

ASL interpreters sacrifice their physical and mental health at large corporate firms

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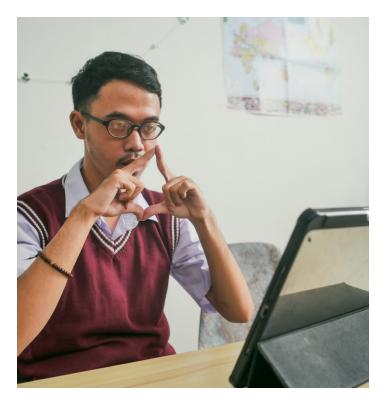
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INTRODUCTION

American Sign Language (ASL) interpreting is harder than most people think, if they have ever thought about it at all. Listening to someone speak English or Spanish and simultaneously using one's hands to translate into sign language is mentally and physically taxing in most settings, but in Video Relay Service (VRS), academic studies and interpreters working for large corporations report serious health and safety risks that lead to burnout and a manufactured interpreter shortage¹ that plagues the industry and hurts Deaf consumers.

As outlined in PESP's **2024 report** on the VRS industry, in recent years, Sorenson Communications and ZP Better Together have controlled the overwhelming majority of the VRS market; their private equity owners, which have been focused on rapid profit expansion, have largely shaped the industry.² Under this system, interpreters who make the firms run and those who rely on the service have suffered, even as federal funds paid to these companies has greatly increased in an effort to comply with the Americans with Disabilities Act.³

The 2024 report detailed significant problems with interpreters' working conditions that has since led interpreters to launch an organizing campaign with the Office of Professional Employees' International Union (OPEIU) in September 2024.⁴ Interpreters have spent months organizing their coworkers, speaking out about working conditions, decrying problems facing the Deaf community, and seeking to meet with their employers and their corporate owners.⁵ As of this writing, Sorenson's private equity owners, Ariel and Blackstone, and ZP Better Together's owner, Teleperformance, have refused to meet with these interpreters about working conditions and collective bargaining rights.



Sorenson has openly opposed unionization, stating publicly that the company "is working to remain free of third-party representation," in March 2025.⁶ Teleperformance signed a global framework on labor rights with UNI Global Union in 2022⁷, but has not yet responded to demands from OPEIU that it apply these labor commitments to its employees in the United States.⁸

PESP has continued to investigate the VRS industry since the release of our 2024 report and learned about troubling working conditions. Such conditions may contribute to the interpreter shortage and a cycle driving more interpreters out of the VRS industry, worsening the shortage, and putting more pressure on the interpreters that remain to maintain this crucial service for the Deaf community.

KEY TAKEAWAYS

- I. Video Relay Service (VRS) is a critical translation tool that facilitates everyday communication for Deaf users.
- II. VRS is federally funded through the Federal Communications Commission (FCC), which regulates and provides reimbursements to private service providers per minute of service.
- III. Two companies with a history of private equity ownership dominate the VRS market: Sorenson Communications and ZP Better Together. Both firms have refused to meet with interpreters that are organizing a union to improve working conditions and quality of service to Deaf users.
- IV. Academic research shows a serious crisis faced by VRS interpreters employed by these two companies caused by unsafe working conditions that has caused many interpreters to limit hours or leave VRS altogether in the midst of a national interpreter shortage.
- V. PESP interviewed interpreters and academics about health and safety in the industry and found a concerning pattern of interpreters working at an intense pace and many suffering serious physical and mental health problems.

- VI. Interpreters reported working grueling shifts while in physical pain, without sufficient breaks that are normal in other types of interpreting.
- VII. When interpreters are working with high levels of physical and mental stress and experienced interpreters leave the industry in large numbers, the quality of service for the Deaf community suffers.
- VIII. The two major VRS providers have not adequately addressed working conditions, even as the FCC has significantly increased the amount the companies are paid for providing such an important service.
- IX. Both VRS providers and the FCC have a responsibility to engage with interpreters and Deaf users of VRS in good faith discussions to improve wages and working conditions of interpreters and quality of service to VRS users.



