

U.S. Agencies Hope to End Testing on Dogs

Three federal agencies sign an agreement to develop testing methods that do not involve animals.

Posted: February 26, 2008, 5 a.m. EST

The Environmental Protection Agency (EPA), the National Toxicology Program, and the National Institutes of Health (NIH) recently signed an agreement to develop and implement new testing methods for chemicals and drugs that do not involve animals, USA Today reports. The new toxicity-testing systems will rely on human cells grown in test tubes and computer-driven testing machines, rather than injecting animals with experimental chemicals.

The new methods will allow researchers to test thousands of chemicals at one time. A glass tray with more than 1,000 tiny wells holds human cells. A computer-driven testing machine drips a different chemical into each well. After some time has passed, the machine shines a laser into each well so the computer can analyze the human cells' reaction to the chemical.

Efforts to implement the new programs began in 2005, when the EPA and the National Toxicology Program sought to speed up toxicological testing. Last year, a report by the National Research Council explained how faster testing might be achieved.

The federal agencies will start using the new systems with compounds previously tested on animals, said Francis Collins, director of the NIH's National Human Genome Research Institute. These tests will help confirm that the new methods are accurate.

The EPA has already implemented some of the new testing methods and has begun evaluating 300 chemicals using them. The agencies say full implementation of the new methods will take some time, as it requires scientific validation of the new tests, but said the first phase of implementation should be finished this year.