Redux Pro

Clinical Outcomes & Moisture Data Guide

Interpreting Moisture Readings for Hearing Care Professionals

Reuben Zielinski, BSEE, MSME, MBA, President & Co-Founder
Mark Campbell-Foster, AuD, CCC-A, Director of Marketing

Redux
9715 Kincaid Drive, Suite 1200
Fishers, IN 46037

April 2026

1. Introduction

Redux Pro provides measurable moisture removal data in microliters (µL), giving clinicians a way to quantify something that would otherwise go unnoticed. This document provides hearing care professionals with a practical framework for interpreting Redux Pro moisture readings, counseling hearing device users, and building awareness around the relationship between moisture and device performance.

Redux Pro is an ultra-efficient evaporation system that lowers the boiling point of water under a vacuum, enabling safe, complete moisture removal from hearing devices. Based in Fishers, Indiana, Redux holds over 72 patents and is trusted by more than 3,000 hearing care professionals worldwide.

Hearing devices are worn in a high-humidity, body-temperature environment where moisture exposure is part of everyday use. Perspiration, environmental humidity, condensation, and daily wear can all contribute to moisture being present within the device. Redux Pro data shows that hearing device users may report noticeable improvement after professional drying even when no obvious issue was identified before treatment.

2. About the Data

More than 100,000 moisture readings from real clinical settings show a consistent pattern: across all measured moisture levels and device conditions, hearing device users reported improvement after professional drying.

The dataset used in this guide represents one of the largest known observational analyses of professional hearing device moisture removal outcomes. Data was collected using Redux Pro units across clinical settings. Of the 102,133 readings with measured moisture, 33,673 also include hearing device user assessments of device performance before and after Redux Pro treatment. These user-reported assessments form the basis for the improvement rates presented throughout this guide.

Dataset Overview

Metric	Value
Data Collection Period	Nov 2019 - July 2022
Readings with Measured Moisture	102,133
Readings with Reported Outcome	33,673
Unique Machines	532
Clinical Partners	257
Clinic Locations	451

3. The Moisture Zone Framework

Any amount of measured moisture removal, no matter how small, was associated with noticeable improvement after treatment. Higher moisture readings were associated with higher rates of perceived improvement.

To help clinicians quickly interpret Redux Pro moisture readings, the data supports a three-zone classification system based on the volume of moisture extracted. These zones provide a practical framework for counseling hearing device users and guiding clinical decision-making.

Zone Overview

The table below shows the distribution of readings across each zone alongside the improvement rate, giving a complete picture of what each zone means in practice.

Zone	µL Range	Count	% of Total	Mean µL	Median µL	Improved	Improvement Rate
Blue	<1.5 µL	66,134	64.8%	0.83	0.9	15,829	**75.7%**
Yellow	1.6-4.0 µL	23,589	23.1%	2.4	2.2	6,686	**82.3%**
Red	>4.1 µL	12,410	12.2%	13.48	8.6	3,939	**84.9%**
Overall	>0.1 µL	**102,133**	100%	2.73	1.1	**26,454**	**78.6%**

Note: Improvement rates are based on the 33,673 readings where hearing device users reported their outcome.

Blue Zone (< 1.5 µL)

The majority of treatments (64.8%) fall in the Blue Zone. In this range, 75.7% of hearing device users reported noticeable improvement after treatment, showing that any amount of measured moisture can be associated with perceived benefit following professional drying.

Counseling guidance: 3 out of 4 hearing device users in this range notice improvement in sound quality after treatment. The device had internal moisture from daily wear, and Redux Pro removed it. Regular preventive treatments help keep moisture at bay and reset the device at baseline.

Recommended next steps: Reinforce the value of routine moisture management. Encourage daily use of a hearing device dryer at home, along with regular in-office Redux Pro treatments as part of a preventive care routine.

Yellow Zone (1.6-4.0 µL)

About 23.1% of treatments fall in the Yellow Zone. The observed improvement rate rises to 82.3%, with a larger share of hearing device users reporting noticeable benefit after treatment compared with the Blue Zone.

Counseling guidance: More than 4 out of 5 hearing device users in this range report noticeable improvement after treatment. This range is associated with a higher likelihood of noticeable benefit following professional drying. Reviewing care habits, storage routine, and moisture exposure may be appropriate.

