solely on paid blood: the choice is left to the community. Freeman Interview, *supra* note 8. But explicitly reacting to the introduction of legislation in Congress, the Red Cross has recently announced its agreement with the concept of a “voluntary, nationwide, nonprofit blood service with

exclusive, they serve to clarify alternatives for reform.

1. *The large volunteer group.* This model requires the development of a broadly-based volunteer effort in the communities served by a given bank, stressing the social, moral, and psychological benefits of giving. While this approach would avoid the hazards attributed to paid donors, the expense of relying solely on this method could be substantial since many volunteers give only once.²⁹ Although the risk is less than that involved in using paid donors,³⁰ it should be recognized that some incremental health risk is created by any group of new donors, since even the best donor populations will have some undetected hepatitis.

This approach would require an assessment of what kind of appeal could best meet the community's needs. It might be necessary to decide whether to concentrate on population segments that have already provided most of the volunteers or on an under-represented group, such as young women. Housewives, for example; could readily be reached through women's magazines and community organizations such as the PTA. Perhaps emphasis on the changing social role of women might prove effective. With sufficient publicity through newspapers and broadcast media, blood banks might also stay open on occasional evenings and weekends.³¹

2. *The assurance group.* Through its emphasis on financial responsibility

uniform standards of operation" and several other features. The Red Cross announced that it was prepared to "join with the government and with voluntary organizations to work for the future attainment of these essential features." American National Red Cross, memorandum to Chapter Chairmen from President Elsey and Chairman Harriman, Feb. 22, 1972.

Nor has the Red Cross made any systematic study of techniques for obtaining volunteer donors. When campaigns conducted by local centers have been successful, the Red Cross has reported these in a quarterly newsletter sent to directors of their centers. There has been no systematic psychological testing either, although occasional publications of the Red Cross analyze this aspect informally.

The American Association of Blood Banks [AABB] is the only other blood banking group organized on a nationwide basis. It is a voluntary organization providing various services to its members. American Ass'n of Blood Banks, AABB Purposes and Programs (1969). Its principal function is establishing minimum standards for its members and accrediting those who meet these standards. Since accreditation is not a prerequisite for the operation of a blood bank, however, the AABB cannot provide the base for centralized direction, control, and coordination of a national blood banking program.

29. London & Hemphill 562. Women constitute a very large proportion of this donor "dropout" population. Condie & Maxwell, *Social Psychology of Blood Donors*, 10 TRANSFUSION 79, 82 (1970).

30. See notes 5 & 8 *supra*.

31. Where local donating conditions justify the extra hours, Dr. Tibor Greenwalt, Medical Director, Red Cross Blood Program, has urged his centers to remain open in the evenings and on weekends [hereinafter all reference to Dr. Greenwalt is made to his capacity as Medical Director, Red Cross Blood Program]. Letter from Frederic Laise, Vice President, American National Red Cross, to Dr. Allen, July 14, 1971.

and family health needs, this group plan readily attracts breadwinners and is most effective through existing units based on employment and social relationships. Perhaps the bank itself could offer to treat all its donors as members of a plan³² or simply ask a sampling of people in a community whether they would like to join the program. A writing campaign here might be effective and much cheaper than the impersonal mass media approach.

Since donors are, in a sense, under contract and must perform when called upon or lose their benefits,³³ donations can be judiciously spaced, enabling control of the supply level. This leverage, however, creates a moral issue: in effect, these donors are buying insurance with their blood. While this method does not produce the health hazards of the donor who receives quick cash, it is conducive to a certain degree of social stratification that may eliminate those whose blood is collectively suspect. This relative selectivity is, in fact, one of the potential attractions of membership.³⁴

3. *The small volunteer cadre.* If the broad voluntary approach is rejected, one alternative might be to find a much smaller group who will donate upon request. Given the current level of demand, not only would this approach be adequate, but it would also avoid health risks and acquisition costs of relying on a large and shifting group of first-time donors. At the extreme, if 1.25 million volunteer donors gave the maximum five times per year, national needs would be met. Such a group would, presumably, be recruited by the usual appeals to civic responsibility and humanitarian concerns as well as subtle intimations of the virtues of membership in an "elite" group. Such an approach, however, would diminish the sense of community responsibility to donate and might be resented precisely for its elitism.

