

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
AUSTIN DIVISION

BERNHARDT TIEDE, II; TEXAS PRISONS  
COMMUNITY ADVOCATES; BUILD UP,  
INC. *a/k/a* JUSTICE IMPACTED WOMEN’S  
ALLIANCE; TEXAS CITIZENS UNITED  
FOR REHABILITATION OF ERRANTS;  
and COALITION FOR TEXANS WITH  
DISABILITIES,

Plaintiffs,

v.

1:23-CV-1004-RP

BRYAN COLLIER, *in his official capacity as*  
*Executive Director of Texas Department of Criminal*  
*Justice,*

Defendant.

**ORDER**

Before the Court is Plaintiffs Bernhardt Tiede, II (“Tiede”); Prisons Community Advocates (“TPCA”); Build Up, Inc. *a/k/a* Justice Impacted Women’s Alliance (“Lioness”); Texas Citizens United for Rehabilitation of Errants (“TX C.U.R.E.”); and Coalition for Texans with Disabilities’ (“CTD”) (collectively, “Plaintiffs”) Motion for Preliminary Injunction. (Dkt. 50). Defendant Bryan Collier (“Collier”) filed a response in opposition, (Dkt. 69), and Plaintiffs filed a reply, (Dkt. 90). From July 30, 2024 through August 2, 2024, the Court held a hearing on the motion. (*See* Min. Entries, Dkts. 167, 172, 173, 174). After considering the parties’ arguments, witnesses, and evidence introduced at the hearing; the parties’ pre- and post-hearing briefing; and the relevant law, the Court enters the following order.

## I. BACKGROUND

Tiede originally filed suit on August 24, 2023. (Compl., Dkt. 1). He initially sued Collier, the Texas Department of Criminal Justice, Kenneth Paxton, and the Texas Office of Attorney General (collectively, “Original Defendants”). Tiede is currently incarcerated at the Texas Department of Criminal Justice (“TDCJ”) Estelle Unit in Huntsville, Texas. (Am. Compl., Dkt. 57, at 5). Tiede is 65 years old and has multiple health conditions, including diabetes, hypertension, and COPD. (Compl., Dkt. 1, at 7–8; *see also* Am. Compl., Dkt. 57, at 39). In August 2023, he reported that while housed in a cell without air conditioning, he suffered from stroke symptoms that were exacerbated by heat and necessitated transportation by ambulance to an emergency room. (Compl., Dkt. 1, at 1; *see also* Am. Compl., Dkt. 57, at 40). He asserted that fans and periodic deliveries of ice water and cold cloths were insufficient to provide relief from temperatures that exceed 110 degrees Fahrenheit in cells. (Compl., Dkt. 1, at 1). Following his stroke, TDCJ moved Tiede to an air-conditioned cell on August 9, 2023, but returned him to unair-conditioned housing only eight days later. (2d Mot. TRO, Dkt. 7, at 5).

On August 28, 2023, following his return to an unair-conditioned cell, Tiede moved for a temporary restraining order requesting that Original Defendants move him to an airconditioned housing unit. (2d TRO Mot., Dkt. 7). United States Magistrate Judge Mark Lane granted the motion on September 13, 2023. (Dkt. 17). On September 14, 2023, this Court entered an Amended Temporary Restraining Order (the “Amended TRO”) ordering the Original Defendants to return Tiede to airconditioned housing for 14 days, (Dkt. 19), which the Court then extended an additional 30 days. (Dkt. 27).

On April 22, 2024, Tiede moved to amend his complaint, (Dkt. 48), and on April 25, 2024, he filed a Motion for Preliminary Injunction, (Dkt. 50), based on the updated facts included in his

proposed amended complaint. The Court granted the motion to amend on May 7, 2024. (Dkt. 56). The first amended complaint removed four of the five Original Defendants (leaving only Collier, the Executive Director of TDCJ) and three of his four legal arguments (leaving only an Eighth Amendment conditions of confinement argument), and added the four Organizational Plaintiffs. (Am. Compl., Dkt. 57). Tiede and the Organizational Plaintiffs bring Section 1983 claims under the Eighth Amendment against Collier in his official capacity, seeking declaratory and injunctive relief on behalf of the entire TDCJ inmate population. (*Id.* at 53–59).

On May 29, 2024, Collier filed an Amended Motion to Dismiss Plaintiff's Amended Complaint Pursuant to Rule 12(b)(1), (Dkt. 76), and an Amended Motion to Dismiss Plaintiff's Amended Complaint Pursuant to Rule 12(b)(6), (Dkt. 77). Plaintiffs filed responses in opposition to the motions to dismiss, (Dkts. 87, 88), and Collier filed replies, (Dkts. 91, 92). On June 14, 2024, the Court denied the two motions to dismiss, (Dkts. 76, 77). (Order, Dkt. 95).

Meanwhile, Collier filed a response in opposition to the motion for preliminary injunction, (Dkt. 52), and Plaintiffs filed a reply, (Dkt. 90). Prior to the preliminary injunction hearing, the Court resolved a number of evidentiary motions. (*See* Orders, Dkts. 83, 96, 100, 108, 109, 117, 118, 131, 132, 133, 147). From July 30, 2024, through August 2, 2024, the Court held a hearing on Plaintiffs' Motion for Preliminary Injunction, (Dkt. 50). (*See* Min. Entries, Dkts. 167, 172, 173, 174). Plaintiffs presented 13 witnesses: (1) Marci Marie Simmons, (2) Dr. Antonella Zanobetti, (3) Plaintiff Bernhardt Tiede, (4) Dr. Julie Skarha, (5) Charlie Malouff, (6) 30(b)(6) deponent David Sweetin via video, (7) Dr. Susi Vassallo, (8) Michele Deitch, (9) Dr. Jhिलam Biswas, (10) Dean Williams, (11) Dr. Paul Uribe, (12) Dr. Amite Dominick, and (13) Brittany Robertson. (Witness List, Dkt. 175). Collier presented eight witnesses: (1) Bobby Lumpkin, (2) Dr. Jane Leonardson, (3) Timothy Fitzpatrick, (4)

Cody Ginsel, (5) Paul Morales, (6) John Baldwin, (7) Ronald Hudson, and (8) Bryan Collier. (*Id.*). At the hearing, the Court admitted 125 exhibits. (Exhibit List, Dkt. 190).

On August 22, 2024, the parties filed their proposed findings of fact and conclusions of law. (Pls.' Brief, Dkt. 187; Collier's Brief, Dkt. 188). That same day, the parties filed a joint advisory to the Court regarding the outstanding evidentiary disputes. (*See* Dkt. 186). At this time, the Court overrules each outstanding objection.

## II. LEGAL STANDARD

A preliminary injunction is an extraordinary remedy, and the decision to grant such relief is to be treated as the exception rather than the rule. *Valley v. Rapides Parish Sch. Bd.*, 118 F.3d 1047, 1050 (5th Cir. 1997). “A plaintiff seeking a preliminary injunction must establish that he is likely to succeed on the merits, that he is likely to suffer irreparable harm in the absence of preliminary relief, that the balance of equities tips in his favor, and that an injunction is in the public interest.” *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 20 (2008). The party seeking injunctive relief carries the burden of persuasion on all four requirements. *PCI Transp. Inc. v. W. R.R. Co.*, 418 F.3d 535, 545 (5th Cir. 2005).

## III. FINDINGS OF FACT

At the outset, the Court notes that the parties are in agreement that air conditioning all TDCJ facilities is necessary as a matter of inmate health and safety. Collier himself testified that his goal is “absolutely” to install air conditioning in all TDCJ facilities and recognized that air conditioning is the best solution to reduce temperatures in TDCJ facilities.<sup>1</sup> He stated that the only reason air conditioning has not been installed in all housing areas throughout TDCJ is because

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<sup>1</sup> Final Hearing Tr. (August 2, 2024), at 179:5–9; 254:24–255:20;

the Texas Legislature has not appropriated the funds for TDCJ to do so.<sup>2</sup>

Currently, TDCJ has approximately 46,000 “cool beds,” or beds in proximity to partial or full air conditioning, meaning that approximately 95,000 inmates are in unair-conditioned housing.<sup>3</sup> To assess whether individual inmates require a cool bed, TDCJ uses a metric called “heat scores,” i.e. a score given to inmates, based on certain criteria, which requires that they be placed in an airconditioned cell. Approximately 12,289 TDCJ inmates have “heat scores” that qualify them for the cool beds;<sup>4</sup> the remaining 33,000 cool beds are available to inmates without heat scores.<sup>5</sup> Some of these beds are given to individuals without a heat score but who have suffered from heat-related illness.<sup>6</sup> 32 of TDCJ’s 101 units are fully airconditioned in the housing areas.<sup>7</sup> TDCJ has classified 55 units as partially airconditioned in the housing areas, though a number of these units have fewer than ten cool beds.<sup>8</sup>

**A. The Organizational Plaintiffs’ Incarcerated Members and Constituents Face a Substantial Risk of Serious Harm From Extreme Heat.**

1. Lioness: Justice Impacted Women’s Alliance (“Lioness”)

Lioness is a traditional voluntary organization “made up of formerly incarcerated and currently incarcerated women, girls, [and] gender expansive individuals in Texas.”<sup>9</sup> Because the TDCJ currently houses people based on their biological sex, rather than on their gender identity,

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<sup>2</sup> Pls.’ Hearing Ex. 254, Collier’s Resp. to Interr. 17.

<sup>3</sup> Final Hearing Tr. (Aug. 1, 2024) at 25:6–8.

<sup>4</sup> *Id.* at 25:3–5.

<sup>5</sup> *Id.* at 25:9–11.

<sup>6</sup> *Id.* at 167:10–168:3.

<sup>7</sup> *Id.* at 14:19–23; 63:23–24.

<sup>8</sup> *Id.* at 63:17–65:2.

<sup>9</sup> Final Hearing Tr. (July 30, 2024) at 26:19–22. Lioness is part of Build Up, Inc., a nonprofit organization formed under the laws of New Jersey. (*See* Final Hearing Tr. (July 30, 2024) at 67:7–10; *see also* Dkt. 90-1, Ex. L, Toon 2d Decl. ¶¶ 1–2; Def.’s Hearing Ex. 30.)

TDCJ currently houses inmates who identify as transgender women with men in its facilities.<sup>10</sup> Lioness’s “roughly 700 members” advocate for “appropriate and livable conditions at TDCJ facilities” and work “to get its members and constituents safe from extreme heat.”<sup>11</sup> Lioness’s board “consists entirely of formerly incarcerated women.”<sup>12</sup> More than 400 of Lioness’s members are TDCJ inmates, and about 250 of those members are currently housed in unair-conditioned units.<sup>13</sup> Lioness’s members all joined the organization voluntarily, support its mission, help guide its priorities, and receive updates about the case.<sup>14</sup> Lioness’s incarcerated members also “guide all of [the organization’s] work,” by letting Lioness know “what’s currently going on in their units,” and then Lioness “campaign[s] around those issues.”<sup>15</sup>

Extreme heat in TDCJ prisons has been of concern to Lioness “from day one.”<sup>16</sup> It is a priority for Lioness because of its members’ “lived experience,” and it remains of paramount importance, because Lioness members have “confirmed” that harm from extreme heat and lack of air conditioning continue each summer.<sup>17</sup> This has happened every year since Lioness was founded. Lioness receives “[a] very large number” of complaints from its incarcerated members “every summer” about the heat in TDCJ prisons, the lack of air conditioning, and TDCJ’s inadequate heat-mitigation measures.<sup>18</sup> The volume of those complaints has increased since

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<sup>10</sup> Final Hearing Tr. (July 30, 2024) at 68:18–69:6.

<sup>11</sup> Dkt. 90-1, Ex. L, Toon 2d Decl. ¶¶ 2–8; *see also* Final Hearing Tr. (July 30, 2024) at 50:25–51:8; ECF 50-8, Ex. H, Toon Decl. ¶¶ 4–7;

<sup>12</sup> Final Hearing Tr. (July 30, 2024) at 52:21–23.

