

Senate Bill 35 – Section 14

Cost, Benefits, and Impact

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Qualitative vs. Quantitative

Qualitative Analysis:

Qualitative testing tells you if a particular drug is present

- It is a Yes or No answer to the question (is there a controlled substance in this sample)
- It is how the current drug laws in NV are written (as with all other States from our research)
- It provides very little uncertainty in the testing process (if any)
- It is rapid and can be accomplished with many analytical techniques in a lab (flexible)

Quantitative Analysis:

Quantitative testing tells you how much of a drug is present

- It is a percent answer to the question (what percent of a controlled substance is in this sample)
- It is not how the current drug laws in NV are written
- It introduces more uncertainty to the testing process
- It is much more cumbersome, and needs dedicated processes and personnel in the lab (more rigid)

Additional Considerations

From our research, no other state performs quantitative analysis to support possession or trafficking charges.

The State would need to create new possession and trafficking weight thresholds for quantitative analysis.

- If the State does not change the weight thresholds, the amount (weight) of controlled substances that could be trafficked in Nevada under a possession charge would drastically increase.
- Laboratories won't have the ability to quantify all controlled substances, therefore, the State will need to determine how to develop charges for quantitative and qualitative analysis and how courts could apply charges when a mixture of the two are within one sample.

No Quality Control for Illicit Controlled Substances.

- Currently, individual users know how much of a controlled substance they are purchasing (weight / number of pills).
- With quantitative analysis, individual users don't have the ability to confirm how much of a controlled substance they are purchasing.
- This creates a potential risk for users to buy an illicit substance with a higher quantitative value than expected, causing them to reach trafficking thresholds.

Benefits and Impacts

Forensic Laboratories: **No Benefit**

Impacts:

- New testing protocols and processes would need to be developed and validated to meet new statutory requirements.
- Time to complete analysis is projected to increase by by 4-6 times per sample.
- More of a sample or additional sample(s) will be need to be analyzed to support charges.
- Reference materials needed to perform quantitative analysis may not be available for all controlled substances and therefore, only some controlled substances could be quantified.
- Quantitative testing would significantly increase annual operating and personnel costs.
- Quantitative analysis would significantly increase exposure to hazardous drugs for laboratory and evidence staff.
- All cases would need to be tested for court, which would increase the number of cases analyzed by the laboratory.
- The increase in testing time would create significant delays in turnaround times and reporting.
- Quantitative testing would significantly increase analyst time spent at court testifying. This will reduce analyst time in the lab, further impacting delays in reporting and turnaround times.

Benefits and Impacts

Court System: **No Benefit**

Impacts:

- Delay in charging - Quantitative analysis would require full testing for all cases before charges could be established.
- All members present in court would have increased exposure to hazardous drugs (judges, attorneys, jurors, etc.).

Law Enforcement Agencies: **No Benefit**

Impacts:

- Delay in charging - Quantitative analysis would require full testing for all cases before charges could be established.
- There would be a significant increase to the cost of analysis per sample. Agencies will be charged for these services, and this will have a significant impact to many rural agencies that may not have sufficient budget to pay for testing.

Cost Analysis - Initial Costs

Item	Quantify Fentanyl Only	Quantify Fentanyl + Derivatives	Quantify All Controlled Substances	Time To Implement
Chemical Fume Hood and Installation	\$120,000 - \$190,000 (one hood)		\$140,000-\$230,000+ (two hoods)	6-12 months
Safety Equipment	\$20,000		\$60,000	2-4 weeks
Instrumentation and Training	\$130,000 Upgrade an existing instrument	\$480,000 New LC-MS-MS instrument	\$960,000 Two new LC-MS-MS instruments	<ul style="list-style-type: none"> • 2-4 months to receive the instrument after the purchasing process • 1 month for analyst training and competency • 12-16 months to complete an instrument validation • additional validation will be needed per controlled substance
Consumables	\$30,000		\$60,000	N/A
Personnel	\$157,000 (1 new analyst)		\$628,000 - \$942,000 (4-6 new analysts)	<ul style="list-style-type: none"> • 6-8 months to train an analyst. Analysts could be trained concurrently, but only 2 or 3 at a time.

Cost Analysis - Ongoing Costs

Item	Quantify Fentanyl Only	Quantify Fentanyl + Derivatives	Quantify All Controlled Substances
Safety Equipment:	\$15,000 per year		\$45,000 per year
Instrumentation:	\$80,000 per year		\$160,000+ per year
Personnel:	\$157,000 per year (1 additional analyst)		\$628,000 - \$942,000 per year (4 to 6 additional analysts)

Note: The laboratory does not have enough space to accommodate 5 or 6 more analysts. Additional construction costs would be needed to increase laboratory space for sample preparation and to build new office space for one to four analysts. These costs would have to be evaluated after the study is completed.

Additional costs would be needed to upgrade the Laboratory Information Management System (LIMS). The cost for this upgrade would be directly affected by the outcome of the study. Costs could be \$200,000 or more.

For Quantifying Fentanyl and Quantifying Fentanyl Derivatives, a second LC-MS-MS will be needed to serve as backup in the event the original LC-MS-MS goes out of service. This will be a future cost to the laboratory.