4. *The small paid cadre.* So far the three models have excluded the paid donor, as conventionally defined, but another approach could rely primarily, if not exclusively, on paid donors. It might be possible to develop a roster of

32. Most blood assurance plans have individual as well as group coverage. Typical of these is the American National Red Cross plan, which provides that any person donating one pint of blood will receive a credit entitling the donor, spouse, minor children, parents, parents-in-law, grandparents, and grandparents-in-law to an unlimited amount of blood for one year. The Red Cross also has a comparable group coverage plan that entitles all members and their families to unlimited blood for one year if 20 percent of the group donates during the year. Interview with Dr. Donald Avoy, Medical Director of American National Red Cross Four County Blood Bank, San Jose, Cal., Apr. 4, 1971.

33. In most plans, however, a payment of up to \$25 may be made in lieu of the annual donation.

34. It has also been argued that those who participate in blood assurance plans ought to be guaranteed that the blood they receive in such a program will be similar low-risk quality. Allen, *Volunteer Blood for Everyone*, 9 STAN. M.D. 2 (1970). This may be difficult to enforce if the donor's need occurs when he is away from home and in an area in which such blood is in short supply.

regular donors whose health and living conditions would be stable and subject to inspection.³⁵ Based on a small group, this model is economical: acquisition cost would be limited to the payment itself. Supply is easily regulated because the donors are paid only if they come when scheduled.

This format is relied upon by Blood Services, Inc., which claims that its paid donors as a group are safer than replacement donors.³⁶ Although its fees to donors are described as tokens of gratitude for their inconvenience and cooperation, these payments are clearly integral to its effectiveness. Blood Services' operations illustrate the problems of this model: questions of morality and social responsibility are replaced by an exclusive marketplace focus, and, since most states effectively exempt all blood banks and hospitals from the obligation to pay for hepatitis³⁷ there is little legal pressure for safe blood. This emphasis may be justified when the health risks can be controlled, but less selective competitive banks might emerge that would drive down both price and quality. Blood Services has attempted to avoid this by concentrating on those areas where it does not face competition for paid donors. Even without competition, however, the fee might be an incentive to lie or an attraction to donors with questionable health histories.

One way to offset these drawbacks, while encouraging regularity of giving, might be to initially offer a minimal payment, gradually increasing for each of the next five donations if they are without incident, and, finally, stabilizing it at a high level. While this could raise the price of blood, the cost would, at least, correlate with the safety and actual cost of the product. Due to the financial incentives, the need for government licensing of blood banks, and perhaps of donors, is much greater in this model than in any of the others.

Obviously the choice of model will define the kinds of donors sought and the methods employed. Whatever the model, several other general steps to increase the donor group are available to the private sector. One of these is the elimination of the disclaimer provision that donors must sign before they are permitted to donate. The risk in giving blood is infinitesimal, but the presence of such a statement might unnecessarily alarm the donor, even if the first donation is painless and harmless. Lawyers have apparently recommended these provisions as a possible legal aid to the blood banks.³⁸ But their legal effectiveness is

35. See note 8 *supra*.

36. See Korzekwa & Alsever, *supra* note 8; Alsever, *supra* note 8.

37. At present some 40 states have statutes that seek to deny strict liability for transfusion-associated hepatitis. Few negligence actions have been brought. See generally Franklin, *supra* note 1.

38. Interview with Dr. Edward Tuelher, Medical Director, and Mrs. Paul Henzlik, Director, Peninsula Memorial Blood Bank, Burlingame, Cal., April 1, 1971.

questionable,³⁹ and their use makes it necessary to find more donors, increasing acquisition costs.

The role of health and medical insurance for blood transfusion presents a more complicated situation. Most health and accident policies cover the expenses of illness, including transfusion costs, within limits. Although money is not an adequate substitute, this reimbursement removes the recipient's incentive to replace blood with blood. It enables, however, the hospitals to buy more blood and, at least in urban centers, may find its way to commercial, rather than volunteer, banks. Some private insurers have begun to exclude transfusion coverage,⁴⁰ and, if this becomes common practice, it should encourage participation in blood assurance plans as well as restore the pressure on non-assurance patients to get more replacement donors. At present, however, there is little likelihood that the exclusion will become widespread.⁴¹