<sup>13</sup> Final Hearing Tr. (July 30, 2024) at 51:9–11, 54:7–9; Dkt. 90-1, Ex. L, Toon 2d Decl. ¶¶ 2–8; Pls.’ Hearing Ex. 62 (list of Lioness members currently incarcerated in TDCJ facilities).

<sup>14</sup> Dkt. 90-1, Ex. L, Toon 2d Decl. ¶¶ 7, 9, 16–23.

<sup>15</sup> Final Hearing Tr. (July 30, 2024) at 53:19–22.

<sup>16</sup> Final Hearing Tr. (July 30, 2024) at 53:23–54:6.

<sup>17</sup> *Id.*

<sup>18</sup> *Id.* at 56:18–22.

2022.<sup>19</sup> Lioness has also identified specific members housed in unair-conditioned TDCJ units who “have been harmed or are at risk of harm from the extreme heat in TDCJ facilities.”<sup>20</sup> Lioness decided to join this lawsuit because it is “concerned about incarcerated Texans’ health and . . . their life,” because “the majority of [Lioness’s] membership is under the direct authority of [TDCJ].”<sup>21</sup> Lioness’s decision to join the lawsuit was “not only a response to the complaints” Lioness received from its members about the extreme heat, but also a result of its formerly incarcerated board members’ “lived experience” in the TDCJ system.<sup>22</sup>

## 2. Texas Citizens United for Rehabilitation of Errants (“TX C.U.R.E.”)

TX C.U.R.E. is an Austin-based criminal justice advocacy nonprofit.<sup>23</sup> It was “created to fight systemic and systematic mistreatment of people incarcerated in TDCJ’s custody, and to provide those who are incarcerated with resources they need in and out of prison.”<sup>24</sup> TX C.U.R.E.’s constituents include all of the approximately 132,600 individuals incarcerated in the TDCJ system—including approximately 89,000 individuals who are currently housed in unair-conditioned living areas.<sup>25</sup> TX C.U.R.E. has constituents in every unit in TDCJ.<sup>26</sup> TX C.U.R.E. advocates for its incarcerated constituents by communicating with them to try to address specific issues, and by testifying in front of the Texas Legislature on heat-related issues.<sup>27</sup> TX C.U.R.E.’s Board of Directors includes individuals formerly incarcerated in the TDCJ system and

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<sup>19</sup> *Id.* at 56:14–57:5.

<sup>20</sup> Dkt. 90-1, Ex. L, Toon 2d Decl. ¶¶ 5, 13–23 (identifying members by their initials “because many of our members fear retaliation by TDCJ for providing testimony or participating in a lawsuit against it”).

<sup>21</sup> Final Hearing Tr. (July 30, 2024) at 57:6–12.

<sup>22</sup> *Id.* at 57:13–16.

<sup>23</sup> Dkt. 90-1, Ex. M, C. Malouff Decl. (June 4, 2024) ¶ 3.

<sup>24</sup> Dkt. 90-1, Ex. M, C. Malouff Decl. ¶ 3.

<sup>25</sup> Final Hearing Tr. (July 30, 2024) at 188:10–23; Pls.’ Hearing Ex. 128; Dkt. 90-1, Ex. M, C. Malouff Decl. ¶ 4.

<sup>26</sup> Final Hearing Tr. (July 30, 2024) at 189:4–6.

<sup>27</sup> *Id.* at 190:3–9.

relatives of those who are currently incarcerated.<sup>28</sup>

TX C.U.R.E.’s staff frequently communicates with its incarcerated constituents and their family members, who seek help with addressing poor conditions in TDCJ’s prisons.<sup>29</sup> These incarcerated constituents’ needs drive the policy goals of the organization, which include seeking relief from the extreme heat in TDCJ’s unair-conditioned units.<sup>30</sup> TX C.U.R.E. identified 19 constituents who have written and requested help with excessive heat, a lack of air-conditioned housing, and other related issues.<sup>31</sup> All of these constituents are alleged to have “suffered from exposure to excessive heat” and “are directly affected by TDCJ’s lack of temperature control throughout its prisons.”<sup>32</sup> TX C.U.R.E. decided to join this lawsuit to serve its constituents by helping address their continued suffering from the extreme heat in unair-conditioned TDCJ facilities.<sup>33</sup>

### 3. Texas Prisons Community Advocates (“TPCA”)

TPCA’s mission is to serve incarcerated individuals and their families. TPCA has focused on issues of extreme heat and a lack of air conditioning in TDCJ prisons from its inception.<sup>34</sup> TPCA’s constituents include prisoners in the TDCJ population.<sup>35</sup> TPCA advocates for its incarcerated constituents in numerous ways—including by working on bills seeking to require humane temperatures in TDCJ prisons, providing expert testimony about the conditions in TDCJ units before the Texas Legislature, co-authoring research reports about those conditions,

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<sup>28</sup> Dkt. 90-1, Ex. M, C. Malouff Decl. ¶ 5.

<sup>29</sup> *Id.* ¶ 6.

<sup>30</sup> *Id.* ¶ 9.

<sup>31</sup> *Id.*; *see also id.* (attachment to C. Malouff Decl. listing 19 examples of TX C.U.R.E. constituents).

<sup>32</sup> Dkt. 90-1, Ex. M, C. Malouff Decl. ¶ 10.

<sup>33</sup> Final Hearing Tr. (July 30, 2024) at 192:11–193:1, 194:17–23.

<sup>34</sup> Final Hearing Tr. (July 31, 2024) at 341:18–342:2; Dkt. 90-1, Ex. N, A. Dominick Decl. (June 6, 2024) ¶ 5.

<sup>35</sup> Final Hearing Tr. (July 31, 2024) at 346:6–12.



conducting advocacy training for criminal justice system-impacted family members, and organizing community events to raise awareness about the conditions within TDCJ units.<sup>36</sup> Most of TPCA’s advocacy work focuses on the effects of extreme heat, lack of air conditioning, and inadequate heat mitigation measures in Texas prisons.<sup>37</sup> TPCA’s founder and president, Dr. Amite Dominick (“Dr. Dominick”), has also communicated directly with Defendant Collier on behalf of TPCA about extreme heat and the lack of air conditioning in Texas prisons.<sup>38</sup>

TPCA’s staff frequently communicates with its incarcerated constituents, and it has approximately 50 volunteer “team members” incarcerated in the TDCJ system whose needs and concerns drive the policy goals of the organization.<sup>39</sup> TPCA communicates with its incarcerated constituents through various means, including by phone, mail, and email.<sup>40</sup> TPCA’s Director of Incarcerated Individuals, Brittany Robertson, communicates daily with individuals incarcerated in TDCJ facilities and receives complaints from them about heat in Texas prisons every day.<sup>41</sup> TPCA joined this lawsuit because of the complaints TPCA received from incarcerated volunteers and constituents; and was further driven by the experience of Dr. Dominick’s own ex-husband, who has been incarcerated in the TDCJ system since 2015.<sup>42</sup>

#### 4. Coalition of Texans with Disabilities (“CTD”)

CTD is a nonprofit corporation whose mission is to ensure that persons with disabilities can work, live, learn, play, and participate fully in the community of their choice.<sup>43</sup> CTD’s

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<sup>36</sup> Final Hearing Tr. (July 31, 2024) at 346:22–347:21; Dkt. 90-1, Ex. N, A. Dominick Decl. ¶ 6.

<sup>37</sup> Final Hearing Tr. (July 31, 2024) at 347:18–21.

<sup>38</sup> *Id.* at 341:6–8.

<sup>39</sup> Final Hearing Tr. (July 31, 2024) at 347:22–348:16 (Dr. Dominick); *id.* at 363:12–21 (Robertson); Dkt. 90-1, Ex. N, A. Dominick Decl. ¶ 8; Pls.’ Hearing Ex. 147.

<sup>40</sup> Final Hearing Tr. (July 31, 2024) at 347:22–348:1; Pls.’ Hearing Ex. 146.

<sup>41</sup> Final Hearing Tr. (July 31, 2024) at 363:1–364:7.

<sup>42</sup> *Id.* at 350:6–17.

<sup>43</sup> Dkt. 50-7, Ex. G, C. Bearden Decl. (Apr. 17, 2024) ¶ 3.

constituency includes of all persons with a disability in Texas, including those incarcerated in Texas prisons.<sup>44</sup> Since an estimated 40% of TDCJ inmates have a disability, roughly 52,000 of the 130,000 people incarcerated in Texas prisons are CTD constituents, including every person with a disability incarcerated in every TDCJ facility that lacks air conditioning.<sup>45</sup> CTD joined this lawsuit in its representative capacity on behalf of and to vindicate the rights of TDCJ inmates with disabilities who are being housed in poor conditions and directly harmed by extreme heat.<sup>46</sup> Several courts have held that CTD has associational standing to represent Texans with disabilities.<sup>47</sup>

**B. Plaintiff Bernhard Tiede, II Faces a Substantial Risk of Serious Harm if He is Moved to an Unair-conditioned Cell.**

Tiede is a TDCJ inmate who has been directly affected by Collier’s failure to protect inmates from extreme heat. He is 65 years old and has multiple medical conditions that make him especially vulnerable to heat-related illness and death—including diabetes, hypertension, cardiovascular disease, and chronic obstructive pulmonary disease.<sup>48</sup> Despite his age and multiple medical conditions that make him particularly vulnerable to heat, TDCJ housed Tiede in an unair-conditioned cell that regularly reached temperatures above 100° during the summer of 2023.<sup>49</sup> In June 2023, Tiede had a “transient ischemic attack”—a small stroke—from heat exposure that

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<sup>44</sup> *Id.* ¶ 5.

<sup>45</sup> *Id.*

<sup>46</sup> *Id.* ¶ 7.

<sup>47</sup> *See, e.g., Steward v. Abbott*, 189 F. Supp. 3d 620, 631-32 (W.D. Tex. 2016) (Garcia, J.) (CTD had associational standing to bring suit against State of Texas on behalf of Medicaid beneficiaries with intellectual disabilities); *Richardson v. Tex. Sec’y of State*, No. SA-19-cv-000963-OLG, 2019 WL 10945422, \*6 (W.D. Tex. Dec. 23, 2019) (Garcia, J.) (CTD had associational standing to bring claim on behalf of disabled Texas voters); *see also Coalition of Texans with Disabilities v. Smith*, No. 03-99-00064-CV, 1999 WL 816734 (Tex. App.—Austin Oct. 14, 1999) (CTD had associational standing to assert claim on behalf of Texans with mobility impairments prevented from accessing religious buildings).

<sup>48</sup> Dkt. 50-4, Ex. D, Cross 3d Decl. ¶ 7; Final Hearing Tr. (July 30, 2024) at 120:14–121:13; Pls.’ Exs. 210, 239.

<sup>49</sup> Dkt. 30-24, Tiede Decl. ¶¶ 3–6; Dkt. 50-4, Ex. D, Cross 3d Decl. ¶¶ 5–7, 18.

resulted in permanent injuries.<sup>50</sup> At the time, he was living in unair-conditioned housing, and (as he testified) it was “really, really hot outside.”<sup>51</sup> Yet, after Tiede returned from receiving treatment in the hospital for the transient ischemic attack, TDCJ placed him back in the same unair-conditioned cell, presenting “a severe risk to his life and well-being.”<sup>52</sup> Confronted with that risk, Tiede filed suit against TDCJ; TDCJ moved Tiede to an air-conditioned cell after this Court entered a temporary restraining order compelling TDCJ to do so.<sup>53</sup> In April 2024, Tiede was diagnosed with an “[a]cute or subacute infarct of the left thalamus”—i.e., a stroke.<sup>54</sup>

Plaintiffs’ medical expert in toxicology, emergency room medicine, and heat medicine, Dr. Susi Vassallo (“Dr. Vassallo”) testified, based on credible, published medical studies, that individuals who are 65 and older, and those with diabetes, pulmonary disease, or cardiovascular disease, are especially vulnerable to heat.<sup>55</sup> Dr. Vassallo opined that Tiede is thus particularly vulnerable to heat.<sup>56</sup> In her opinion, placing Tiede in unair-conditioned housing would put him at substantial risk of death or serious harm.<sup>57</sup> Tiede, likewise, testified that his health improves when he is in air conditioning, and that his health declines when he is in extreme heat.<sup>58</sup>

TDCJ and its officials testified that Tiede has been appropriately housed at all times during his custody under TDCJ policy.<sup>59</sup> Despite his various heat-sensitive co-morbidities, TDCJ’s “health

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<sup>50</sup> Dkt. 30-24, Tiede Decl. ¶ 9; Dkt. 50-4, Ex. D, Cross 3d Decl. ¶¶ 7, 12–15; Final Hearing Tr. (July 30, 2024) at 95:22–96:11, 121:20–22.