VIDEO RELAY SERVICE



For many people who are deaf and hard of hearing, Video Relay Service (VRS) is a critical translation tool in facilitating communication with family, medical providers, emergency services, and more. VRS users make calls by connecting with a VRS provider and an ASL interpreter appears on a video screen and interprets between the VRS users and hearing call recipients.⁹ In order to provide a free service to users and comply with the Americans with Disabilities Act (ADA), the Federal Communications Commission (FCC) reimburses service providers, which are required to meet certain standards such as: being available 24 hours a day/7 days a week; answering 85% of calls within 10 seconds; and ensuring confidentiality, among others.¹⁰

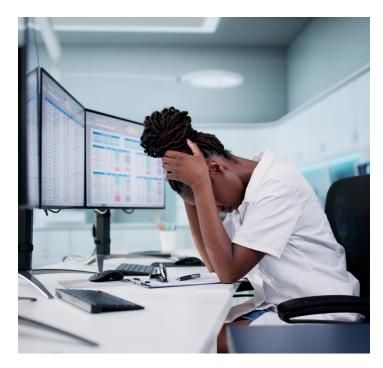
Two private companies with a history of private equity ownership dominate the VRS market: Sorenson Communications, owned by private equity firms Ariel Alternatives and Blackstone, and ZP Better Together, which was recently sold by private equity firm Kinderhook to Teleperformance, a publicly traded French company. While there are at least three additional small VRS companies, these two companies have represented the overwhelming majority of the VRS market in recent years.

ACADEMIC RESEARCH DOCUMENTS HEALTH AND SAFETY HAZARDS OF VRS INTERPRETATION

Numerous research studies have explored the issue of VRS interpreters' working conditions, poor health outcomes, and the relationship these have to the industry's interpreter shortage.

Professors Robert Pollard and Robyn Dean of the Rochester Institute of Technology have been studying working conditions, health outcomes, and their relation to high turnover in the industry for over twenty years. Research that they collaborated on in 2005 identified VRS interpreting as having greater levels of psychological distress than other ASL interpreting settings. In 2021 Dean and Pollard conducted a follow up study using saliva samples to measure changes in interpreters' levels of cortisol, a hormone associated with stress. The hormone study validated previous studies that were based on surveys. The researchers noted that:

"Occupational health problems that plague signed language interpreters (SLIs) are a major cause of the interpreter shortage in the United States and elsewhere. Interpreters suffer high rates of cumulative motion injury (CMI), burnout, and departure from the field. Most studies



regarding this problem focus on CMI and presume that the causes and potential solutions lie in the mechanics of signing. However, research also suggests that psychological stress, rather than signing mechanics alone, plays a significant role in SLI occupational health problems."¹⁶



"If high levels of burnout persist, the field could see higher levels of turnover, which could lead to further increased levels of stress and burnout. If this problem is not addressed, it will affect not only VRS interpreters, but also the users of this service (both hearing and Deaf)." A 2015 study titled "Stress and Burnout in Video Relay Service (VRS) Interpreting" (Bower, 2015) defines burnout and surveyed hundreds of interpreters to identify how widespread burnout is and what was causing its prevalence in VRS interpreting, noting that "the vast majority of participants expressed that they have experienced burnout at some point in their work as VRS interpreters, most currently struggling with burnout in their daily work lives."

Another 2015 study by researchers from Midwestern University and the Rochester Institute of Technology notes that "sign language interpreting is commonly associated with musculoskeletal injuries secondary to repetitive strain," with "VRS as one of the job settings with the highest occupational health risks." That study surveyed over 100 VRS interpreters and found that only 18.8% of survey respondents reported "no pain" from interpreting.¹⁸

Multiple studies highlight the mental stress that VRS interpreters face due to the unique nature of two dimensional video calls that occur in rapid succession with limited breaks and no way to prepare for the subject matter.¹⁹

Two studies highlight the unique effect of offensive and discriminatory caller behavior that Black²⁰ and LGBTQ²¹ interpreters face respectively. According to a 2019 study, "When harassment occurs in the workplace, but it is committed by an individual outside the company or organization, such as a video relay service consumer, it presents a unique challenge because the offender is not required to adhere to company policies and procedures."²²

A 2014 study by two researchers from the University of North Florida found that a majority of interpreters who limited hours or left VRS did so because of "stress from working conditions" or "stress from management or colleague interaction."²³

This study includes a series of responses from interpreters that shows company policies and

management behavior²⁴ can have devastating effects on the workforce and lead many to leave VRS or limit working hours in VRS, which likely contributes to a shortage of VRS interpreters. The report authors highlighted survey responses that illustrated a "coping theme" of interpreters responding to stress by reducing hours, listed on page 7.²⁵