The use of cadaver blood might meet the needs of hospitals that run their own blood banks. If blood is drawn within an hour after death, the average adult body will yield ten units. Since it is essentially the presence of contamination that is crucial, this would reduce the risk of hepatitis in a multiple unit transfusion to that of a single unit. It would similarly reduce the likelihood of mismatching. The opposition to this on aesthetic grounds has been so substantial that there has been little attention to the potential merits, but recent organ transplants from cadavers might facilitate a change in social attitudes toward this possible source of blood. Cadavers could, of course, best be utilized by hospitals themselves, rather than by independent blood banks.⁴²

39. See AMERICAN MEDICAL ASSOCIATION COMMITTEE ON TRANSFUSION AND TRANSPLANTATION, *GENERAL PRINCIPLES OF BLOOD TRANSFUSION* 73 (2d ed. 1970).

40. Recognizing the problem of commercial blood, the Medical Policy Committee of California Blue Shield on August 11, 1971, recommended "that as contracts are rewritten provision for the payment of blood and/or blood by-products be deleted from basic and major medical contracts." Letter from Dr. Ralph W. Schaffarzick, Chief Medical Advisor of California Blue Shield, to Dr. Allen, Aug. 18, 1971.

Administrators at one bank said that they had a replacement rate of 86 percent in 1956. Then insurers began to cover blood and the rate dropped to 70 percent. Then Medicare began covering blood (see notes 84 and 85 *infra*) and replacement rate has dropped to 52 percent. Interview with Dr. Edward Tuelher and Mrs. Paul Henzlik, *supra* note 38.

41. Recognition of the problems caused by insurance has not been universal. For example, a letter of July 15, 1970 from Louis A. Orsini, Council Director of Health Insurance Association of America, to Dr. Allen, denies that insurance coverage adversely affects the supply of volunteer blood or that eliminating insurance will increase the number of voluntary donors. There is also apparent consumer demand for this protection. Thus, the BSP Insurance Company provides insurance coverage solely against blood charges. This suggests that the only way to end insurance for blood costs may be legislation.

42. For use of cadavers in the U.S.S.R., see Kiel, *Blood Substitutes in the Soviet Union*, 9 *TRANSFUSION* 169 (1969). Should the United States try to utilize this source of blood, it could be made possible through the Uniform Anatomical Gift Act. See generally Burleson, *The Uniform Anatomical Gift Act and Its Implications for Life and Health Insurance*, 5 *FORUM* 171 (1969).

Although the absence of a profit motive among volunteer banks may have reduced incentives to improve quality and quantity of blood,⁴³ if the current nonchalance about the importance of obtaining safe donors continues, public concern may force other methods to effect reform.

How can the law gain leverage in reducing the risk of hepatitis? The desirability of judicial adoption of strict liability in cases brought by hepatitis victims—at least in the states that have not enacted legislation barring such a result⁴⁴—has been discussed elsewhere. This article will discuss other types of legislation, looking first at the relative merits of state and federal action. Blood banks vary greatly throughout this country, and even in neighboring communities. Since health hazards differ greatly in large urban centers and in rural states, flexibility at the state level might be desirable. Further, it might be initially easier and more efficient for each state to regulate the health standards of blood banking and to coordinate shipping of blood from one part of the state to another.⁴⁵ At present, blood banks fear that if they allow other banks to use their surpluses, the next day they may find themselves in need. Not only does this result in hoarding, it also allows up to a million pints of whole blood to become outdated annually.⁴⁶

Federal action would have different advantages. The blood problem is a national problem; no area is immune from hepatitis. Urban areas often overlap state boundaries, and blood is now shipped in interstate commerce, even from one region to another.⁴⁷ This already involves some federal regulation,⁴⁸ and existing health agencies could easily be expanded to implement more extensive controls and to coordinate usage more efficiently. Moreover, a national effort would give blood donation greater publicity,⁴⁹ and would create patriotic con-

43. Intensified efforts by the Red Cross and other non-profit groups would put commercial banks out of business. Many commercial banks are owned by pharmaceutical manufacturers. The Red Cross has taken pains to avoid criticizing the commercial banks. See the statement by Dr. Tibor Greenwalt in note 85 *infra*.

44. *Supra* note 41.

45. Moreover, even if Congress might refuse to adopt general blood donor legislation, it might well "consent" to interstate compacts among states having common blood problems. U.S. CONST. art. I, § 10.

