

TABLE 6a.—ESTIMATE OF ANNUAL CASES AVERTED—Continued

Hazard	Estimated number of cases ¹	Number of cases averted (lower) ²	Number of cases averted (upper) ¹
Shigella	200	100	150
Vibrio vulnificus (3d year)	60	12	30
Total	113,630	20,151	58,520

¹ These numbers were determined in consultation with representatives from the Centers for Disease Control and Prevention.

² The upper and lower bounds were determined by a panel of scientists at CFSAN (Dr. George P. Hoskin, Dr. Karl C. Klontz, Dr. Kaye I Wachsmuth and Dr. Thomas C. Wilcox).

Table 7 reflects revised estimates of the total cost of seafood illness.

TABLE 7.—ANNUAL COST OF SEAFOOD ILLNESS

Hazard	Value per case	Total cost of seafood illness
Anasakis	\$1,703	\$170,332
Campylobacter jejuni	9,390	1,877,924
Ciguatera	15,247	24,395,438
Clostridium botuli num	223,252	2,232,524
Clostridium perfrin gens	6,551	1,310,164
Diphyllobothrum latum	2,753	2,752,617
Giardia	6,104	183,112
Hepatitis A Virus	22,669	22,668,870
Other Marine Toxins	269	5,380
Norwalk Virus	575	57,500,000
Other Vibrio's	2,955	2,954,842
Paralytic shellfish poisoning	92,356	1,200,628
Salmonella non-typhi	8,199	1,639,756
Scombrototoxin	339	2,708,755
Shigella	16,750	3,349,961
Vibrio vulnificus	2,008,917	120,535,039
Total		245,485,342

Table 8 shows the estimates of the efficacy of mandatory seafood HACCP at reducing foodborne disease in the third year following the date of implementation (undiscounted).

TABLE 8.—ESTIMATE OF THE EFFICACY OF MANDATORY HACCP AT REDUCING FOODBORNE DISEASE IN THE THIRD YEAR

Hazards	Lower bound estimate (3d year)	Upper bound estimate (3d year)
Anasakis	\$42,583	\$102,199
Campylobacter jejuni	938,962	1,408,443
Ciguatera	1,463,726	3,049,430
Clostridium botulinum	558,131	1,116,262
Clostridium perfringens	655,082	982,623
Diphyllobothrum latum	688,154	1,651,570
Giardia	91,556	137,334
Hepatitis A Virus	3,400,331	11,334,435
Other Marine Toxins		269
Norwalk Virus	8,625,000	28,750,000
Other Vibrio's	590,968	1,477,421
Paralytic Shellfish Poisoning		46,178
Salmonella non-typhi	819,878	1,229,817
Scombrototoxin	1,354,377	2,031,566
Shigella	1,674,981	2,512,471
Vibrio vulnificus (3d year)	24,107,004	60,267,519
Total	45,010,733	116,097,537

Finally, in response to the comments, FDA has attempted in Table 9 to associate particular hazards with categories of seafood (to the extent the data allow).