Most existing studies called on VRS providers to take action to address the concerning results. The 2015 Bower survey compiled a list of things that interpreters report would help deal with burnout, for which the top two answers were "reduced call volume (more time between calls)" and "Increased break time." Some suggested that interpreters should follow the 20/20 rule, which is standard in other types of interpreting where interpreters in a team interpret for 20 minutes and then rest and become back-up for the next 20 minutes.²⁶

Bower also notes that:

"Although interpreters must use resources such as self-care techniques to balance stressors in their work, it is the responsibility of employers to achieve the balance for their employees within the setting as a whole. . . . It is clear that VRS interpreters are struggling, and they are requesting change on many levels. This has serious implications for the VRS industry as a whole. If high levels of burnout persist, the field could see higher levels of turnover, which could lead to further increased levels of stress and burnout. If this problem is not addressed, it will affect not only VRS interpreters, but also the users of this service (both hearing and Deaf)."²⁷

The 2021 Dean and Pollard study concluded by saying that "We believe the results of this study should engender a call to action to mitigate the health risks associated with VRS and K-12 interpreting work." The study notes the importance of interpreter employers in addressing these workplace risks by exploring and implementing "job redesign strategies aimed at achieving a healthier,

- VI 1: "I have made short term changes to my VRS work schedule (limiting the number of hours I will work consecutively), and I have made long term changes to my VRS schedule (no longer building VRS in first but rather using it as a time filler or 'extra' income rather than primary interpreting income.)"
- VI 2: "I have reduced my hours to reduce the cumulative stress and trauma that was wearing me down."
 - VI 3: "Reduce my hours and seek other employment."
- VI 4: "I've changed status from full-time to part-time."

more balanced relationship between job demands and the controls that [sign language interpreters] are able (or allowed by policy or perceptions thereof) to bring to bear in response to job demands."²⁸

Dean and Pollard also note that policy creators are often "insufficiently knowledgeable" and cannot participate in job redesign efforts without directly engaging with interpreters as well as researchers in the field. The authors call for a "consensus planning conference" that includes "representatives from the FCC, the major VRS companies, VRS workers

- VI 5: "Take more assignments out in the community rather than in VRS setting."
 - VI 6: "Work less VRS for a while; work more in the interpreting community outside of VRS to have a break from the intensity of interpreting phone calls."
- VI 7: "Reducing hours worked. Changing shift worked to one that has fewer highly emotional calls. Finding complementary work that allows me to play an active role in the situation to combat the sense of helplessness that can come up in VRS work."
 - **VI 8:** "The only coping strategy I have found is to LEAVE interpreting in VRS."

themselves, Deaf and hearing consumers of VRS services, and researchers in the field."²⁹ It has been over 5 years since this research was published; yet, Pollard and Dean report having received no follow up or engagement from VRS employers such as Sorenson Communications and ZP Better Together.

An abstract of more recent research with an expected publication date in 2025 states that "dereliction by VRS companies and the FCC is failing to identify and mitigate VRS [occupational health risks]."³⁰



"We believe the results of this study should engender a call to action to mitigate the health risks associated with VRS and K-12 interpreting work."



STORIES FROM THE FRONT LINES

Interpreters overwhelmingly do this job because of a sense of service to the Deaf community, with which they often have a very personal relationship. While VRS interpreting does have some benefits when compared to other forms of interpreting, such as guaranteed income, steady employment, and access to benefits, interviews PESP conducted in early 2025 with eleven current or recent VRS interpreters employed by ZP Better Together³¹ or Sorenson and four academics echoed conclusions in the public-health research described above. All of the interpreters reported physical and/or mental health issues related to their work in VRS. More concerning, all interpreters discussed company policies that they believe contribute to poor health outcomes and high turnover in the industry.

Lack of down time

Interpreters at both Sorenson and ZP Better Together report that employer software tracks their activity down to the second and allows for an average of about 10 minutes per hour of time not taking calls. This covers anything from bathroom breaks, to drinking water, stretching, fixing equipment, or communicating with a supervisor and therefore is not always true "break time." This is more than double recommended standards for interpreting, which typically has interpreters working in teams and alternating every 20 minutes, as "research has shown that after 20 minutes of interpreting, the integrity of the interpreted message begins to break down." 32

Company policy at both Sorenson and ZP Better Together encourages interpreters to maximize time available to actively take calls, even at the risk of limiting this downtime. Interpreters interviewed expressed a varied understanding of the details of company policy, though multiple interpreters at both companies reported that the average of these tracked metrics are used to either reward or punish interpreters for how they rank against coworkers. Taking more than the 10 minute allotment is against policy, while taking less than that ensures they stay within the requirements and allows them to "bank" break time for when it is needed in the future. Interpreters bid for preferred schedules and those are rewarded based on ranking, so interpreters that want to get their preferred schedule may feel pressure to limit breaks.