46. See TITMUS 55-59. The American Association of Blood Banks has tried to remedy this through a system of clearinghouse credits that attempts to facilitate replacement donations and to balance out oversupply and shortages among member banks. The procedure is explained in Hemphill, *AABB National Clearinghouse Program*, 98 MEDICAL TIMES 101 (Aug. 1970).

47. For concern about interstate shipment of blood, see Washington Evening Star, Nov. 17, 1971, § C, at 1, col. 4.

48. See 42 U.S.C. § 262 (a) (1964); 42 C.F.R. §§ 73.3000—3524 (1971). Only 166 of the 7,000 blood banks in the country come under scope of these statutes. 117 CONG. REC. 11210 (daily ed. Nov. 17, 1971) (remarks of Congressman Veysey).

49. The federal government has publicized the need for blood donation by such actions as the

notations, reinforcing the other motivations. Further, federal action may be the only way to challenge the powerful medical, hospital, and blood bank lobby—an alliance that has obstructed the introduction of strict liability in this area in a majority of states.⁵⁰ Such an alliance is especially intimidating where, as here, it is joined by the pharmaceutical houses—with no organized opposition. In sum, federal regulation by itself would likely have a more substantial impact than state regulation alone. But it might be preferable to coordinate the two, and we next consider some possibilities.

Whatever jurisdiction develops protective statutes, one of three kinds of sanctions will likely be involved. First, selective incentives to influence the behavior of various groups—blood banks, hospitals or prospective donors—are available. Second, certain behavior could be prohibited. This could also be combined with incentives to the same or other groups. Third, obligations—such as requiring persons to present themselves as donors—could be created. The proposals discussed below generally follow this sequence.

Major legislative steps toward blood transfusion safety have come only within the last year. In 1971, the State of Washington enacted legislation allowing victims of transfusion-associated hepatitis arising from “any transaction in which the blood donor receives compensation” to use strict liability theories.⁵¹ Such a provision increases the cost of commercial blood and subjects hospitals buying such blood to strict liability.⁵²

In the same year, the Texas legislature passed—but then rescinded—a bill providing that “[n]o blood bank may pay cash for blood” except in the form of checks mailed to the donor at least 15 days after donation.⁵³ Also, a strict liability theory was made available to hepatitis victims.⁵⁴ This was an effort to

annual proclamation of January as National Blood Donor Month, and the issuance of 130,000,000 postage stamps on Mar. 12, 1971 with the legend “Giving Blood Saves Lives.” This was the first such stamp and culminated a four-year campaign by the AABB. *See*, Note, 19 OCCUPATIONAL HEALTH NURSING 23 (May, 1971).

50. *See* note 86 *infra*.

51. WASH. LAWS ch. 56, § 1 (1971).

52. For this author's proposals, *see* Franklin, *supra* note 1.

53. TEX. REV. CIV. STAT. ANN., art. 4590—3, § 3(b) (Vernon Supp. 1972). After this provision had been enacted, the legislature adopted House Concurrent Resolution 195 directing the enrolling clerk to strike that portion of the bill. The clerk apparently failed to do this and the governor signed the original version of the bill. The governor later signed the resolution with a message explaining the situation. Letter from Professor Roy. M. Mersky, Director of Research, University of Texas School of Law to author, Oct. 19, 1971. The president of Blood Services, Inc., which operates in Texas, wrote to hospitals served by his blood banks in that state reassuring them that the provision against direct cash payment was not legally applicable. Letter from W. Quinn Jordan to hospital administrators, Sept. 7, 1971.

54. Although the prohibition sounds criminal, no criminal penalty is provided for violation. Furthermore, the version as adopted was ambiguous as to whether a strict liability theory could be invoked only by a patient harmed by blood obtained in violation of the statute, or whether this

sub-classify paid donors, reflecting a legislative belief that hepatitis perils cannot be blamed on all paid donors as such.⁵⁵ Washington distinguished between paid and unpaid donors; Texas distinguished those who are paid cash at once and those who are sent checks later. Both agree on the need to discourage irresponsible donors whose sole motivation is the "fast" money involved.⁵⁶

Serious drafting problems are created because some classes of paid donors are not dangerous. An immediate concern is whether the administrative cost of making this distinction is commensurate with the benefits achieved. While the media occasionally focus on the unhealthy skid row bum as the typical paid donor, it is not known how many paid donors have useful blood, particularly since this might well vary with the size of the community and the location and tradition of its commercial banks. Nevertheless, we would properly be reluctant to attempt to develop legal distinctions based upon subjective socio-economic classifications.⁵⁷ Because it adopts an objective measure of payment practices and can be policed fairly easily, the Texas distinction may be a viable solution. Requiring a mailing address and a 15-day wait for compensation assumes that donors who need quick cash or who have no fixed addresses are among the worst risks. Although this is a partial and indirect approach to the problem, it certainly would have been worth a try.