<sup>51</sup> Final Hearing Tr. (July 30, 2024) at 103:18–25.

<sup>52</sup> Dkt. 30-24, Tiede Decl. ¶¶ 11–16; Dkt. 50-4, Ex. D, Cross 3d Decl. ¶¶ 7, 12–15.

<sup>53</sup> Order, Dkt. 17; Dkt. 30-24, Tiede Decl. ¶ 17.

<sup>54</sup> Pls.’ Hearing Ex. 210 at 1832.

<sup>55</sup> Final Hearing Tr. (July 31, 2024) at 17:25–20:21, 28:5–31:13, 34:7–17; Pls.’ Hearing Exs. 6, 13, 15.

<sup>56</sup> Final Hearing Tr. (July 31, 2024) at 47:16–49:10; Pls.’ Hearing Ex. 13; Pls.’ Hearing Ex. 6.

<sup>57</sup> Final Hearing Tr. (July 31, 2024) at 49:19–24.

<sup>58</sup> Final Hearing Tr. (July 30, 2024) at 128:21–129:1.

<sup>59</sup> Final Hearing Tr. (Aug. 1, 2024) at 200:25–201:14; Dkt. 155, TDCJ 30(b)(6) Dep. at 195:20–196:2; 201:5–19.

score algorithm” did not assign Tiede a heat score qualifying him for air-conditioned housing. Thus, under TDCJ’s current policy, Tiede’s medical conditions did not and still do not require that he be placed in an air-conditioned cell.<sup>60</sup> TDCJ agrees that Tiede may be moved into unair-conditioned housing because he does not have a heat score.<sup>61</sup> On the last day of the preliminary injunction hearing, Collier could not commit to keeping Tiede in an air-conditioned cell for the duration of his sentence.<sup>62</sup> Thus, without a court order, Tiede is at risk of being moved to an unair-conditioned cell at any time.<sup>63</sup>

### **C. Temperatures Inside TDCJ’s Prisons are Dangerously High Each Summer.**

At the outset, the Court notes that the definition of “summer” is more expansive in Texas and other southern states than it is in more temperate parts of the nation. The Court agrees with TDCJ’s definition of summer as running from April 15 through the end of October for purposes of this analysis.<sup>64</sup> Accordingly, the Court refers to these months when it refers to “summer.”

#### 1. The health risks of extreme heat are well-established.

According to the National Weather Service (“NWS”), heat “is one of the leading weather-related killers in the United States, resulting in hundreds of fatalities each year.”<sup>65</sup> The NWS has

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<sup>60</sup> Final Hearing Tr. (Aug. 1, 2024) at 200:25–201:14; Dkt. 155, TDCJ 30(b)(6) Dep. at 198:16–24.

<sup>61</sup> Dkt. 155, TDCJ 30(b)(6) Dep. at 205:7–206:7.

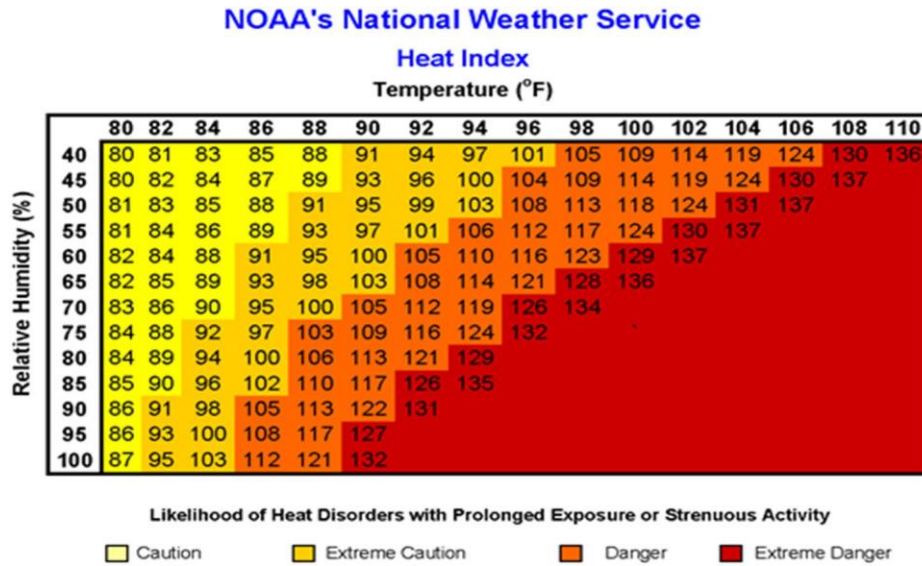
<sup>62</sup> Final Hearing Tr. (Aug. 2, 2024) at 252:24–254:9.

<sup>63</sup> Tiede also confirmed that he filed grievances on October 10, 2023, October 22 or 23, 2023, October 31, 2023, and November 15, 2023. (*See* Final Hearing Tr. (July 30, 2024) at 142:1–13.)

<sup>64</sup> Final Hearing Tr. (Aug. 1, 2024) at 14:12–18; *id.* at 16:14–16; *id.* at 26:6–11.

<sup>65</sup> “Heat Safety Tips and Resources,” National Weather Service, *available at* <https://www.weather.gov/safety/heat>. Under Rule 201 of the Federal Rules of Evidence, that Court may take judicial notice of a fact that is not subject to reasonable dispute because it can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned. Fed. R. Evid. 201. The Court finds that extreme heat’s status as one of the leading weather-related killers in the United States is such a fact, and that the NWS is a source whose accuracy cannot reasonably be questioned.

published a chart that illustrates how exposure to high heat indexes—a function of temperature and humidity—increases the risk of heat-related illnesses<sup>66</sup>:



TDCJ’s heat policy references and relies on the heat index.<sup>67</sup> The NWS correlates heat index ranges to risk levels for the general population:

- Caution (light yellow; heat index 80–90°): “Fatigue possible with prolonged exposure and/or physical activity.”
- Extreme Caution (mustard yellow; heat index 91–104°): “Sunstroke, muscle cramps, and/or heat exhaustion possible with prolonged exposure and/or physical activity.”
- Danger (orange; heat index 105–125°): “Sunstroke, muscle cramps, and/or heat exhaustion likely. Heatstroke possible with prolonged exposure and/or physical activity.”
- Extreme Danger (red; heat index >126°): “Heat stroke likely.”

Expert testimony and scientific studies presented at the hearing confirm that high temperatures pose a substantial risk of serious harm to anyone, even young, healthy individuals. Dr. Vassallo credibly testified that a heat index of 88° or higher poses a substantial risk of adverse health outcomes in all inmates—even those who are young and healthy.<sup>68</sup> Those risks include heat exhaustion, heat rash,

<sup>66</sup> Final Hearing Tr. (July 31, 2024) at 21:6–23:17; Pls.’ Hearing Ex. 24.

<sup>67</sup> Final Hearing Tr. (Aug. 1, 2024) at 262:1–14; Final Hearing Tr. (Aug. 2, 2024) at 172:7–14.

<sup>68</sup> Final Hearing Tr. (July 31, 2024) at 23:2–38:23; Pls.’ Hearing Exs. 10, 15, 23, 42, 54, 70.

dehydration, heat cramps, heat syncope, and heat stroke—the last of which carries a “high mortality rate” and can have lasting negative health consequences.<sup>69</sup> Plaintiffs’ epidemiology expert, Dr. Julie Skarha (“Dr. Skarha”), confirmed that heat can cause a number of negative health outcomes beyond heat stroke and heat exhaustion, including heart attacks, asthma attacks, kidney failure, and an increase in risk of suicide.<sup>70</sup> Dr. Antonella Zanobetti (“Dr. Zanobetti”), Plaintiffs’ environmental epidemiology expert, likewise opined that higher temperatures increase the risks of hospitalization, illness, and mortality.<sup>71</sup> And Collier’s own expert in internal medicine, Dr. Jane Leonardson (“Dr. Leonardson”), agreed that people who are exposed to severe environmental heat in the range of 90–105° are at serious risk of illness and death.<sup>72</sup>

Plaintiffs’ expert in forensic psychiatry, Dr. Jhiliam Biswas (“Dr. Biswas”), testified that high heat exacerbates mental illness; when exposed to high heat, people with mental health disorders exhibit higher rates of suicidality, agitation, and impulsivity, and a slowing of cognitive processing.<sup>73</sup> Heat affects sleep, and people with mental illness have more trouble controlling their conditions if they cannot sleep.<sup>74</sup> Extreme heat can exacerbate mental health episodes requiring hospitalization.<sup>75</sup> And in high heat, suicidality increases “by a significant amount” among inmates.<sup>76</sup>

Further, people with mental illnesses are particularly vulnerable to high heat.

Conservative estimates from the federal Substance Abuse and Mental Health Services

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<sup>69</sup> Final Hearing Tr. (July 31, 2024) at 15:15–17:20, 32:20–37:23; Pls.’ Hearing Exs. 15, 275.

<sup>70</sup> Final Hearing Tr. (July 30, 2024) at 150:23–151:8.

<sup>71</sup> *Id.* at 75:13–23, 79:1–9; Pls.’ Hearing Exs. 46, 73, 75.

<sup>72</sup> Final Hearing Tr. (Aug. 1, 2024) at 143:12–16.

<sup>73</sup> Final Hearing Tr. (July 31, 2024) at 167:24–170:20, 177:17–179:9; Pls.’ Hearing Exs. 11, 35, 76, 103.

<sup>74</sup> Final Hearing Tr. (July 31, 2024) at 177:11–178:7.

<sup>75</sup> Final Hearing Tr. (July 31, 2024) at 180:15–181:15; Pls.’ Hearing Ex. 33.

<sup>76</sup> Final Hearing Tr. (July 31, 2024) at 178:8–14, 182:6–183:19; Pls.’ Hearing Ex. 91.

Administration indicate that 37%—i.e., more than one in three—inmates have a diagnosable mental illness at any given time.<sup>77</sup> When housed in extreme heat, inmates with mental illness are “more likely to die or experience worse morbidity than individuals without mental illness.”<sup>78</sup> For example, Dr. Biswas explained that one study showed that people with schizophrenia had a 200% higher risk of death when exposed to extreme heat.<sup>79</sup> People with substance abuse disorders and individuals taking psychotropic medications are also particularly vulnerable to health risks from high heat.<sup>80</sup> Dr. Biswas thus credibly concluded that “exposure to periods of extreme heat cause[s] a substantial risk of serious harm” to TDCJ inmates by increasing the incidence of and exacerbating existing mental health conditions.<sup>81</sup>

## 2. Texas prisons are hot and getting hotter.

Dr. Linda Mearns (“Dr. Mearns”), a climatologist and researcher at the National Center for Atmospheric Research, has opined via declaration that “increasing temperatures, increasing extreme temperatures, and more frequent heat waves” are among the most certain predictions for future climate trends, including those in Texas.<sup>82</sup> “This most likely will result in an increasing heat index, and [an increased] number of hours per day with extreme heat index values.”<sup>83</sup> In other words, “[t]he trend of summer temperatures throughout Texas is certainly towards warmer temperatures [and] increasing heat index.”<sup>84</sup> In particular, Texas “is expected to increase in mean annual temperature between 4.5° and 8.5° by the end of the 21<sup>st</sup> century.”<sup>85</sup>

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<sup>77</sup> Final Hearing Tr. (July 31, 2024) at 168:10–23.

