

assume that the nature of the worker and the worker's wage would be about the same in foreign countries as in the United States. In open markets where trade takes place, real wage rates tend to be equal for similar work and productivity across countries.

Learning costs: Foreign and domestic facilities will incur administrative costs in order to learn how to comply with any new regulation. Because most of the facilities covered by the proposed registration rule would be covered by this proposed rule, the administrative costs will be shared between the registration and recordkeeping rules. Those establishments covered by both regulations will probably search for information on both regulations at the same time and find information in the same places. Therefore, the learning cost estimates presented here probably overestimate the costs actually incurred by firms covered by both rules since there is the potential for double counting. The potential for double counting occurs in estimates of costs for firms covered by both rules. These include domestic manufacturers, wholesalers, warehouses, mixed-type facilities that engage in farming, foreign final holders, foreign manufacturers, and importers in any of these categories.

Facilities will become aware of these requirements through normal business activities: Reading trade press, reading industry news, FDA outreach, or conversation with other business operators. Because facility operators or owners must be aware of the requirement to change their activity, we assume that becoming aware of the regulations will occur as part of normal business practice and so have no economic costs for the facility. There may be costs incurred, however, by FDA or trade organizations to undertake the outreach.

Once the owner or operator of the facility becomes aware of the regulations, he or she will need to research the requirements of the regulation, which will require searching for a copy of the requirements and reading and understanding them. Owners or operators may search for a copy of these requirements on the Internet or at a library. FDA received comments indicating that many businesses might not have access to the Internet. Searching costs will be higher for facilities that do not have access to the Internet and have to write to FDA or find other sources of information. In the United States, 59.1 percent of the population accessed the Internet at least once in the 3 months prior to being surveyed (Ref. 7). A Small Business Administration (SBA) report cites two

studies that report 40 and 47 percent of small businesses had Internet access in 1998 (Ref. 8). An updated report from Dunn and Bradstreet in 2002 reports that 71 percent of small businesses have Internet access (Ref. 9). Therefore, FDA assumes that 71 percent of domestic facilities will search for the requirements for both regulations electronically. FDA estimates it will take domestic facilities with Internet access 1 hour to search for the requirements, and domestic facilities without Internet access 2 hours to search for the requirements. FDA requests comments on these assumptions.

FDA expects foreign establishments to go through the same searching, reading, and comprehending steps as domestic establishments. Costs for searching, reading, and comprehending the regulation requirements will be higher for some foreign establishments than for domestic establishments due to distance and language differences. Costs for searching, reading, and comprehending for some foreign establishments may be so high that, rather than become informed about the requirements before shipping, they learn about the requirements after shipments to the United States have been made. Costs for searching, reading, and comprehending for foreign facilities will vary depending on: (1) Whether the worker researching the regulatory requirements or the person who manufactures, processes, packs, transports, distributes, receives, holds, or imports food or food packaging can read and write in English; and (2) the level of Internet access available in exporting countries.

The percent of foreign facilities with Internet access will be lower than in the United States. Although 71 percent of the small businesses in the United States have Internet access, only 3 percent of the population of China, the country that has the largest number of manufacturers that export to the United States, has access to the Internet (Ref. 7). To get an idea of how many facilities that export to the United States have access to the Internet, FDA looked at Internet access for the 26 countries that represent 80 percent of the manufacturers that export to the United States (OASIS) and the percent of the population that has access to the Internet worldwide for the remaining 20 percent. A weighted average of these 26 countries by the number of manufacturers suggests that 26 percent of the population that exports to the United States has Internet access. Because businesses are more likely to have Internet access than individuals, FDA adjusts the percent of the

populations of other countries with Internet access upward by the percent difference in Internet access between individuals and small businesses in the United States. Seventy one percent of small businesses in the United States have Internet access versus 59 percent of the population, or the percent of businesses with Internet access represents a 20 percent increase over the population. Applying this adjustment to Internet access in foreign countries increases the percent of businesses with Internet access from 26 percent to 31 percent. FDA therefore assumes that 31 percent of foreign manufacturers would be able to research the new requirements electronically. Regardless of whether the cost of obtaining Internet access is borne by the facility, or by a third party, for ease of computation FDA estimates the cost per facility. FDA expects that, due to the overall lower level of Internet access in foreign countries, it will be more difficult for foreign facilities without Internet access at their place of business than it will be for domestic facilities to access the Internet elsewhere. FDA assumes it would take foreign facility operators that do not have access to the Internet 5 additional hours to search for the recordkeeping requirements. FDA requests comments on these assumptions.

In addition to search costs, there are costs for reading and comprehending the regulation requirements. Reading costs depend on the length of the document that describes the requirements and the reading speed of the user. Costs for comprehending the regulation requirements are linked to the reading speed of the user. For purposes of simplicity FDA assumes that, on average, the user comprehends the requirements described in the regulation after one reading. FDA requests comments on this assumption.

The online speed-reading training course, TurboRead Speed Reading (Ref. 10), estimates that the average reading speeds for the vast majority of the worlds' readers is between 200 and 250 words per minute. Dividing the approximate length of the current proposal (approximately 44,450 words) by an average speed of 225 words per minute yields an estimate of the time required to read the regulation of about 3 hours and 18 minutes. Because the length of the document may change and the approximate nature of the calculation, FDA rounds up to the nearest half-hour to 3 1/2 hours for the time required for reading and comprehending the requirements of this rule for all English reading users. FDA requests comments on this assumption.