A variety of other approaches are available. The tax law could be employed for incentive purposes—each "donation" of a unit of blood to an eligible organization could be taken as a \$25 tax deduction to charity with an annual maxi-

rendered the offender strictly liable to all patients who suffered hepatitis from blood provided by the offending bank. Note also that the Texas statute applies only to the blood bank itself, while the Washington statute denied strict liability exemption to all involved in the proscribed transaction. TEX. REV. CIV. STAT. ANN. art. 4591—3, §§ 1-3 (Vernon Supp. 1972). WASH. LAWS ch. 56, § 1 (1971).

55. See, e.g., JENNINGS, AN INTRODUCTION TO BLOOD BANKING SYSTEMS, Technical Report No. 27, Dec., 1967 (M.I.T. Operations Research Center), at 94-95, in which the author draws a distinction between "mercenary donors" who receive benefits, perhaps even money, but who are motivated primarily by a desire to help others. See also note 8 *supra*. See also Jennings, *Not All Paid Donors Pose Hepatitis Risks*, 2 LAB. MEDICINE 8 (July 1971), in which the author notes that "paid donors in certain categories are dangerous donors," but that this "finding has been utilized by some individuals, including uninformed politicians, to create an indiscriminate condemnation of the use of all paid donors." He argues that "the question is not whether the donor is paid or not paid, but rather the socio-economic status of the donor." It is doubtful that the legal system could effectively, or would want, to discriminate among donors according to socio-economic status.

56. Wisconsin has prohibited the operation of blood banks for commercial profit. WIS. STAT. ANN. § 146.31(1) (Supp. 1971). This legislation was not motivated by concern for hepatitis-infected blood, but was rather an attempt to prevent commercial blood banks from drawing blood in Wisconsin and shipping it out of state, thereby reducing the supply of blood available in Wisconsin. Letter from H. Rupert Theobald, Chief of Wisconsin Legislative Reference Bureau, to author, Apr. 8, 1971. This statute does not prohibit payments for blood by non-profit banks.

57. Some would leave this to the judgment of the individual blood banks. See *supra* note 59; Korzekwa & Alsever, *supra* note 8.

num of \$125 per person.⁵⁸ Although this proposal reflects the same hypothesis as the Texas statute, the financial benefit here is more remote in form and in time. Its probable appeal—mostly to middle-class and upper-class taxpayers—is intended to induce persons to donate, without the health hazards generally associated with “paid” donors. At present, however, this plan is especially limited in that more than half of all taxpayers do not itemize deductions and, therefore, could not take advantage of this incentive.⁵⁹ If the plan employed tax credits, it would be available to all taxpayers, but might be less effective in reducing the risk of hepatitis. Since it would involve the government in a market approach to blood,⁶⁰ this type of statute might be objectionable and, perhaps, more humanistic approaches such as increased education and public campaigns might be more appropriate before moving to tax incentives.⁶¹

Another possible approach is the reduction from 21 to 18 of the minimum age at which blood may be given without parental consent, in keeping with similar trends for voting and the assumption of other responsibilities. Significantly, 18 year olds in some states are ineligible to give blood for compensation.⁶² However, this approach is less fruitful than it once was, since the hepatitis rate in this age group has increased due to the use of needles associated with drugs.⁶³ Indeed, campus blood drives might be a useful way of dramatizing the impact of drugs, while increasing the volunteer blood supply.⁶⁴

58. H.R. 853, 92d Cong., 1st Sess. (1971). The bill has been enthusiastically received in some quarters. See editorial endorsement, *On Stimulating the Gift of Blood*, 173 *SCIENCE* 583 (1971). The Internal Revenue Service has treated blood donations as non-deductible services, rather than as the donation of property, which would have been deductible. Rev. Rul. 162, 1953-2 *CUM. BULL.* 127. The phrase “donation” in the bill is ambiguous, for if, as the sponsor claims, health is the primary concern, then the bill should cover altruistic and assurance plan donors equally. Yet the assurance donor is obtaining something else of material value in return for his donation, and does not come within our conventional notion of one making a charitable gift.