<sup>78</sup> *Id.* at 177:1–16; Pls.’ Hearing Ex. 103 at 13.

<sup>79</sup> Final Hearing Tr. (July 31, 2024) at 170:15–20.

<sup>80</sup> *Id.* at 181:2–15, 187:9–191:18; Pls.’ Hearing Exs 43, 44, 50.

<sup>81</sup> Final Hearing Tr. (July 31, 2024) at 185:13–20.

<sup>82</sup> Dkt. 50-5, Ex. E, L. Mearns Decl. ¶ 23.

<sup>83</sup> *Id.* ¶¶ 12–14, 23.

<sup>84</sup> *Id.* ¶ 18.

<sup>85</sup> *Id.* ¶ 19.

TDCJ did not provide testimony at the hearing to dispute Dr. Mearns’s declaration, and the Court finds Dr. Mearns’s opinions to be credible. In addition, TDCJ itself recognizes that its prisons are hot in the summers. TDCJ’s Rule 30(b)(6) deponent, David Sweetin (“Sweetin”), agrees that temperatures in every prison in Texas are likely to exceed 85° each summer.<sup>86</sup> Collier also believes that summers are hot in Texas, they have been hot for years, they are likely to continue to be hot, and that it is hot inside Texas prisons without air conditioning.<sup>87</sup> Collier agrees that it “certainly” makes sense to him that the heat index could reach 113° in Texas in August.<sup>88</sup> And, in fact, TDCJ itself reported to the Texas Legislature that the temperatures inside its prisons exceeded 85° on the overwhelming majority of days from May 1, 2023 to September 30, 2023.<sup>89</sup> This testimony is also consistent with TDCJ’s own prison temperature logs, which have documented heat indexes outside of its prisons as high as 134°.<sup>90</sup>

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<sup>86</sup> Dkt. 155, TDCJ 30(b)(6) Dep. at 214:1–4; 222:17–21.

<sup>87</sup> Final Hearing Tr. (Aug. 2, 2024) at 204:24–205:18.

<sup>88</sup> *Id.* at 217:12–14.

<sup>89</sup> Pls.’ Hearing Ex. 102 at 11–20.

<sup>90</sup> Def.’s Hearing Ex. 76 (highlight added).



TEXAS DEPARTMENT OF CRIMINAL JUSTICE  
Temperature Log  
Unit: Stiles

Date: <u>7/10/2022</u>	Outside Air Temperature	Humidity or Wind Speed	Heat Index or Wind Chill*	Person Recording
12:30 a.m.	84°	85%	95°	Hardy
1:30 a.m.	81°	90%	88°	Hardy
2:30 a.m.	81°	90%	89°	Hardy
3:30 a.m.	81°	90%	88°	Hardy
4:30 a.m.	80°	91%	85°	Hardy
5:30 a.m.	80°	91%	85°	Hardy
6:30 a.m.	80°	92%	85°	Hardy
7:30 a.m.	82°	90%	91°	Bordelon
8:30 a.m.	86°	86%	103°	Bordelon
9:30 a.m.	86°	89%	103°	Bordelon
10:30 a.m.	89°	76%	108°	Bordelon
11:30 a.m.	83°	73%	118°	Bordelon
12:30 p.m.	93°	70%	122°	Bordelon
1:30 p.m.	95°	66%	122°	Bordelon
2:30 p.m.	98°	66%	129°	Bordelon
3:30 p.m.	100°	63%	134°	Bordelon
4:30 p.m.	99°	64%	130°	Bordelon
5:30 p.m.	95°	76%	129°	Bordelon
6:30 p.m.	95°	76%	129°	Bordelon
7:30 p.m.	95°	76%	129°	Hardy
8:30 p.m.	77°	89%	78°	Hardy
9:30 p.m.	78°	89%	80°	Hardy
10:30 p.m.	81°	89%	88°	Hardy
11:30 p.m.	81°	90%	88°	Hardy

\* Temperatures between 51 and 79 degrees Fahrenheit (°F) are not represented on the Wind Chill Index (Attachment A) or the Heat and Humidity Index (Attachment B). Indicate (N/A) in these fields when applicable.

Testimony from current TDCJ inmate Tiede and former TDCJ inmates at the hearing further confirmed the existence of these high temperatures. For example, former TDCJ inmate Marci Marie Simmons (“Simmons”) testified that, in the summer of 2022, she observed a thermometer in the Dr. Lane Murray Unit, a TDCJ unit for women in Gatesville, that read 136°. <sup>91</sup> Her unit was so hot one day that she and a group of other inmates were able to cook a raw egg on the concrete floor. <sup>92</sup> During his incarceration in the Byrd Unit, a unit for men in Huntsville, former TDCJ inmate Charlie Malouff (“Malouff”) observed a digital temperature monitor reading 129° one day, 118° on another, and 114° on another. <sup>93</sup> And scores of TDCJ inmates continue to file

<sup>91</sup> Final Hearing Tr. (July 30, 2024) at 30:2–20.

<sup>92</sup> *Id.* at 28:19–24.

<sup>93</sup> *Id.* at 179:15–23.

grievances about the extreme heat in their unair-conditioned units—last summer alone, inmates filed 450 formal, Step One grievances about heat and heat-related issues.<sup>94</sup> Based on the foregoing, the Court finds that the inmate housing areas in Texas’s unair-conditioned prisons are unreasonably dangerous due to the extreme heat during the summer months.

**D. Extreme Heat Poses a Substantial Risk of Serious Harm to TDCJ Inmates.**

1. TDCJ has repeatedly acknowledged the risk that extreme heat poses to TDCJ inmates.

TDCJ has admitted that at least 23 individuals died in TDCJ facilities from heat-related causes between 1998 and 2012, and credible evidence presented at the hearing shows that TDCJ has underestimated this number.<sup>95</sup> Collier admitted he was aware of ten deaths from heat stroke in the summer of 2011 alone.<sup>96</sup> And TDCJ has identified hundreds of other inmates diagnosed with heat-related illnesses since 2011.<sup>97</sup> Collier agrees that heat has caused deaths or contributed to the deaths of TDCJ inmates in the past.<sup>98</sup> Five years ago, Collier testified in Texas federal court that inmates confined in temperatures at or above 95° face a serious health risk.<sup>99</sup>

TDCJ’s Rule 30(b)(6) deponent, Sweetin, also testified in his July 2024 deposition that the high temperatures in TDCJ facilities during the summer months place inmates a very real risk of harm and serious injury unless adequate measures are taken to protect them from the excessive heat.<sup>100</sup> He acknowledged that extreme heat poses danger, “has killed inmates, and [has] caused numerous inmates and officers to suffer heat-related illnesses.”<sup>101</sup> TDCJ Facilities Director Ron

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<sup>94</sup> Pls.’ Hearing Ex. 102 at 4 (reflecting temperature related grievances from May through August).

<sup>95</sup> *Cole v. Collier*, No. 4:14-CV-1698, 2017 WL 3049540, at \*1, \*20 (S.D. Tex. July 19, 2017).

<sup>96</sup> Final Hearing Tr. (Aug. 2, 2024) at 207:22–208:2.

<sup>97</sup> *Cole*, 2017 WL 3049540, at \*20.

<sup>98</sup> Final Hearing Tr. (Aug. 2, 2024) at 207:9–208:2.

<sup>99</sup> Dkt. 50-11, Ex. K-4, *Cole v. Collier*, Sept. 10, 2019 Hearing Tr. at 49:22–25.

<sup>100</sup> Dkt. 155, TDCJ 30(b)(6) Dep. at 229:22–230:4; *see also* Final Hearing Tr. (July 31, 2024) at 211:12.

<sup>101</sup> Dkt. 155, TDCJ 30(b)(6) Dep. at 131:12–132:8, 161:22–162:5.

Hudson (“Hudson”) also agrees that elevated indoor temperatures impact inmates and correctional staff at unair-conditioned facilities.<sup>102</sup>

According to TDCJ’s Fiscal Year 2023 report to the Texas Legislature, TDCJ inmates filed 5,202 Step One grievances and 609 Step Two grievances related to the heat in the summer of 2023.<sup>103</sup> TDCJ’s Administrative Review and Risk Management Division provides Collier’s office a monthly report regarding heat-related grievances filed by TDCJ inmates, and Collier is aware of them.<sup>104</sup> According to Plaintiffs’ corrections expert Dean Williams (“Williams”), that volume of grievances further shows extreme heat is a problem that needs to be addressed.<sup>105</sup>

2. Publicly available, peer-reviewed research studies have warned Collier that TDCJ inmates continue to die from extreme heat.

In 2022, Plaintiffs’ experts Dr. Zanobetti and Dr. Skarha published an epidemiological study on the association between extreme heat and mortality among inmates in Texas prisons with and without air conditioning.<sup>106</sup> They found an increased risk of mortality in Texas prisons without air conditioning during times of high heat, whereas there was no increase in risk of mortality in Texas prisons with air conditioning during that same period.<sup>107</sup> As compared to days when the heat index is 85°, the risk of dying in a Texas prison without air conditioning increased by 5% when the heat index is 95°, 10% when the heat index is 100°, and 15% when the heat index is 105°. <sup>108</sup> In other words, a one-degree increase above 85° corresponds to a 0.7% increase in the risk of

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<sup>102</sup> Final Hearing Tr. (Aug. 2, 2024) at 133:18–23; Def.’s Ex. 21.

<sup>103</sup> Final Hearing Tr. (Aug. 1, 2024) at 270:14–272:25; Pls.’ Hearing Ex. 102 at 4.

<sup>104</sup> Final Hearing Tr. (Aug. 1, 2024) at 269:10–270:13.

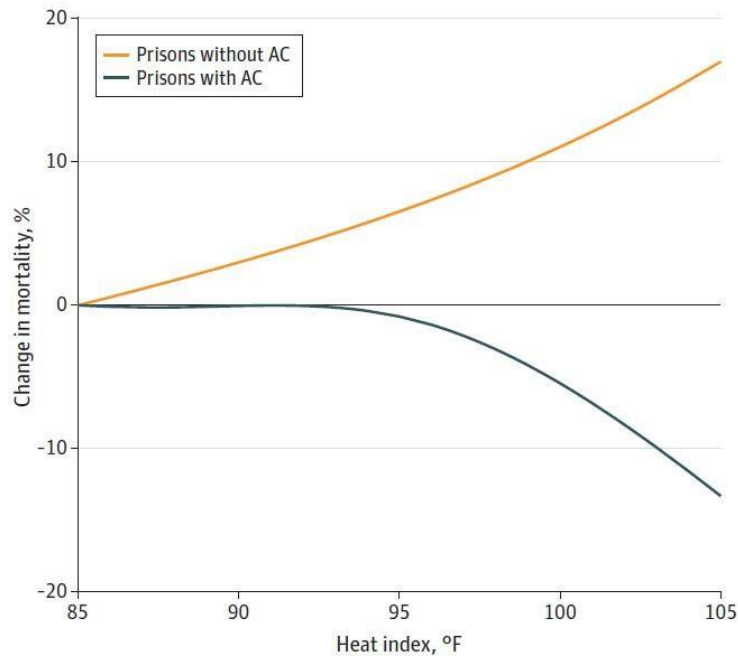
<sup>105</sup> Final Hearing Tr. (July 31, 2024) at 235:17–236:11.

<sup>106</sup> Pls.’ Hearing Exs. 70 and 75.

<sup>107</sup> *Id.*

<sup>108</sup> Final Hearing Tr. (July 30, 2024) at 158:18–160:6; Pls.’ Hearing Ex. 70 at 5.

mortality.<sup>109</sup>



Dr. Zanobetti and Dr. Skarha concluded there were 271 deaths attributable to extreme heat in Texas prisons without air conditioning from 2001 to 2019—an average of 14 deaths per year.<sup>110</sup> According to Dr. Vassallo, however, this is likely an underestimate, as it does not account for heat’s exacerbation of underlying illnesses.<sup>111</sup> The same study concluded that not a single heat-related death occurred in TDCJ’s climate-controlled prisons during this period.<sup>112</sup> Based on their research, Dr. Zanobetti and Dr. Skarha expect more TDCJ inmates to die from extreme heat in unair-conditioned cells each summer.<sup>113</sup>

<sup>109</sup> Pls.’ Hearing Ex. 70 at 5 (explaining that the figure “shows the association between same-day daily maximum heat index above 85 °F and the percentage change in the risk of daily all-cause mortality by AC status”).

