designed and validated by regulatory authorities are conducted on each potential pesticide before its approval. The studies evaluate all circumstances of human and environmental exposure. Studies are carried out in compliance with Good Laboratory Practice, an international framework that ensures data quality and integrity. Experts from regulatory authorities review data and conduct risk assessments based on each pesticide’s composition, dose and exposure to determine if it can be used safely. Regulators estimate exposure based on how a product will be used. They also set strict rules around potential residues. Generally, a product is considered safe for use when the likely exposure is at least 100 TIMES LOWER than the dose that causes no adverse effects in the studies. Only products that meet all stringent regulatory requirements are authorized.

The crop protection industry spends $71 MILLION on safety tests for every pesticide brought to market. Regulatory approval is only given if tests prove products are safe for human health and the environment. It takes 11 YEARS to develop a new product from discovery to commercialization. Much of this increase is due to the rise in volume and complexity of data required by regulatory bodies to ensure products are safe and effective.

The cost of bringing new pesticides to market has increased 55% since the turn of the century. After registration, each pesticide is subject to:

- Periodic review of authorizations
- Requests for post-commercial monitoring or additional data on product safety
- Updates due to changes in regulatory systems

Regulatory data requirements continue after product authorizations have been granted. More than 150 STUDIES The pesticide authorization process is one of the most stringent in the world for any product. The studies provide data on:

- Health and environmental safety
- Efficacy and quality of a product

100 TIMES LOWER than the dose that causes no adverse effects in the studies.

Learn more at CropLife.org/transparency.