59. In 1969 Congress amended the Internal Revenue Code to increase the standard deduction from 10 to 15 percent, *INT. REV. CODE OF 1954* § 141(b) (Supp. 1971). Congress hopes to raise the percentage of taxpayers using the standard deduction from 58 to over 70 percent. Report on Tax Reform Act of 1969 to accompany H.R. 13270, S. REP. NO. 552, 91st Cong., 1st Sess. 257 (1969).

60. It has been suggested that the tax deduction be accompanied by a similar tax treatment for hepatitis carriers to induce them not to give blood. *Supra* note 12. This might be objectionable as a bribe to deter criminal, or at least tortious, behavior.

61. These might include campaigns based on the medical advantages to the donor of giving blood. Studies are now being conducted on the possibility that men who donate blood regularly are less likely to suffer coronary attacks and strokes. See *N.Y. Times*, Feb. 14, 1972, at 31, col. 6.

62. See, e.g., *OHIO REV. CODE ANN.* § 2108.21 (Supp. 1971); *TEX. REV. CIV. STAT. ANN.* art. 4447j, § 1 (Vernon Supp. 1972). Presumably laws that lower the age of majority from 21 to 18 will enable 18 years olds to donate without parental consent or other restrictions. See, e.g., *CAL. LAWS* ch. 1748 (1971).

63. See note 8 *supra*.

64. Unless a blood drive is keyed to a sharp increase in demand, it may produce more blood

There is concern, among the more fully informed, about incentives aimed at donors rather than banks. Even volunteer donors are not above lying to obtain some accolade.⁶⁵ This concern should extend to governmental endeavor in this area, such as a current bill pending before Congress, that would "develop a national program to honor and recognize all voluntary donors."⁶⁶

Voluntary or paid, paid now or later, the problems of line-drawing in the area of incentives also arise in terms of any outright prohibition fortified by criminal sanctions. The most obvious method would be a total ban on the purchase of blood. This implies an acceptance of the correlation between bad blood and paid blood and a reluctance, or inability, to make functional subdivisions of paid donors. To fill the foreseeable gap, the remaining blood banks could use, or combine, aspects of the three non-commercial models. It is not clear, however, that a ban coupled with incentives would be adequate. Any outright ban, then, should allow an adjustment period to permit blood banks, hospitals and the public to conform.

Although prohibition avoids the problem of dividing lines, it may well be too stringent. While the Red Cross does not pay for blood, other community banks often make such payments—especially to induce donations of very rare blood.⁶⁷ One possible modification to absolute prohibition would be to forbid a blood bank to pay for more than a specific percent of its blood supply. Further, exemptions could be made available only for designated rare types and limited classes of donors.

One prohibition might apply to blood drawn from the prison population. Many states shorten prisoners' sentences in return for units of blood contributed.⁶⁸ It is claimed that blood drawn from the prison population is as likely to carry hepatitis as is blood from the typical paid donor. Despite the counterargument that constant supervision for a lengthy period facilitates accurate health records, some states, concerned about the risk, have repealed legislative

than can be used within the 21-day shelf-life. Another special problem of some blood drives is that the implicit pressure might induce some to give who have reason to believe that they should not. This might occur for example if fraternities were competing in a blood drive. *See Glazer, Blood*, 24 *PUBLIC INTEREST* 86, 93 (summer 1971). This wastage may be minimized by component therapy. *See note 8 supra*.

65. Hemphill Interview, note 16 *supra*.

66. H.R. 11828, 92d Cong., 1st Sess. § 4(b)(3) (1971). *See also*, S. 2909, 92d Cong., 1st Sess. (1971).

67. While persons with rare blood might be expected to be most concerned about creating an adequate community supply, they seem as nonchalant about the problem as most people. *See note 21 supra*.