Recommended next steps: Review daily care routine, storage habits, and environmental moisture exposure. Consider more frequent Redux Pro treatments, along with daily at-home drying, to support ongoing device performance.

Red Zone (> 4.1 µL)

About 12.2% of treatments fall in the Red Zone, with a mean moisture extraction of 13.48 µL and a median of 8.6 µL. This group shows the highest observed improvement rate at 84.9%, indicating a high likelihood of noticeable device improvement following professional drying. Redux Pro data also shows that more than half of inoperable devices are restored through treatment (see Section 4).

Counseling guidance: Nearly 85% of hearing device users in this range notice improvement after treatment. This level is associated with the highest observed likelihood of noticeable benefit following professional drying. Users may report concerns such as reduced volume, distortion, or intermittent function. A conversation about moisture prevention strategies, storage habits, and scheduling regular Redux Pro treatments is recommended.

Recommended next steps: Prioritize follow-up care. Evaluate the device and patient-reported listening experience after treatment. Discuss daily moisture-management habits, including the use of a hearing device dryer, and consider scheduling regular Redux Pro treatments. A follow-up appointment may also be appropriate to reassess device performance over time.

4. Improvement by Pre-Treatment Device Condition

Moisture removal can improve the listening experience even when devices appear to be functioning normally, and Redux Pro data shows that more than half of completely inoperable devices are restored through treatment.

The table below groups results by the device's starting condition at check-in.

Starting Condition	Total	Improved	Improvement Rate	Mean µL	Median µL
Normal	16,168	12,880	**79.7%**	2.61	1.3
Weak	9,425	7,455	**79.1%**	2.94	1.1
Dead	2,006	1,023	**51.0%**	4.33	1.2
Not Recorded	6,074	5,096	**83.9%**	2.69	1.2
Overall	**33,673**	**26,454**	**78.6%**	2.82	1.2

Even "Normal" Devices Benefit

Among devices classified as normal at check-in, 79.7% of hearing device users still reported noticeable improvement after Redux Pro treatment. In these cases, neither the clinician nor the hearing device user had identified a clear performance concern before treatment. Yet after professional drying, nearly 8 out of 10 users reported a noticeable difference. This suggests that professional drying can deliver noticeable benefit even when a device appears to be functioning normally.

Redux Pro Restores More Than Half of Inoperable Devices

Redux Pro data shows that 51.0% of devices classified as dead at check-in were restored to function through drying treatment alone (1,023 out of 2,006). More than half of devices that arrived inoperable were recovered in office through professional moisture removal, which may help reduce disruption for hearing device users and avoid unnecessary time without their devices.

5. Suggested Counseling Framework

The following is a suggested framework that hearing care professionals can adapt to their own practice and communication style when discussing Redux Pro results with hearing device users.

Universal Message (All Zones)

Consider opening every counseling conversation with a consistent baseline message. This sets a positive tone and frames Redux Pro as part of routine hearing care:

"We ran your hearing devices through the Redux Pro, and it detected and removed moisture from inside. Moisture exposure is a normal part of daily wear, and professional drying can provide noticeable benefit even when no obvious issue is suspected. The good news is, we've taken care of it. Let me show you what we found."

Zone-Specific Guidance

After the opening message, the conversation can be tailored based on the moisture zone. Across all zones, many hearing device users report noticeable improvement after treatment, with higher moisture readings associated with higher rates of reported benefit. A home dryer that achieves complete moisture removal may help support ongoing moisture management between office visits.

Zone	Reading	Suggested Messaging
Blue	< 1.5 µL	*"Your hearing devices had measurable moisture inside from everyday use. After treatment, about 3 out of 4 people in this range report noticeable improvement. Regular drying, including consistent home drying, can be a helpful part of keeping your hearing devices performing consistently."*
Yellow	1.6-4.0 µL	*"We removed a higher level of moisture from your hearing devices today. More than 4 out of 5 people in this range report noticeable improvement after treatment. Let's talk about your storage habits, daily care routine, and using a home dryer consistently to help manage moisture between visits."*
Red	> 4.1 µL	*"We removed a high level of moisture from your hearing devices today. Nearly 85% of people in this range report noticeable improvement after treatment. Because devices in this range show the highest observed likelihood of benefit from professional drying, I'd recommend we talk about regular drying treatments, home drying, and your daily care routine."*