<sup>110</sup> Final Hearing Tr. (July 30, 2024) at 90:22–91:4 (Dr. Zanobetti); *id.* at 160:7–15 (Dr. Skarha); Pls.’ Hearing Ex. 70.

<sup>111</sup> Final Hearing Tr. (July 31, 2024) at 38:3–24.

<sup>112</sup> Pls.’ Hearing Ex. 70.

<sup>113</sup> Final Hearing Tr. (July 30, 2024) at 84:21–85:2 (Dr. Zanobetti); *id.* at 163:3–7 (Dr. Skarha).

3. TDCJ admits that multiple TDCJ inmates died from extreme heat in Summer 2023.

After publicly denying that any inmate had died from the extreme heat in Texas prisons since 2011, TDCJ now concedes that there were at least three heat-related custodial deaths in the summer of 2023.<sup>114</sup> Collier admitted “there were three inmate deaths where elevated temperatures were cited in the final autopsies as a possible contributing factor”<sup>115</sup> and reported the following three deaths to the Texas Legislature.<sup>116</sup> Collier also acknowledged that he is briefed on any autopsy that identifies heat as a contributing factor, and that he would “probably” read the autopsy report, as well.<sup>117</sup> The Court briefly recounts the known deaths due to heat during that time period.

a. Elizabeth Hagerty – Died on June 28, 2023

Elizabeth Hagerty was a 37-year-old woman housed in an unair-conditioned cell in the Dr. Lane Murray Unit, a TDCJ unit for women in Gatesville.<sup>118</sup> At 12:10 a.m. on June 30, 2023, after Hagerty failed to respond to an officer conducting the unit count,<sup>119</sup> the officer found Hagerty unresponsive in her cell.<sup>120</sup> Less than forty minutes later, she was pronounced dead.<sup>121</sup> At the time she died, the temperature in her cell was 95.7°.<sup>122</sup> No core body temperature was documented.

Hagerty had a medical history of obesity, hypercholesterolemia, diabetes, asthma, substance abuse, and an unspecified mood disorder.<sup>123</sup> At the time of her death, Hagerty’s

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<sup>114</sup> Pls.’ Hearing Ex. 102 at 5.

<sup>115</sup> Pls.’ Hearing Ex. 254, Collier’s Resp. to Interr. No. 1.

<sup>116</sup> Pls.’ Hearing Ex. 102 at 5.

<sup>117</sup> Final Hearing Tr. (Aug. 2, 2024) at 211:17–212:2.

<sup>118</sup> Pls.’ Hearing Ex. 169-A at 2.

<sup>119</sup> *Id.*

<sup>120</sup> *Id.*

<sup>121</sup> *Id.* at 6.

<sup>122</sup> *Id.* at 11.

<sup>123</sup> Pls.’ Hearing Ex. 169-A at 29.

medications included (1) albuterol (a bronchodilator for asthma), (2) atorvastatin (used to treat elevated cholesterol), (3) citalopram (a selective serotonin reuptake inhibitor to treat anxiety and depression), and (4) carbamazepine (used to treat bipolar disorder).<sup>124</sup> A week before she died, Hagerty submitted a sick call complaining about the heat and a heat rash on her entire body.<sup>125</sup> Four days later, she was seen again by medical staff and complained of having abdominal cramps for two days and more than 20 episodes of vomiting.<sup>126</sup> Medical staff advised Hagerty to drink water.<sup>127</sup>

A University of Texas Medical Branch (“UTMB”) pathologist performed an autopsy on Hagerty’s body five days after her death.<sup>128</sup> Other than a heat rash, the autopsy revealed no significant anatomical findings but found she had hyponatremia (low sodium).<sup>129</sup> The pathologist determined that this was the result of dehydration from her recent gastrointestinal illness, which was likely caused by COVID-19.<sup>130</sup> According to the autopsy report, hyponatremia caused Hagerty’s death, although elevated environmental temperatures were noted as a potential contributory factor.<sup>131</sup> At the hearing, Collier admitted that he knew in 2023 that Hagerty died after complaining of heat rash, and that UTMB doctors had concluded that heat may have been a contributing factor in her death.<sup>132</sup>

Plaintiffs’ experts Dr. Vassallo and Dr. Uribe gave un rebutted testimony that Hagerty’s

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<sup>124</sup> *Id.* at 27.

<sup>125</sup> Pls.’ Hearing Ex. 169 at 6.

<sup>126</sup> *Id.*

<sup>127</sup> Pls.’ Hearing Ex. 169 at 6; Pls.’ Hearing Ex. 169-A at 24.

<sup>128</sup> Pls.’ Hearing Ex. 169 at 4.

<sup>129</sup> *Id.* at 11.

<sup>130</sup> *Id.*

<sup>131</sup> *Id.* at 12.

<sup>132</sup> Final Hearing Tr. (Aug. 2, 2024) at 216:5–9.

death was heat-related.<sup>133</sup> Specifically, Dr. Vassallo opined that the heat exacerbated Hagerty’s obesity, diabetes, asthma, and COVID-19 symptoms.<sup>134</sup> Dr. Vassallo and Dr. Uribe credibly testified that Hagerty would not have died if she had been housed in an air-conditioned cell.<sup>135</sup>

b. John Castillo – Died on August 6, 2023

John Castillo was a 33-year-old man housed in an unair-conditioned cell in the Alfred D. Hughes Unit, a TDCJ prison for men in Gatesville.<sup>136</sup> At 10:42 p.m. on August 6, 2023, Castillo’s roommate notified a corrections officer that Castillo was sitting on the floor leaning against the bottom bunk with his head tilted backward.<sup>137</sup> He was unresponsive but still breathing.<sup>138</sup> The officer entered the cell and attempted to communicate with Castillo, but he remained unresponsive.<sup>139</sup> The officer noted that Castillo’s breathing was shallow, and that his body temperature appeared elevated.<sup>140</sup> Castillo was taken to the medical unit, where a nurse reported he was “hot to the touch.”<sup>141</sup> His core body temperature was 107.5°.<sup>142</sup> He was pronounced dead at 11:33 p.m.<sup>143</sup>

The ambient temperature inside the Hughes Unit was 94.4° on the day Castillo died.<sup>144</sup> Fans were on in his unit, and he had access to water.<sup>145</sup> In fact, he was seen on TDCJ surveillance footage going to the water cooler 23 times in the 24 hours before his death.<sup>146</sup> He had a medical history of

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<sup>133</sup> Final Hearing Tr. (July 31, 2024) at 61:3-5 (Dr. Vassallo); *id.* at 302:11–13, 303:1–13 (Dr. Uribe).

<sup>134</sup> *Id.* at 61:6–8.

<sup>135</sup> *Id.* at 61:9–12 (Dr. Vassallo); *id.* at 303:6–9, 309:7–12 (Dr. Uribe).

<sup>136</sup> Pls.’ Hearing Ex. 161-B at 2.

<sup>137</sup> *Id.* at 2–3.

<sup>138</sup> *Id.*

<sup>139</sup> *Id.* at 2.

<sup>140</sup> *Id.* at 2–3.

<sup>141</sup> Pls.’ Hearing Ex. 161-B at 27.

<sup>142</sup> *Id.* at 64; Pls.’ Hearing Ex. 161 at 12.

<sup>143</sup> Pls.’ Hearing Ex. 161-B at 3.

<sup>144</sup> Pls.’ Hearing Ex. 102 at 17.

<sup>145</sup> Pls.’ Hearing Ex. 161 at 12.

<sup>146</sup> *Id.*

epilepsy and depression.<sup>147</sup> At the time of his death, his medications included (1) oxybutynin (used to treat bladder control disorders), (2) phenytoin (an antiseizure medication), and (3) sertraline (a selective serotonin reuptake inhibitor (an “SSRI”).<sup>148</sup> According to TDCJ’s Administrative Incident Review, Castillo was last seen by medical staff a little over a month before he died, on June 23, 2023, for treatment of depression.<sup>149</sup> The provider did not document any recent seizure activity or complaints of seizures.<sup>150</sup>

A UTMB pathologist performed an autopsy on Castillo’s body six days after his death.<sup>151</sup> She could not identify an anatomic cause of death.<sup>152</sup> Bleeding in his tongue, aspiration pneumonitis, and the absence of antiseizure medications in post-mortem toxicology tests suggested that Castillo had a seizure around the time of his death.<sup>153</sup> Based on these findings, the pathologist opined that Castillo’s cause of death was seizure disorder, “with high environmental temperature as an important contributory factor.”<sup>154</sup> The pathologist’s report also stated that, while seizures can result in hyperthermia, “it is well-established that hyperthermia can also induce seizures in susceptible individuals.”<sup>155</sup> And she concluded that “[t]he degree of hyperthermia seen in this patient is much greater than would be expected in the setting of seizures alone.”<sup>156</sup> At the hearing, Collier admitted to having read the report from the autopsy of Castillo, and to knowing in 2023 that UTMB doctors had concluded that heat was an important

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<sup>147</sup> *Id.*

<sup>148</sup> *Id.*

<sup>149</sup> Pls.’ Hearing Ex. 161-B at 35.

<sup>150</sup> *Id.*

<sup>151</sup> Pls.’ Hearing Ex. 161 at 4.

<sup>152</sup> *Id.* at 12.

<sup>153</sup> *Id.*

<sup>154</sup> Pls.’ Hearing Ex. 161 at 12.

<sup>155</sup> *Id.*

<sup>156</sup> *Id.*



contributory factor in Castillo's death.<sup>157</sup>

Dr. Vassallo and Dr. Uribe agreed that Castillo's death was heat-related.<sup>158</sup> And they credibly testified that Castillo would not have died if he had been in an air-conditioned cell.<sup>159</sup>

c. Patrick Womack – Died on August 21, 2023

Patrick Womack was a 50-year-old man housed in restrictive housing in the unair-conditioned H.H. Coffield Unit, a men's prison in Anderson County.<sup>160</sup> On the night of August 20, 2023, Womack asked a correctional officer for a cooldown shower, but the officer said there were not enough staff and did not give him one.<sup>161</sup> Video surveillance on August 21, 2023, shows Womack passing water bottles under his cell door at 9:19 a.m., but he did not respond to a correctional officer's count at 10:07 a.m.<sup>162</sup> At 11:34 a.m., the commissary manager tried to talk to Womack, but he did not respond.<sup>163</sup> The manager said that Womack appeared to be asleep on his stomach.<sup>164</sup> At 1:33 p.m., officers reported that Womack was face-down in his bunk and unresponsive.<sup>165</sup> At 1:44 p.m., officers noted that he remained unresponsive, and his core body temperature was 106.9°.<sup>166</sup> He was pronounced dead nine minutes later.<sup>167</sup> When corrections officers discovered Womack, the ambient outdoor temperature was 104° and the heat index was 113°.<sup>168</sup> TDCJ reported to the Texas Legislature that the indoor temperature at the Coffield Unit

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<sup>157</sup> Final Hearing Tr. (Aug. 2, 2024) at 213:11–23, 214:15–215:6.

<sup>158</sup> Final Hearing Tr. (July 31, 2024) at 51:19–52:2 (Dr. Vassallo); *id.* at 316:18–21 (Dr. Uribe).

<sup>159</sup> *Id.* at 56:12–15 (Dr. Vassallo); *id.* at 288:11–15, 309:7–12 (Dr. Uribe).

<sup>160</sup> Pls.' Hearing Ex. 200 at 6; Pls.' Hearing Ex. 200-B at 1.

<sup>161</sup> Pls.' Hearing Ex. 200-B at 3, 8, 42.

<sup>162</sup> *Id.* at 3.