68. *TITMUS*, *supra* note 3, at 67, 85-86. *See, e.g.*, MASS. GEN. LAWS ANN. ch. 127, § 129A (Supp. 1972); MISS. CODE ANN. § 7985(a) (Supp. 1971); S.C. CODE ANN. § 55-11.2 (Supp. 1971).

inducements for prison donors.⁶⁹ Even in those states, however, parole authorities may well be expected to look favorably on donors. If the health risk is demonstrable, the fact that prisoners are under constant supervision might be used to impose an effective ban on their giving blood altogether.⁷⁰

A state legislature could also prohibit the liability disclaimers, discussed earlier.⁷¹ Even if invalid, their possible adverse impact on potential donors should be a matter of concern.

Legislative efforts might also be directed toward the role of private health insurance, discussed earlier.⁷² The problems of trying to use money to replace blood might alone justify the elimination of coverage for blood. Congress, aware of these problems when enacting the Medicare program, denied coverage for the first three units of any transfusion.⁷³ That effort has not been successful, but for reasons that may not apply to our situation.⁷⁴

Another legislative alternative would be establishing a minimum price below which blood could not be bought from donors. This would induce higher income groups to become donors, substantially lowering the intrinsic health risk and possibly allowing more rigorous screening of applicants' blood. The higher payment per donor would be at least partially offset by a reduction in other acquisition costs and liability for hepatitis. Since pricing cannot safely be left to the operation of the existing market, the government must create its own blood market. The market has not been functioning because the costs of hepatitis are only rarely brought into the price of blood by the legal system,⁷⁵ because general ignorance of the comparative risks has permitted utilization of paid donors, and because banks using volunteer donors do not charge what their

69. California formerly reduced sentences of county jail inmates by five days for every pint of blood they donated. Concern that this might induce misrepresentations as to hepatitis led to repeal of the measure. CAL. LAWS ch. 657, § 1 (1968) repealing Cal. Penal Code § 4352. Letter from Assemblyman Pete Wilson to author, June 18, 1971.

70. Slightly under five percent of our total blood supply comes from prison donors. *TITMUS* at 94.

71. See text at notes 42-44 *supra*.

72. See text at notes 40-41 *supra*.

73. 42 U.S.C. § 1395(a)(2) (Supp. 1969).

74. During the first year after the statute's passage, of the 320,000 Medicare patients who received whole blood, only about 120,000 satisfied the blood deductible through replacement. The remaining 200,000 patients were charged for an average of two units each, totalling some \$9.6 million. Letter from Alvin M. David, Ass't Commissioner for Program Evaluation and Planning, Department of Health, Education, and Welfare to Dr. Allen April 22, 1970. The obvious reason for this low replacement rate in Medicare is that people over 65 cannot donate blood themselves, and it is difficult for the elderly to find eligible donors unless they live near or with their children.

75. To the extent negligence can be shown, or where strict liability is permissible, such costs will find their way back into the tort system. Otherwise they will appear among general costs of disease and if covered at all by insurance, it will be through general medical insurance.

product could bring on the open market.⁷⁶ Since a private market solution is unlikely to take hold, the minimum price approach may best combine the market approach and a concern for safety. Some might object to the inefficiency of having the government set price levels.

One recent congressional proposal seeks to eliminate bad blood by classifying banks.⁷⁷ A federal administrator is directed to aid in developing an adequate supply of voluntary blood as well as conducting evaluations of recruitment techniques to obtain such donors. Banks would be classified as either A or B depending upon the percentage of donors they pay: this percentage would have to decline each year.⁷⁸ Only Class A banks could maintain predeposit or assurance programs and federal agencies could obtain blood only from Class A banks.⁷⁹ It should be noted that this scheme involves elements of prohibition as well as incentives.

Finally, we turn to legislation that would involve aspects of compulsion. The ultimate in compulsion would be simply to require two million citizens chosen at random each year to donate one unit of blood. This would surely yield a safer blood supply than the two million units now coming from paid donors, but it presents a host of obvious philosophical, social, and administrative difficulties. Government may perhaps inform citizens about social problems, or even provide incentives, but compelling blood donations might well be viewed as an infringement of the rights of the individual, not unlike attitudes toward making any form of pro-social behavior obligatory, such as a general duty to rescue.⁸⁰

We do, however, rationalize compulsory taxation and vaccination in terms of the public good; compulsory blood donation, if that is the one way to virtually eliminate hepatitis, might also be supported in that context. Even if it were acceptable philosophically, however, such a venture would be an administrative nightmare. Perhaps it would be easiest to require persons to give blood on their 18th, 19th and 20th birthdays. This would be a self-randomizing steady supply that would introduce people to the habit of giving blood when young. Even with this simple model though, major problems of collection and medical or religious exemptions are present. These obstacles serve to reinforce the

76. For the comparative risk of commercial and volunteer blood, *see* note 5 *supra*. Presumably, safer blood could command a higher price than commercial blood, yet it may be less costly to obtain. The Red Cross supplies blood solely for processing costs, which vary regionally from \$9.50 to 20 dollars, and is operating on a charitable basis regardless of how much the patient can afford to pay.

