



Quick Facts about the Pesticide Data Program (PDP)

History

USDA-AMS started PDP in May 1991 to test commodities in the U.S. food supply for pesticide residues.

PDP has tested **112 different commodities**: fresh/frozen/canned fruit and vegetables, fruit juices, baby food, infant formula, dairy products, grains, corn syrup, nuts, peanut butter, honey, eggs, poultry, beef, pork, catfish, salmon, bottled water, private and school well water, and municipal drinking water.

PDP has tested for more than **450 different pesticides**: insecticides, fungicides, herbicides, and growth regulators.

Sampling Operations

PDP samples are collected by **10 participating States**, which represent about **50 percent** of the Nation's population and all regions of the country.

Samples are collected **close to the point of consumption**. Collection at terminal markets and large chain store distribution centers allows the capture of sample identity data, takes into account pesticide degradation during transit and storage, and provides data on residues from postharvest applications of fungicides and growth regulators.

The number of samples to be collected is **apportioned** according to State **population** or commodity **production** figures.

Samples are **randomly chosen** without regard for commodity origin or variety. Samples reflect what is typically available to consumers throughout the year.

PDP's statistically-reliable sampling protocol is designed to select random samples that best represent pesticide residues in the food supply to allow for **realistic estimates of exposure** to these chemicals.

All participating States **ship samples** to a single laboratory for dedicated commodity analysis.

PDP maintains **Standard Operating Procedures (SOPs)** designed to provide criteria to State samplers for site selection and specific instructions for sample selection, shipping, and handling.

Support and oversight for all sampling operations is provided by USDA's National Agricultural Statistics Service (NASS).

Laboratory Operations

Analytical services are provided by **7 State** laboratories and **1 USDA** laboratory. Participation as a contributing laboratory is **voluntary** and is funded through a Cooperative Agreement between the laboratory and USDA.

Upon receipt, samples are visually **examined** for acceptability and are **discarded** if determined to be inedible (decayed, extensively bruised, or spoiled).

Accepted samples are prepared (washed with inedibles removed) **emulating consumer practices**. All sample preparations are controlled by program-wide Standard Operating Procedures (SOPs) that **ensure consistency** between laboratories.

Residues are isolated from composite samples using **various extraction and clean-up** procedures. Extracts are then ready for instrumental analysis.

All extraction **methods** and **instrumental systems** are independently **validated** by the laboratory performing the analysis.

PDP requires continuous **quality assurance (QA)** controls and on-site monitoring by independent QA officers to ensure the reliability of PDP data. Performance **equivalency** of the participating laboratories is monitored by a program-wide **proficiency testing program**.

All **residues** initially identified are **verified** using various forms of mass spectrometry or alternate detection systems.

PDP laboratories also report **non-detects** for all pesticides screened, with corresponding Limits of Detection (LODs).

Database Management & Reporting

PDP maintains an **electronic database** which serves as a central repository for its residue monitoring data. The data captured and stored in the PDP database include product information, residue findings, and process control recoveries for each sample collected and analyzed, plus fortification results for each set of samples.

Data for each **calendar year** are stored in a separate database structure, allowing for easier administration and reporting of data.

PDP utilizes a customized Web-based **software application** package that provides participating laboratories with the ability to **enter the PDP data** into interactive data entry screens using just a Web browser and **Internet** access. The data are stored directly into a central database that resides in Washington, D.C.

Ad hoc queries and customized reports are generated in response to **data requests** from government agencies and the public sector.

PDP calendar year **databases** are available for download from the PDP Web site.

PDP has published **Annual Summary** reports to present program findings for calendar years 1991 through 2013.