"They tell us it's six seconds [between calls], I don't believe them... More often than not I can't even take a sip of water, I can't even blow my nose," said one ZVRS (ZP Better Together) interpreter who requested to remain anonymous for fear of retaliation.

Call volume and substance

Interpreters at both major VRS providers report an intense speed of incoming calls, leaving mere seconds between finishing a call and starting a new one, as stressors that make the job difficult. The lack of time between calls means that interpreters are often jumping between very different calls with little time to reset or prepare.

"It's like boom boom boom. On VRS there is no prep time, but you don't even have time for self care. There is no time in between the last call you just took which could have been so jarring and emotional and you don't have time to debrief from that before you have to go into your next call and be a whole new person. It is very physically and mentally demanding." -Anonymous ZP Better Together interpreter



Nathan graduated with a Bachelors in American Sign Language about three years ago and has been working at Sorenson for almost a year. However, they report that within less than a year of working part time in VRS, they had to switch to only working in VRS a few hours a week, after feeling so burned out

Nathan found the working conditions in VRS much more difficult than other forms of interpreting. "In our interpreter training programs, we were told when you are working and you have a team, you should only be [interpreting] 15 to 20 minutes



at a time before switching with your team and rotating. But for VRS, we're expected to work 50 minutes straight, and then only a 10 minute break." Nathan reports that after working in VRS they experienced a flaring up of wrist pain and had to get a doctor's note for an accommodation to use a brace while working, "because usually that is not something that's allowed."

When asked what improvements they would like to see at Sorenson, Nathan noted:

- 1. More time between calls so that interpreters can process one call and prepare for the next better.
- 2. More breaks so that VRS is more like other forms of interpreting when you are not regularly going 50 minutes without time to recover.

Physical pain and a lack of support

ASL interpreting is both physical and mental work. All interpreters interviewed reported some form of pain, mostly in their wrists, arms, neck, or back. None of those interviewed had received training for good ergonomics from their employer. Some reported a small but insufficient stipend for equipment such as chairs and desks, and many reported paying for ergonomic equipment or medical care related to their work out of pocket.

"I had to wear a TENS machine³³ for my last year in VRS every shift. It was a maintenance thing. It kept the pain at bay enough so that I could do the work. ... One time when I was using it, I had a remote control... my manager addressed me asking if I was using a cell phone [which is prohibited during work hours] and I showed her the remote control. There never was a question about why I needed this or if I was OK. If I was using a cell phone was the only focus from my manager. That should have been an invitation for my manager to go to HR and say we have a health and safety issue here." -Tracy Williams, former ZP Better Together interpreter.

Abusive and traumatic calls

"In a medium where people do not have to interact with us as complete people, only hearing our voice or seeing our face and hands on a two dimensional screen, it is easy for people to disregard us as human"³⁴ – Exploring the Experiences of Lesbian, Gay, Bisexual, Transgender, and Queer, Sign Language Interpreters Working in the Video Relay Service Setting (2019)

Interpreters we interviewed reported a stressful amount of inappropriate behavior, disparagement, or even harassment by VRS users. Academic research notes how these issues can be made more difficult for Black³⁵ interpreters or who present as LGBTQ.³⁶

Multiple interpreters said that they have reported such behavior to management, but did not feel supported or listened to, which is also supported by academic research.³⁷ One academic study concluded that interpreters "experienced physical,

mental, and emotional distress due to working in the VRS interpreting field, but they rarely received support from their employers."³⁸

Interpreters can also witness traumatic things while on a video call. Krista, a Sorenson interpreter, reported that she had a call and was interpreting for a couple at a train station who were dealing with a ticket issue while fighting when she witnessed a man hit his girlfriend and had to interpret the call while the woman was bleeding. "I was so in shock and shaken up."

