## Lesson 12 READ THIS STORY #2, Advanced

## **Pharmaceutical Research**

Pharmaceutical companies spend a great deal of money on research. They are continually attempting to develop new products that will be therapeutic for a large number of people. New medicines must be tested to ensure that they will produce the desired result safely. Also, the optimum dosage of each new medicine must be determined.

Usually a new medicine is first tested on animals, then on human volunteers, and finally on patients. It's an arduous task to go through the process of having a medical drug licensed by the Food and Drug Administration. In unusual situations, a drug may be placed on a "fast track" to make it available to the public in a shorter amount of time.

After a medicine is approved, it must be marketed. Physicians must be made aware of its benefits so that they will recommend the new medicine when it's appropriate. Advertisements appear in medical magazines. Salesmen leave samples and printed information in doctors' offices. Recently, pharmaceutical companies have begun advertising their new products directly to the consumer, hoping this will increase demand. Possible side effects are mentioned casually, in very small print. But benefits of the drug must outweigh its risks.

Despite extensive research, sometimes toxic reactions are reported after a medicine is released. In that case, the FDA may withdraw the license, and the new medication will no longer be available.