77. H.R. 11828, 92d Cong., 1st Sess. (1971).

78. H.R. 11828, 92d Cong., 1st Sess., § 4(b)(6)-(7) (1971).

79. H.R. 11828, 92d Cong., 1st Sess., § 9-10 (1971).

80. *See generally* THE GOOD SAMARITAN AND THE LAW (J. Radcliffe ed. 1966).

notion that such a plan should only be a last resort.

Another method of control might be to require banks to report to a central registry all donors who have been linked with hepatitis incidents or test positive in a screening test.⁸¹ It would then be compulsory for banks to clear all new donors. A rejected donor can now go to another bank and donate blood after being implicated in a hepatitis episode. A national, or even state registry computerized and keyed to fingerprints or other personal identification would do much to diminish the risk of bad blood.⁸²

Conclusion

All these measures—incentives, prohibitions, and compulsions—have been discussed without addressing the broader question: should existing blood banks be replaced by a national system organized and run by the federal government? This is the practice in Great Britain and it has been acclaimed there as an ideal system.⁸³ There are, of course, differences in political attitudes, geography, size, demography, and medical practice between Britain and the United States; and it should be remembered that no country starts from scratch in solving this sort of problem.

An expansion of private institutions which already meet two-thirds of the national blood needs appears preferable to creating a government system.⁸⁴ If these institutions had worked together and confronted the commercial banks, they might have met the hepatitis problem by educating the public about the risks of using paid donors. But these groups continue to make statements that reduce public pressure on commercial bank practices;⁸⁵ they continue to join with the commercial banks in working for the passage of legislation limiting

81. For example, New York City has established a central registry for the medical history and physical examination records of all blood donors in New York City. New York City, N.Y., Code § 567-70(a) (1970). See note 7 *supra*.

82. Paid donors are known to use fictitious names and to borrow or rent another person's social security card in order to avoid identification. TITMUS at 76. The costs of such a registry must, of course, be considered.

83. See generally TITMUS, *but see* M. COOPER & A. CULVER, *THE PRICE OF BLOOD* (1968).

84. The Executive Council of the American Federation of Labor and Congress of Industrial Organizations has proposed that a "nationally controlled blood program be developed, through the American Red Cross, if possible, which would insure adequate quantities of volunteer blood through better means of recruitment and incentives." Statement of the A.F.L.-C.I.O. on Blood Banks, Bal Harbour, Florida, Feb. 16, 1971.

85. See, e.g., statement by Dr. Greenwalt, in a recent television interview, as quoted by Congressman Veysey of California:

You cannot blame the commercial blood banks for anything that has happened in this country. They were needed to fill the gap. The gap that was not filled in a total program by the Red Cross. [sic.]

117 CONG. REC. 11210 (daily ed. Nov. 17, 1971).

the legal remedies of patients who contract hepatitis;⁸⁶ and they continue to fail to increase their facilities in the locations where reliance on paid donors has been particularly hazardous.⁸⁷ In the meantime, the problem of paid donors is growing worse.⁸⁸ Now that most courts have been immobilized by statutory controls, the only alternative is far-reaching legislative reform.

86. Both the Red Cross and the American Association of Blood Banks have supported such statutes. Letter from Frederic Laise, Vice-President, American National Red Cross, to Dr. Allen, June 4, 1971. American Association of Blood Banks, *supra* note 77, at 6. The Red Cross has taken the position that strict liability would subject their organization "[t]o unconscionable claims which would drastically affect the cost of blood" Letter from George M. Elsey, President of the American National Red Cross to Dr. Allen, Apr. 6, 1971. However, the Red Cross is not trying to avoid liability based on negligence. Letter from George M. Elsey, President of the American National Red Cross to Dr. Allen, Mar. 18, 1971.

87. *See* note 28 *supra*.

88. The percentage of commercial blood in relation to the total appears to be increasing. TITMUS 96-98.