Low staffing

Most interpreters reported various forms of feeling understaffed. This includes not having enough staff on phones to cover the volume of incoming calls, which results in long queue times for Deaf users and increased workload for interpreters. Because VRS providers are reimbursed by the FCC on a per minute basis and pay interpreters by the hour, there is an incentive to keep the least number of interpreters on the clock in order to handle call volume in accordance with FCC regulations. Such low staffing and high wait times can contribute to interpreters feeling pressured to take more calls with fewer breaks, as they do not want to see Deaf users with long wait times.

"They are trying to save money by not staffing appropriately ahead of time because just like any other company you try to cut where you can but then they see that ... we have got over 140 people in the queue. Let's approve OT now at the last minute. .. who can pick that up last minute? In that situation both the Deaf user and the interpreters suffer."

-Anonymous interpreter at ZP Better Together

Researchers have documented a cycle in the VRS industry, in which experienced interpreters leave or limit VRS hours, seeking less stressful interpreting opportunities.³⁹ This means there are fewer experienced interpreters in VRS and fewer interpreters available, which lowers VRS quality for users and leaves more work on the plate of the remaining interpreters.



Tracy started on her path to becoming an interpreter after working at a summer camp at age 19 in a signing environment and learning a bit of the language, later studying ASL in college and going to grad school at Gallaudet University. She became active in a National Civil Rights movement led by the Deaf community pushing for a Deaf president at the University⁴⁰ and later was embraced by a group of CODAs who taught her how to be an interpreter.

Tracy started as a VRS interpreter at the inception of the program, working first for Sorenson and later for what became ZP Better Together, working in VRS for 10 years, leaving for 10 years when she was able to find sufficient work as a freelance interpreter in Texas and coming back to ZP Better Together in 2022 where she worked full time until she left VRS in February 2025.

Tracy has experienced many health issues during her time as a VRS interpreter in her hands, wrists, shoulder, and back, as well as ear and headaches from wearing headsets. Towards the end of her time in VRS, she began wearing a TENS unit to help deal with back pain while working.

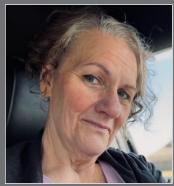
Tracy described two major issues she would change in order to better protect interpreters:

- 1. Reduce the minimum amount of minutes required to be available to take calls to 30 minutes an hour, more like the industry standard. This would create an environment where they could retain interpreters for a long time. "There is not enough focus on retaining interpreters, the focus is on recruitment... That would cut into the profits, but churn costs money."
- More support for interpreters' mental health and support dealing with hostile or abusive customers.



TENS unit that Tracy used to deal with pain while interpreting.





Tracy's right hand "following surgery for Trigger Finger."

KRISTA

Krista has worked in VRS for 14 years total and has been working at Sorenson for seven years after spending seven years at ZP Better Together. When Krista began working VRS full-time, she reports increased back pain and had to go back to part time for health reasons in December 2024. "I was worried I was going to do damage to myself or my back." She reports having to see specialists when working full time, paying out of pocket for copays and other expenses. She also described the mental burnout that affected her personal life, feeling so fried after a shift that she didn't want to be on



the phone or see friends, simply feeling exhausted. "The happiness quotient was just compromised when working full time. I don't know how people do it."

Krista believes the current industry practice of requiring interpreters to regularly interpret for 50 minutes without a break is unsustainable and has joined the effort to unionize her workplace to improve things. She notes three main things that need to change:

- 1. More time between calls.
- 2. More time for breaks.
- 3. A more supportive chain of command, where management listens to you if you are in pain or had a traumatic call.

CONCLUSION AND RECOMMENDATIONS

There is a growing body of research that finds a connection between the quality of VRS service and healthy working conditions for interpreters. When private equity owned firms focus on quickly increasing profits at the expense of a long term vision for a quality VRS system, everyone suffers.

ZP Better Together's new owner, Teleperformance, has the opportunity to transition away from this model and invest in its workforce. Three years into their current ownership structure, Sorenson's private equity owners, Ariel and Blackstone, still have the opportunity to implement their firms' important statements around **workforce principles** and investing in minority-owned and operated companies and their diverse employees to **generate** growth in underrepresented communities.

In order to ensure an improved and resilient VRS system, fully in compliance with the ADA, it is necessary for all stakeholders to have a seat at the table, including VRS providers, the FCC, academic researchers, Deaf users, and interpreters.

