

# How to Forecast Reagent Demand Using Your Own LIS Data

A 5-step method to predict consumption and stop guessing

Article 2 of 22

7 min-minute read

**90%**

Of labs have the data they need in their LIS

**10-15%**

Safety buffer above calculated need

**2-3 Qtrs**

To achieve high forecast accuracy

*Emergency orders, stockouts, and overstocked shelves all stem from the same root cause: guessing instead of forecasting. Your Laboratory Information System already contains everything you need to predict next month's reagent consumption with reasonable accuracy. Here is a straightforward method any lab can apply.*

## 1 Pull 12 Months of Test Volume Data

Export your test-level volume data from the LIS for the past 12 months. You want the number of times each test or panel was ordered, broken down by month. If your LIS cannot export easily, most can generate a test utilization report that gets you close enough.

**QUICK TIP:** Start with your top 10 highest-volume tests.

## 2 Calculate Your Monthly Average and Trend

For each test, compute the simple average of monthly volume. Then look at the trend: compare the average of the most recent three months to the average of the earliest three months. If the recent average is more than 10% higher, you have a growth trend and should factor that into your forecast.

**QUICK TIP:** A simple spreadsheet with 12 months of data is all you need.

## 3 Convert Test Volume to Reagent Units

Each test consumes a known quantity of reagent. Divide your forecasted test volume by the number of tests per reagent unit to get the number of kits you need. Do not forget to add the reagent consumed by QC runs and calibrations—this is a common blind spot that causes shortfalls.

**QUICK TIP:** Check package inserts for tests-per-kit. Add QC and calibrator consumption.

## 4 Add a Safety Buffer

No forecast is perfect. Add a safety stock buffer of 10–15% above your calculated need, or enough to cover your supplier's lead time plus a few days. If your supplier typically delivers in five business days, keep enough stock on hand to cover at least seven to eight days of usage beyond your reorder point.

**QUICK TIP:** Safety buffer = enough to cover lead time + 2-3 extra days.

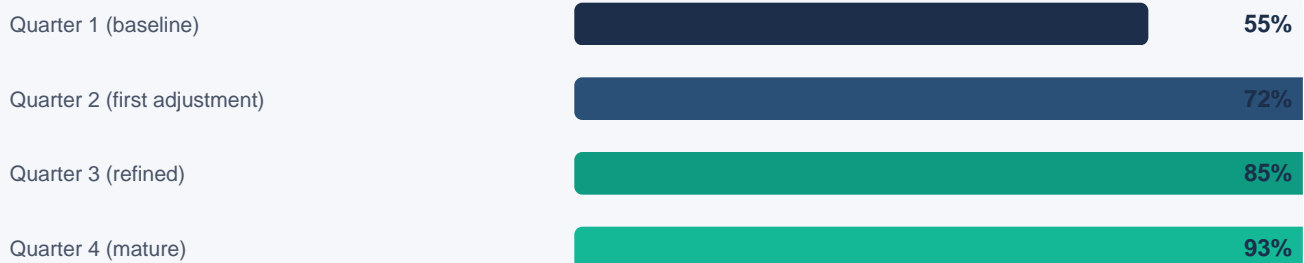
## 5

### Review and Adjust Quarterly

Set a quarterly reminder to compare your forecast to actual consumption. Adjust your averages, trend factors, and safety stock as needed. Over time, your accuracy will improve and emergency orders will become rare events rather than a weekly headache.

**QUICK TIP:** Track forecast vs actual each quarter. Accuracy improves with every cycle.

#### FORECAST ACCURACY IMPROVES OVER TIME



*Typical forecast accuracy trajectory for independent labs*

**BOTTOM LINE:** You do not need sophisticated software. A spreadsheet with 12 months of LIS data and these five steps will outperform gut-feel ordering every time.

#### FREE TOOLS TO GET STARTED

Template	What It Does
<a href="#">12-Month Demand Forecast</a>	Rolling forecast with trend analysis and kit conversion
<a href="#">Reorder Point Calculator</a>	Auto-calculate par levels and safety stock

#### Download the complete JIT4LABS Templates Toolkit

23 ready-to-use Excel templates covering inventory, financials, compliance, and more.

Visit: [jit4you.myshopify.com/resources](https://jit4you.myshopify.com/resources)

This is Article 2 of the **JIT4LABS Lab Operations Resource Series** — 22 practical guides for independent diagnostic labs.