<sup>163</sup> Pls.' Hearing Ex. 200-B at 3.

<sup>164</sup> *Id.*

<sup>165</sup> *Id.* at 2.

<sup>166</sup> Pls.' Hearing Ex. 200 at 6.

<sup>167</sup> *Id.*

<sup>168</sup> *Id.*

was 99.1° at 3:00 p.m. on August 20 and 96.6° at 3:00 p.m. on August 21.<sup>169</sup>

Womack had an extensive history of mental illness, including antisocial behavior, impulse control disorder, and major depressive disorder with suicidal ideation.<sup>170</sup> He had made numerous prior suicide attempts, had had over 70 encounters with Crisis Management, and was on TDCJ's mental health caseload.<sup>171</sup> Womack's medications included (1) benztropine (an anticholinergic); (2) haloperidol (an antipsychotic); and (3) sertraline (an SSRI).<sup>172</sup>

A UTMB pathologist performed an autopsy on Womack's body ten days after his death.<sup>173</sup> His body showed evidence of advanced decomposition.<sup>174</sup> Post-mortem toxicology showed that Womack had potentially toxic serum sertraline levels of 2500 ng/ml, which can cause hyperthermia.<sup>175</sup> The UTMB pathologist stated, "Classic heat stroke caused by elevated environmental temperatures can also occur in combination with drug-induced hyperthermia."<sup>176</sup> She then opined that Womack's cause of death was hyperthermia due to sertraline toxicity with environmental heat as a contributory factor.<sup>177</sup>

Dr. Vassallo and Dr. Uribe offered un rebutted testimony at the hearing that Mr. Womack's death was heat-related,<sup>178</sup> and Dr. Vassallo credibly testified that Womack died of a heat stroke.<sup>179</sup> Dr. Vassallo and Dr. Uribe also opined that absent environmental heat stress,

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<sup>169</sup> Pls.' Hearing Ex. 102 at 17.

<sup>170</sup> Pls.' Hearing Ex. 200 at 6.

<sup>171</sup> *Id.*

<sup>172</sup> *Id.*

<sup>173</sup> *Id.* at 4.

<sup>174</sup> *Id.* at 6.

<sup>175</sup> Pls.' Hearing Ex. 200 at 11.

<sup>176</sup> *Id.*

<sup>177</sup> *Id.*

<sup>178</sup> Final Hearing Tr. (July 31, 2024) at 69: 16-25 (Dr. Vassallo); *id.* at 304:11–13, 305:18–21 (Dr. Uribe).

<sup>179</sup> *Id.* at 69:16–25.

sertraline toxicity would not have caused a core body temperature of 106.9°. <sup>180</sup> Dr. Vassallo and Dr. Uribe testified that Womack would not have died if he had been in an air-conditioned cell. <sup>181</sup>

4. At least two more TDCJ inmates died from the heat in summer 2023.

Dr. Vassallo and Dr. Uribe also credibly testified that at least two other TDCJ inmates died from heat-related causes in Summer 2023:

a. John Southards – Died on June 28, 2023

John Southards was a 36-year-old man housed in restrictive housing in an unair-conditioned cell in the Estelle Unit in Huntsville. <sup>182</sup> During security rounds on June 28, 2023, an officer found him laying down in his cell and having trouble breathing. <sup>183</sup> The officer called for assistance at 11:06 p.m. <sup>184</sup> Southards was moved to the infirmary, where resuscitation efforts continued. At the time, staff described him as diaphoretic (sweating heavily) and hot to the touch. <sup>185</sup> Southards was pronounced dead at 11:58 p.m. <sup>186</sup> The UTMB pathologist who performed the autopsy on Southards asked TDCJ for his core body temperature near the time of his death, but none was recorded. <sup>187</sup> The ambient temperature in his cell was 85.7° with a heat index of 96.2° at 3:00 a.m. <sup>188</sup>

Southards had a significant psychiatric history, including depression, anxiety, psychosis,

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<sup>180</sup> *Id.* at 304:16–305:14 (Dr. Uribe testifying that sertraline cannot increase the body temperature to 106.9 degrees); *see id.* at 67:8–69:15 (Dr. Vassallo explaining that a sertraline level of 2500 ng/ml would not necessarily have caused death and not have caused core body temperature to increase to 106.9 degrees).

<sup>181</sup> *Id.* at 70:4–7 (Dr. Vassallo); *id.* at 305:15–17, 309:7-12, 332:2–5 (Dr. Uribe).

<sup>182</sup> Pls.’ Hearing Ex. 192-B at 2.

<sup>183</sup> Pls.’ Hearing Ex. 192-B at 2.

<sup>184</sup> *Id.*

<sup>185</sup> Pls.’ Hearing Ex. 192-A at 83.

<sup>186</sup> *Id.*

<sup>187</sup> *Id.* at 19, 83, 88.

<sup>188</sup> *Id.* at 88.

and suicidal ideation with multiple suicide attempts.<sup>189</sup> His medical history was only significant for intermittent asthma and gastroesophageal reflux. His medications included (1) haloperidol (an antipsychotic), (2) oxybutynin (used for bladder dysfunction), (3) venlafaxine (an SSRI), and (4) Benadryl (an antihistamine and anticholinergic).<sup>190</sup>

A UTMB pathologist performed an autopsy on Southards's body six days after his death.<sup>191</sup> The findings included heat rash on his upper extremities.<sup>192</sup> Although additional anatomical findings were described, none were considered a contributing factor in Southards's death.<sup>193</sup> The pathologist concluded that diphenhydramine (Benadryl) toxicity caused Southards's death but stated "there is insufficient evidence to support heat-related stress as a contributory cause of death, given the lack of core body temperature data. However, the possibility cannot be excluded."<sup>194</sup> She also noted that there was "no documented information to suggest suicidal intent."<sup>195</sup> On December 8, 2023, TDCJ investigators determined that Southards had died by suicide and closed their investigation.<sup>196</sup>

Dr. Vassallo and Dr. Uribe opined that heat stroke caused Southards's death.<sup>197</sup> Both medical experts testified that Southards could not have died from diphenhydramine toxicity (i.e., a Benadryl overdose), because he was sweating when he was found, and Benadryl inhibits sweating.<sup>198</sup> Dr. Vassallo and Dr. Uribe further concluded that the amount of Benadryl in

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<sup>189</sup> *Id.*

<sup>190</sup> *Id.* at 68, 83.

<sup>191</sup> *Id.* at 81.

<sup>192</sup> *Id.* at 88.

<sup>193</sup> *Id.*

<sup>194</sup> Pls.' Hearing Ex. 192-A at 88.

<sup>195</sup> *Id.*

<sup>196</sup> *Id.* at 41.

<sup>197</sup> Final Hearing Tr. (July 31, 2024) at 61:18–64:22 (Dr. Vassallo); *id.* at 296:19–21 (Dr. Uribe).

<sup>198</sup> *Id.* at 63:15–22 (Dr. Vassallo); *id.* at 297:1–13 (Dr. Uribe).

Southards's system was not lethal.<sup>199</sup> Lastly, Dr. Vassallo and Dr. Uribe both credibly testified that Southards would not have died if he had been in an air-conditioned cell.<sup>200</sup>

b. Armando Gonzales – Died on August 23, 2023

Armando Gonzales was a 42-year-old transgender woman housed in the Alfred D. Hughes Unit, a prison in Gatesville.<sup>201</sup> At 10:00 p.m. on August 21, 2023, Gonzales was found unresponsive but breathing in her cell. After the incident command system was activated, medical staff found Gonzales lying on her left side in a pool of vomit.<sup>202</sup> The autopsy noted that the “air conditioning was out in the unit,” and that the ambient temperature in Gonzales’s cell at the time she was found was between 97° and 100°. <sup>203</sup> She was taken to the onsite emergency room, where her rectal temperature was documented as 109.4° on repeated measurements.<sup>204</sup> Despite multiple attempts over a 48-hour period, medical providers could not resuscitate her, and she was pronounced dead at 5:32 a.m. on August 23, 2023.<sup>205</sup>

Gonzales had been diagnosed with Hepatitis C and manic depressive disorder with psychosis; she also had a history of substance abuse.<sup>206</sup> She had cirrhosis of the liver,<sup>207</sup> and her medications included: (1) aripiprazole (used to treat bipolar disorder); (2) citalopram (an SSRI); (3) spironolactone (a diuretic to treat fluid retention); (4) estradiol (a hormone); and (5) bupropion (used to treat depression).<sup>208</sup>

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<sup>199</sup> *Id.* at 64:3-19 (Dr. Vassallo); *id.* at 297:15–17 (Dr. Uribe).

<sup>200</sup> *Id.* at 64:23–65:1 (Dr. Vassallo); *id.* at 297:23-298:2, 309:7–12 (Dr. Uribe).

<sup>201</sup> Pls.’ Hearing Ex. 168-A at 2.

<sup>202</sup> *Id.* at 8.

<sup>203</sup> Pls.’ Hearing Ex. 168 at 6, 11.

<sup>204</sup> *Id.* at 6.

<sup>205</sup> *Id.*

<sup>206</sup> *Id.* at 5–6.

<sup>207</sup> *Id.*

<sup>208</sup> *Id.* at 6.

A UTMB pathologist performed an autopsy on Gonzales’s body 13 days after she died.<sup>209</sup> The anatomic examination revealed a lung hemorrhage and pneumonia, reflecting Gonzales’s clinical illness.<sup>210</sup> Post-mortem toxicology was positive for midazolam, a sedative hypnotic drug; and fentanyl, an opioid analgesic.<sup>211</sup> The pathologist noted, however, that “the levels of drug may be altered by the long post mortem interval and severe degree of autolysis of tissues seen in this patient.”<sup>212</sup> He nevertheless opined that Gonzales’s death was caused by multidrug toxicity with opioid overdose and drug-related hyperthermia.<sup>213</sup> Collier received this autopsy report as well.<sup>214</sup>

Dr. Vassallo disagreed with the UTMB pathologist’s analysis.<sup>215</sup> She explained that multiple medications (including opioids) are used in the intensive care unit to sedate patients who have suffered medical incidents like heat stroke, which could explain the postmortem toxicology results.<sup>216</sup> Most importantly, it is “unquestionable” that opioids like fentanyl do not cause hyperthermia.<sup>217</sup> Instead, they cause *hypothermia*—i.e., *decreased* body temperature.<sup>218</sup> Thus, in Dr. Vassallo’s credible expert opinion, fentanyl could not have caused Gonzales’s hyperthermia; rather, severe environmental heat stroke caused her death.<sup>219</sup> Dr. Uribe agreed that Gonzales’s death was heat-related.<sup>220</sup> Dr. Vassallo and Dr. Uribe both credibly testified that Gonzales would

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<sup>209</sup> *Id.* at 4.

<sup>210</sup> *Id.*

<sup>211</sup> Pls.’ Hearing Ex. 168 at 11.

<sup>212</sup> *Id.*

<sup>213</sup> Pls.’ Hearing Ex. 168 at 11.

<sup>214</sup> *Id.* at 15.

<sup>215</sup> Final Hearing Tr. (July 31, 2024) at 54:15–56:5.

<sup>216</sup> *Id.*

<sup>217</sup> *Id.* at 54:22–55:13.

<sup>218</sup> *Id.* at 54:22–55:3, 55:21–24.

<sup>219</sup> *Id.* at 56:3–5.

<sup>220</sup> *Id.* at 291:10–292:6.

not have died if she had been in an air-conditioned cell.<sup>221</sup>

Plaintiffs' corrections expert Williams testified that core body temperatures of 106° or 107° would be "cause for alarm across the [state government], . . . not just in the corrections system."<sup>222</sup> If he saw even "one death where [he] knew the core body temperature was in the range of 106 degrees, 107 degrees, . . . [he] would pull the fire alarm for [the] department."<sup>223</sup> As set forth in more detail below, Collier did not do so upon receiving Gonzales's autopsy report.

5. Evidence of two other possibly heat-related inmate deaths was also presented during the preliminary injunction hearing.