To achieve this, VRS providers should:

- Engage with interpreters through their independent organizations, such as trade unions and employee associations.
- 2. Commit to refrain from anti-union efforts and meet and bargain in good faith with workers who have chosen to be represented by a union.
- Collaborate with academic research studies to identify best practices for interpreter health and safety.
- 4. Collaborate with interpreter organizations and researchers to jointly lobby for necessary FCC

- policy changes where FCC regulations inhibit best practices.
- 5. In collaboration with interpreters, review current policies and limit those that directly or indirectly threaten employee wellbeing, such as rewarding employees for skipping breaks. Instead, they should adjust policies to increase breaks and time between calls for interpreters.

The Federal Communications Commission (FCC) should:

- Engage all stakeholders, including Deaf associations, VRS providers, independent interpreter organizations, and VRS users to reevaluate current VRS regulations.
 - a. This reevaluation should specifically study the appropriate amount of FCC reimbursements that should go directly to wages and benefits of interpreters and establish clear enforceable rules around these minimum standards.
 - b. The FCC should request information from VRS providers about their current pay structures and what percent of reimbursements are going to wages and other items, such as research, debt service, and other categories to better understand whether rates need to go up or down or whether VRS providers are not using the reimbursements correctly.
 - c. Ensure that current stakeholder engagement is more open to the public so that the Commission can hear from VRS users and make sure their needs are being addressed in the rulemaking process.

ENDNOTES

- Pollard, R. Q., Dean, R. K., Samar, V. J., Knigga, L. M., & Taylor, T. L. (2021). Cortisol dysregulation among American Sign Language interpreters in different work settings: Confirmation of occupational health risks. *Interpreting and Society*, 7(1), 28-50. (Original work published 2021).
- FCC Fact **Sheet**, The FCC stated in 2021 that "one provider, Sorenson Communications, Inc. (Sorenson), dominat[es] the market," estimating that as recently as 2014, "Sorenson provides about 80% of the VRS minutes logged every month, and its two principal competitors each provide another five to ten percent". Under private equity ownership, the "two principal competitors," ZVRS and Purple, combined to form ZP Better Together in **2017**. In 2023, Sorenson **acquired** the customers of a smaller VRS provider, GlobalVRS.
- In the Matter of Telecommunications Relay Services and Speech to-Speech Services for Individuals with Hearing and Speech Disabilities Structure and Practices of the **Video Relay Service** Program, June 28, 2024, pages 2, 8; **Lost in Interpretation: Private equity's capture of a vital sign language translation tool**, Private Equity Stakeholder Project, August 2024.
- 4 https://aslunion.org/why-a-union/
- 5 https://aslunion.org/
- American Sign Language interpreters union alleges poor working conditions, asks FCC to intervene, Texas Public Radio, March 3, 2025.
- 7 Teleperformance and UNI Global Union sign global agreement, January 12, 2022,
- 8 **U.S.-Based Workforce, Unions Call on Teleperformance to Protect Service Quality**, EIN Presswire, February 26, 2025; **Global Agreement on Social Responsibility between Teleperformance and UNI Global union**, December 1, 2022.
- 9 FCC Consumer Guide, Video Relay Services, accessed May 2025.
- 10 **Lost in Interpretation: Private equity's capture of a vital sign language translation tool**, Private Equity Stakeholder Project, August 2024, page 3.
- 11 **Austin-based video relay service co. ZP Better Together sold for \$490M**, Austin Business Journal, Feb 6, 2025.
- 12 Video Relay Service Providers, Federal Communications Commission, accessed May 2025.
- FCC Fact Sheet, TRS Fund Compensation for VRS, April 29, 2021; The FCC stated in 2021 that "one provider, Sorenson Communications, Inc. (Sorenson), dominat[es] the market," estimating that as recently as 2014, "Sorenson provides about 80% of the VRS minutes logged every month, and its two principal competitors each provide another five to ten percent". Under private equity ownership, the "two principal competitors," ZVRS and Purple, combined to form ZP Better Together in 2017. In 2023, Sorenson acquired the customers of a smaller VRS provider, GlobalVRS.
- Dean R. K., Pollard R. Q, Samar V. J. (2010, Winter). RID research grant underscores occupational health risks: VRS and K-12 settings most concerning, Page 3 of **PDF**.
- Pollard, R. Q., Dean, R. K., Samar, V. J., Knigga, L. M., & Taylor, T. L. (2021). Cortisol dysregulation among American Sign Language interpreters in different work settings: Confirmation of occupational health risks. *Interpreting and Society*, 7(1), 28-50. (Original work published 2021).