Two other inmate deaths were discussed during the hearing—both of which were possibly heat-related.

a. Corey Smith – Died on July 28, 2022

Corey Smith was a 50-year-old transgender woman housed in cell 4-E-2 in the Alfred D. Hughes Unit.<sup>224</sup> During a count on July 28, 2022, at approximately 2:00 a.m., a correctional officer found Smith prostrate on the floor of her cell and in acute medical distress.<sup>225</sup> At that time, her core body temperature was measured at 107.6°.<sup>226</sup> Smith was pronounced dead less than an hour later.<sup>227</sup> Smith's medical history included high cholesterol, asthma, substance abuse, and gender dysphoria disorder.<sup>228</sup> Her medications included (1) Benadryl; (2) estradiol (a hormone); and (3) spironolactone (used to treat high blood pressure and heart failure).<sup>229</sup>

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<sup>221</sup> *Id.* at 56:6-11 (Dr. Vassallo); *id.* at 292:7-9, 309:7-12 (Dr. Uribe).

<sup>222</sup> *Id.* at 234:1-5.

<sup>223</sup> Final Hearing Tr. (July 31, 2024) at 233:10-18.

<sup>224</sup> Pls.' Hearing Ex. 277 at 2.

<sup>225</sup> *Id.*

<sup>226</sup> *Id.* at 123.

<sup>227</sup> *Id.*; Pls.' Hearing Ex. 277 at 2.

<sup>228</sup> Pls.' Hearing Ex. 277-A at 123.

<sup>229</sup> *Id.* at 24.

A UTMB pathologist performed an autopsy on Smith's body eight days after her death.<sup>230</sup> The autopsy report states that the cause of death was hyperthermia attributed to sertraline toxicity and serotonin syndrome.<sup>231</sup> Smith's postmortem sertraline level was elevated at 1200 ng/ml.<sup>232</sup> While elevated levels of sertraline can increase core body temperature, Dr. Vassallo and Dr. Uribe both testified that a postmortem sertraline level of over twice Smith's level would not have caused someone's core body temperature to rise to 106°.<sup>233</sup> TDCJ's Director of Classification Timothy Fitzpatrick, testified that Hughes 4-E-2 is not air-conditioned.<sup>234</sup> And, according to the temperature logs that TDCJ provided to the Texas Legislature, the indoor temperature at the Hughes unit was 93.6° on the day Smith died in her unair-conditioned cell.<sup>235</sup>

b. Jason Wilson – Died on July 5, 2024

In the weeks before his death, TDCJ inmate Jason Wilson sent TPCA Director Brittany Robertson several emails indicating that there were not enough corrections staff to pass out water, and that the temperatures in his unit were extremely high.<sup>236</sup> Wilson had been a TPCA team member for a year before he died.<sup>237</sup> When Robertson called Wilson's unit to check on him on July 7, 2024, a TDCJ employee told Robertson that Wilson was doing okay, even though he had, in fact, died two days earlier.<sup>238</sup> During the hearing, Collier agreed that TDCJ handled Wilson's

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<sup>230</sup> *Id.* at 126.

<sup>231</sup> *Id.* at 123, 126, 133–34.

<sup>232</sup> Pls.' Hearing Ex. 277-A at 133.

<sup>233</sup> Final Hearing Tr. (July 31, 2024) at 304:16-305:14, 331:10–16 (Dr. Uribe testifying that sertraline cannot increase the body temperature to 106.9° when he discussed Womack's death); *see id.* at 67:1–69:15 (Dr. Vassallo explaining that a sertraline level of 2500 ng/ml would not necessarily have caused death and would not have caused a core body temperature to increase to 106.9° when she discussed Womack's death).

<sup>234</sup> Final Hearing Tr. (July 31, 2024) at 218:14–16.

<sup>235</sup> Def.'s Hearing Ex. 70 at 2 (noting that the temperatures are taken indoors), 27 (noting the temperature).

<sup>236</sup> Final Hearing Tr. (July 31, 2024) at 366:14–370:11, 374:3–375:1; Pls.' Hearing Exs. 137, 264, 152.

<sup>237</sup> Final Hearing Tr. (July 31, 2024) at 365:3–12.

<sup>238</sup> *Id.* at 372:10–16, 374:3–5; Pls.' Exs. 137, 264, 152.



wellness check in an unprofessional manner, and Collier said he had reached out to his staff to investigate it.<sup>239</sup> Collier also agreed that Wilson’s messages to Robertson about not having access to cold water are very concerning.<sup>240</sup> After Wilson’s death, another inmate wrote to Robertson that “no officer came and checked on the pod that we were house[d] all night on July 4 til the next morning when they found Jason dead.”<sup>241</sup>

6. Heat-related deaths are being undercounted and underreported because of TDCJ’s practices.

Based on the available evidence, there is no dispute that high heat has caused or contributed to the deaths of a number of TDCJ inmates in unair-conditioned units, including last summer. In addition, three TDCJ practices have likely led to heat-related deaths of TDCJ inmates being undercounted and unreported.

First, TDCJ does not consistently take the core body temperatures of deceased inmates found in high ambient temperatures, and it has no policy requiring temperatures be taken in those circumstances.<sup>242</sup> According to the medical literature, “[a] rectal temperature should be obtained in *all* patients suspected of heat stroke.”<sup>243</sup> According to Dr. Vassallo, a core body temperature is “absolutely fundamental” to determining whether a death is heat-related,<sup>244</sup> and failing to take a core body temperature violates the commonly accepted medical standard of care.<sup>245</sup> In fact, taking a core body temperature is so “fundamental to being a doctor” that the entire point of one oral board examination question is for the examinee to recognize that the temperature is missing

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<sup>239</sup> Final Hearing Tr. (Aug. 2, 2024) at 238:10–239:8.

<sup>240</sup> *Id.* at 241:19–242:2.

<sup>241</sup> Pls.’ Hearing Ex. 264 at 8.

<sup>242</sup> Dkt. 155, TDCJ 30(b)(6) Dep. at 245:17–246:4.

<sup>243</sup> Pls.’ Hearing Ex. 275 at 5 (emphasis added).

<sup>244</sup> Final Hearing Tr. (July 31, 2024) at 52:8–10.

<sup>245</sup> *Id.* at 57:21–58:6.

from the data presented.<sup>246</sup>

Dr. Uribe agreed that taking a core body temperature is “essential,” because it is a “quick way to establish one or more things that are possibly going wrong” with the body—especially in a “particularly hot or cold environment.”<sup>247</sup> He testified that the “documentation of the core body temperature is critically important from a post mortem perspective.”<sup>248</sup> “[T]he core body temperature [triggers] the diagnosis of hyperthermia,” and the pathologist then has to figure out “why does this person have such an elevated temperature”—for instance, was it “because they were exposed to heat for a prolonged period of time,” or “were they . . . on certain drugs or medications?”<sup>249</sup> Dr. Uribe opined that routinely failing to take core body temperatures could lead to heat being underreported as a contributing cause of inmate deaths.<sup>250</sup>

Correctional leaders understand the importance of taking core body temperatures. Plaintiffs’ correctional expert, Williams confirmed that a proper death investigation should include measuring the ambient temperature of the cell or the living area where the individual died, the heat index, and the individual’s core body temperature.<sup>251</sup> A high core body temperature is “not just a clue,” but “strong evidence that people are dying of heat stroke.”<sup>252</sup>

Second, TDCJ only considers a death “heat-related” if the autopsy report lists hyperthermia as the sole cause of death.<sup>253</sup> In other words, heat must be the “sole causal factor” of the inmate’s

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<sup>246</sup> *Id.*

<sup>247</sup> *Id.* at 298:23–299:23.

<sup>248</sup> *Id.* at 299:24–300:18.

<sup>249</sup> *Id.* at 300:3–13.

<sup>250</sup> *Id.* at 300:19–24.

<sup>251</sup> Final Hearing Tr. (July 31, 2024) at 246:7–23, 251:20–24.

<sup>252</sup> *Id.* at 251:2–19.

<sup>253</sup> Dkt. 155, TDCJ 30(b)(6) Dep. at 244:25–245:12.

death for TDCJ to consider it “heat-related.”<sup>254</sup> But, according to Dr. Vassallo, there is no medical distinction between identifying heat as a “contributing factor” or a “heat-related death.”<sup>255</sup> Dr. Vassallo testified that, “if a death is found to have heat as a contributing cause, [she] as a medical professional [would] consider that to be a heat-related death.”<sup>256</sup> Dr. Vassallo concluded that, if you “only considered deaths in which heat was found to be the sole cause and did not consider [deaths] where heat was found to be a contributing factor,” you would undercount heat-related deaths.<sup>257</sup> Dr. Uribe agreed that heat-related deaths would be undercounted if TDCJ took the position that a death is not heat-related unless heat is the sole, direct cause of death.<sup>258</sup>

Third, Dr. Uribe also testified that the standard of care for pathologists requires that an autopsy be performed within 48 hours (two days) of an individual’s death.<sup>259</sup> The autopsies for the deaths listed above were all performed outside of this window: (i) Elizabeth Hagerty (5 days); (ii) John Castillo (6 days); (iii) Patrick Womack (10 days); (iv) John Southards (6 days); (v) Armando Gonzales (13 days); and (vi) Corey Smith (8 days).<sup>260</sup> Dr. Uribe explained that the timeliness of an autopsy is important because decomposition (autolysis) affects the accuracy of the results, particularly toxicology and laboratory values.<sup>261</sup> Dr. Uribe further opined that a systemic pattern of delayed autopsies would likely result in TDCJ underreporting heat as a cause of death.<sup>262</sup>

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<sup>254</sup> *Id.*

<sup>255</sup> Final Hearing Tr. (July 31, 2024) at 71:21–72:19.

<sup>256</sup> *Id.* at 72:2–5.

<sup>257</sup> *Id.* at 72:6–16.

<sup>258</sup> *Id.* at 308:25–309:6.

<sup>259</sup> *Id.* at 292:14–293:1.

<sup>260</sup> *See* Sections IV.C.–IV.E., *supra*.

<sup>261</sup> Final Hearing Tr. (July 31, 2024) at 294:5–295:9.

<sup>262</sup> *Id.* at 295:10–19.

## 7. TDCJ is likely undercounting inmates' heat-related injuries.

In addition to heat-related deaths, Collier knows that TDCJ inmates also continue to develop heat-related injuries. In his interrogatory responses, Collier identified more than a dozen inmates diagnosed with heat exhaustion, heat stroke, or hyperthermia between May 5, 2023, and September 17, 2023.<sup>263</sup> Collier, likewise, reported to the Texas Legislature that 17 TDCJ inmates developed heat-related illnesses in 2023 alone<sup>264</sup>:

Inmate Heat-Related Illnesses	FY 2023												
	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Total
Heat Cramps	0	0	0	0	0	0	0	0	0	0	0	0	0
Heat related Illness, Exhaustion, Dehydration	0	1	0	0	0	0	1	0	1	4	2	8	17
Heat Stroke	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>8</b>	<b>17</b>

This number is likely an undercount, since at least one report from UTMB identified 35 TDCJ inmates with heat-related illnesses in a single month (June 2023).<sup>265</sup> Collier acknowledged that he was aware of UTMB's June 2023 heat-related illness report but claimed that the data UTMB reported to TDCJ contained "significant inaccuracies" based on differences in how UTMB and TDCJ categorize heat-related illnesses.<sup>266</sup>

Former TDCJ inmates' firsthand accounts further illustrate the catastrophic consequences of extreme heat. For example, Simmons testified that the summer heat affected her physical and mental health during her ten-year incarceration in unair-conditioned units from 2012 to 2022. She testified that she lost her appetite, could not sleep, and became weaker and more lethargic because of the heat.<sup>267</sup> She saw several other inmates become lethargic, pass out, and

<sup>263</sup> Pls.' Hearing Ex. 206, Collier's Response to Plaintiffs' Interr. 8.

<sup>264</sup> Pls.' Hearing Ex. 102.

<sup>265</sup> Pls.' Hearing Exs. 84 & 85.

<sup>266</sup> Final Hearing Tr. (Aug. 2, 2024) at 225:10–228:3.