- 16 Ibid. See Introduction.
- Bower, Kathryn (2015) **"Stress and Burnout in Video Relay Service (VRS) Interpreting,"** Journal of Interpretation: Vol. 24: Iss. 1, Article 2., page 14 of PDF.
- Roman, Gretchen A. and Samar, Vincent (2015) "Workstation Ergonomics Improves Posture and Reduces, Musculoskeletal Pain in Video Interpreters," Journal of Interpretation: Vol. 24: Iss. 1, Article 7.
- Wessling, Dawn M. and Shaw, Sherry (2014) "Persistent Emotional Extremes and Video Relay Service Interpreters," Journal of Interpretation: Vol. 23: Iss. 1, Article 6, page 3 of pdf.
- 20 Olopade, T. A. (2017). African American interpreters in the video relay service setting (master's thesis). Western Oregon University, Monmouth, Oregon.
- 21 Exploring the Experiences of Lesbian, Gay, Bisexual, Transgender, and Queer, Sign Language Interpreters Working in the Video Relay Service Setting, Elizabeth A. Donovan, St. Catherine University, 2019.
- 22 Ibid.
- Wessling, Dawn M. and Shaw, Sherry (2014) "Persistent Emotional Extremes and Video Relay Service Interpreters," Journal of Interpretation: Vol. 23: Iss. 1, Article 6, page 9.
- 24 Ibid, page 16.
- 25 Ibid, page 14-15.
- Bower, Kathryn (2015) **"Stress and Burnout in Video Relay Service (VRS) Interpreting,"** Journal of Interpretation: Vol. 24: Iss. 1, Article 2, See page 13-14.
- 27 Ibid. Page 14-15.
- Pollard, R. Q., Dean, R. K., Samar, V. J., Knigga, L. M., & Taylor, T. L. (2021). Cortisol dysregulation among American Sign Language interpreters in different work settings: Confirmation of occupational health risks. *Interpreting and Society*, 1(1), 28-50. (Original work published 2021)
- 29 Ibid.
- APHA Abstract, March 28, 2023, Occupational Health Risks Among sign language interpreters in video relay service settings: A growing body of evidence, Page 1.
- Note that some interpreters identified themselves as being employed by Purple or ZVRS. Both companies are owned by ZP Better Together so all are identified as ZP Better Together employees in this report.
- 32 University of Oregon, Accessible Education Center, Sign Language Interpreting FAQs.
- TENS (transcutaneous electrical nerve stimulation) is a treatment that gives temporary pain relief. A TENS machine passes a weak electrical current to your nerves which can help ease pain; **NHS website,** accessed May 2025.
- 34 Exploring the Experiences of Lesbian, Gay, Bisexual, Transgender, and Queer, Sign Language Interpreters Working in the Video Relay Service Setting, Donovan, 2019 (citing Brunson's (2008))
- Olopade, T. A. (2017). **African American interpreters in the video relay service setting** (master's thesis). Western Oregon University, Monmouth, Oregon.
- 36 Exploring the Experiences of Lesbian, Gay, Bisexual, Transgender, and Queer, Sign Language Interpreters Working in the Video Relay Service Setting, Elizabeth A. Donovan, St. Catherine University, 2019.
- 37 Stress and Burnout in VRS, 2015, page 12; Also see Wessling, Dawn M. and Shaw, Sherry (2014)

 "Persistent Emotional Extremes and Video Relay Service Interpreters," Journal of Interpretation:
 Vol. 23: Iss. 1, Article 6.
- 38 Stress and Burnout in VRS, 2015, page 12
- Wessling and Shaw (2014), **Persistent Emotional Extremes and Video Relay Service Interpreters:**"Studies that encourage the voice of VRS interpreters to be heard and attended to are becoming

more prevalent as researchers seek to understand what appears to be a steady exodus from the VRS environment."; See also: Bower (2015), **Stress and Burnout in Video Relay Service (VRS) Interpreting:** "The results also show that the stress interpreters experience in the VRS field has caused a considerable number of interpreters to limit how much they work in this field or to leave VRS interpreting altogether."; See also, Pollard and Dean (2021), **Cortisol dysregulation among American Sign Language interpreters in different work settings: Confirmation of occupational health risks:** "Occupational health problems that plague signed language interpreters (SLIs) are a major cause of the interpreter shortage in the United States and elsewhere."

40 https://gallaudet.edu/museum/history/the-deaf-president-now-dpn-protest/