<sup>267</sup> Final Hearing Tr. (July 30, 2024) at 28:25–29:6

suffer heat-induced seizures.<sup>268</sup> She also saw “lots of women that [she] was housed with” require medical attention and be taken away in ambulances “very frequently” during the summer.<sup>269</sup>

According to Simmons, she and her fellow inmates tried to reduce the effects of the heat by dousing themselves in water from the toilets in their cells.<sup>270</sup> Simmons did this “[m]ore times than [she could] count.”<sup>271</sup> Other women in Simmons’s unit would even “inflict harm” on themselves and “make it look like a suicide attempt” to “get into the air conditioned crisis management center” and “get a break from the heat.”<sup>272</sup>

Malouff was also housed in unair-conditioned TDCJ units over multiple summers. He testified that the heat was “horrible”—you felt “dehydrated,” and it “literally sucks the oxygen right out of you.”<sup>273</sup> He witnessed two inmates go from “sweating profusely” to “no sweat” to “discoloration” to “kind of [] queasiness” to passing out before finally receiving medical attention.<sup>274</sup> To Malouff, it looked like “they were having a heat stroke.”<sup>275</sup> Malouff also said that inmates in administrative segregation would “fairly regularly” start fires in their unit, so that the corrections officers would respond by flooding the unit with water and the inmates could lay down on the ground in the pools of water.<sup>276</sup> These accounts suggest there are likely more heat-related injuries than are reported.

#### 8. TDCJ Staff Continue to Suffer Heat-Related Injuries.

In addition to TDCJ inmates, TDCJ staff also suffer from a substantial risk of serious

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<sup>268</sup> *Id.* at 33:14–34:9.

<sup>269</sup> *Id.* at 34:10–17.

<sup>270</sup> *Id.* at 31:3–24, 35:15–36:8.

<sup>271</sup> *Id.* at 31:17–24.

<sup>272</sup> *Id.* at 35:17–36:8.

<sup>273</sup> *Id.* at 179:24–180:2.

<sup>274</sup> *Id.* at 181:23–182:9.

<sup>275</sup> *Id.* at 182:7–8.

<sup>276</sup> Final Hearing Tr. (July 30, 2024) at 180:3–19, 182:24–183:2.

harm from the extreme heat in TDCJ facilities. TDCJ's own training documents confirm that heat-related illness is the fifth-leading cause of serious injuries among TDCJ employees.<sup>277</sup> One document specifically recognizes that “[n]o one is immune from suffering a heat-related illness, from the fittest employee to those who may be prone to medical conditions.”<sup>278</sup> It warns that “[i]ncreased body temperatures, if left uncontrolled, may lead to delirium, convulsions, seizures, and possibly even death.”<sup>279</sup> And the document suggests treating the person by moving them “out of direct sunlight [and] into an air conditioned environment, if possible.”<sup>280</sup>

In 2022 and 2023, TDCJ staff filed nearly 80 workers' compensation claims related to the heat.<sup>281</sup> These are some of the employee statements<sup>282</sup>:

- “Overheated, got dizzy, fell down and could not move or respond.”
- “I was sitting in my office and started to feel unwell and overheated. I felt liek [sic] I could not breath [sic].”
- “I was counting the wings at Beto when I became over heated. Reported to Capt. Kimberly Henslee. She then sent me to the chapel where I began to throw up, then Capt. Henslee sent me home.”
- “Driving home from work (Torres Unit/Food Service) after being exposed to excessive heat in the food service dept. Had a stroke on the way home.”
- “Heat from unit really got to me, extremely overheated causing me to get sick, really dizzy, headache, messing wiht [sic] my diabetes.”
- “While performing officer duty at the O.M. gate, too much heat.”
- “Heat exhaustion, dehydration.”
- “Heat exhaustion.”
- “It happened because of the heat and I was dehydrated.”
- “In C Row top felt light headed, requested water, after drinking three bottles I got dizzy and felt like I was going to pass out, left side of the body went numb.”
- “While watching my workers in the bath house, I got overheated, very weak,

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<sup>277</sup> Def.'s Hearing Ex. 13D at 15.

<sup>278</sup> *Id.*

<sup>279</sup> *Id.*

<sup>280</sup> *Id.*

<sup>281</sup> Pls.' Hearing Ex. 207, Collier's Resp. to Interr. No. 10.

<sup>282</sup> *Id.*

confused and unable to respond. Also, I was dry heaving and felt nauseated, I vomited blood.”

- “Was working in high heat when I started to feel dizzy, then later felt chest pain and body aches.”

Simmons, likewise, testified that she saw “at least five” corrections officers in her unit pass out in the high heat.<sup>283</sup> Collier acknowledged during the hearing that TDCJ correctional officers continue to develop heat-related illnesses.<sup>284</sup> TDCJ reported 35 instances of heat-related illnesses of TDCJ staff to the Texas Legislature in 2023.<sup>285</sup>

#### **E. Collier Knows that TDCJ’s Heat Mitigation Policies are Inadequate.**

TDCJ circulates a seasonal preparedness directive every year prior to the summer months which discusses TDCJ’s heat mitigation measures and Administrative Directive 10.64 (“AD 10.64”), TDCJ’s policy regarding excessive and extreme heat temperatures, which provides direction on how to mitigate extreme temperatures during the summer months.<sup>286</sup> TDCJ uses a seasonal preparedness checklist prior to the summer months to ensure the facilities, staff, and inmate population are prepared for extreme heat.<sup>287</sup> The checklists require every unit to respond to 15 checklist items concerning access to heat mitigation measures, whether staff and inmates are trained on heat mitigation and precaution measures, whether equipment is in working condition, and if AD 10.64’s requirements are being implemented.<sup>288</sup> TDCJ trains inmates and staff on the effects of heat and how to mitigate these effects.<sup>289</sup> TDCJ also trains individuals in

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<sup>283</sup> Final Hearing Tr. (July 30, 2024) at 39:16–18.

<sup>284</sup> Final Hearing Tr. (Aug. 2, 2024) at 229:4–231:11.

<sup>285</sup> Pls.’ Hearing Ex. 102.

<sup>286</sup> Final Hearing Tr. (Aug. 1, 2024) at 14:3–11; 16:17–17:15; 18:4–20; 19:10–19; Def.’s Hearing Ex. 1; Def.’s Hearing Ex. 53.

<sup>287</sup> Final Hearing Tr. (Aug. 1, 2024) at 39:12–40:9; Def.’s Hearing Ex. 9.

<sup>288</sup> Def.’s Hearing Ex. 9 at 8–12.

<sup>289</sup> Final Hearing Tr. (Aug. 2, 2024) at 167:1–9.

training to become corrections officers (“cadets”) in heat preparedness.<sup>290</sup> All TDCJ staff are required to carry a pocket card to help them recognize the signs and symptoms of heat-related illness, and know how to treat and prevent such illness.<sup>291</sup>

TDCJ’s heat mitigation policy provides for the provision of respite rooms, cold showers, fans, ice water, and a reusable cup to use to drink from and refill with water.<sup>292</sup> Collier acknowledged that, “despite TDCJ’s heat mitigation policies and measures, heat was a factor in at least three [inmates’] death[s] last summer.”<sup>293</sup> He admitted that 17 TDCJ inmates suffered heat-related illnesses in summer 2023, despite TDCJ’s heat mitigation measures.<sup>294</sup> And he recognized that, despite TDCJ’s heat mitigation policies and measures, TDCJ inmates submitted nearly 6,000 heat-related grievances in 2023 alone.<sup>295</sup> TDCJ itself created a “Heat Strike Team” initiative in which groups of TDCJ employees make unannounced visits to individual units to evaluate a unit’s compliance with heat-related procedures and heat mitigation protocols by using an audit tool, talking with inmates and staff, visiting all housing and work locations, ensuring the unit has adequate ice and water, looking at respite and how often the inmates get breaks while working, and ensuring all employees are carrying their pocket cards.<sup>296</sup> The Heat Strike Team then drafts a compliance report and can notify TDCJ’s executive leadership if it believes a problem is more systematic.<sup>297</sup>

In 2017, Judge Keith Ellison (“Judge Ellison”) concluded that “the mitigation measures put

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<sup>290</sup> Final Hearing Tr. (Aug. 1, 2024) at 226:13–229:11.

<sup>291</sup> Final Hearing Tr. (Aug. 1, 2024) at 42:19–43:7; 229:12–23; Def.’s Hearing Ex. 12.

<sup>292</sup> Final Hearing Tr. (Aug. 1, 2024) at 317:10–11; 30:4–17; Final Hearing Tr. (Aug. 2, 2024) at 169:5–12.

<sup>293</sup> Final Hearing Tr. (Aug. 2, 2024) at 221:8–12.

<sup>294</sup> Final Hearing Tr. (Aug. 2, 2024) at 222:4–7, 224:10–14; Pls.’ Hearing Ex. 102.

<sup>295</sup> Final Hearing Tr. (Aug. 2, 2024) at 221:13–222:3; Pls.’ Hearing Ex. 102 at 4.

<sup>296</sup> Final Hearing Tr. (Aug. 1, 2024) at 262:1–265:19.

<sup>297</sup> *Id.* at 265:22–266:13; 268:25–269:2.



in place by TDCJ are insufficient to combat the substantial risk of serious injury or death faced by the inmates at the [Wallace] Pack Unit during the summer months.”<sup>298</sup> Judge Ellison explained that, “[s]ince the 12 heat-related deaths in 2011 and 2012, TDCJ has implemented, and attempted to implement, many of the mitigation measures discussed by the Fifth Circuit in *Ball v. LeBlanc*.”<sup>299</sup> In Judge Ellison’s view, however, these measures did not “reduce the substantial risk of heat-related illness faced by all of the men at the Wallace Pack Unit, and particularly not the men with heat sensitivities.”<sup>300</sup> The following year, the Texas House Committee on Corrections reached the same conclusion: “Based on the medical information about human health and heat-related health risks, TDCJ cannot rely only on mitigation measures to ensure the well-being of inmates and corrections personnel.”<sup>301</sup>

In July 2022, a study authored by Dr. Carlee Purdum (“Dr. Purdum”) and published by Texas A&M (“Dr. Purdum’s study” or the “Purdum study”) concluded that, “despite [TDCJ’s] current heat mitigation policies, nearly every year, there are reports of incarcerated people and staff falling extremely ill and/or dying from complications from extreme heat in Texas prisons.”<sup>302</sup> The study warned that “[i]ncreasing annual temperatures and the increase of days over 100 degrees in Texas will continue to exacerbate the degradation of health for both incarcerated people and staff” in the TDCJ system.<sup>303</sup> The study based its conclusions on survey responses from TDCJ inmates which indicated:

- 66% said they did not have access to ice.<sup>304</sup>

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<sup>298</sup> *Cole*, 2017 WL 3049540, at \*10.

<sup>299</sup> *Id.*; see also *Ball v. LeBlanc*, 792 F.3d 584, 599 (5th Cir. 2015) (“*Ball I*”).

<sup>300</sup> *Id.*

<sup>301</sup> Plaintiffs’ Hearing Ex. 34 at 58.

<sup>302</sup> Pls.’ Hearing Ex. 55 at 3–4.

<sup>303</sup> *Id.* at 4.

<sup>304</sup> *Id.* at 22.

- 61% said they did not have access to cool-down showers.<sup>305</sup>
- 60% said wellness checks weren't happening regularly.<sup>306</sup>
- 47% reported being denied access to respite areas.<sup>307</sup>
- 29% said that they knew of at least one heat-related death in their own unit or another.<sup>308</sup>
- 11% said they did not receive access to cold water, and the respondents who reported receiving access to cold water described “a pattern or persistent inconsistency.”<sup>309</sup>

TDCJ's heat-mitigation policies were in place during the years of Dr. Skarha's study, 2001-2019, as well, yet heat-related deaths continued unabated.<sup>310</sup> According to Dr. Skarha, if mitigation measures were effective in preventing heat-related deaths in Texas prisons without air conditioning, she would have expected to see no effect from heat on mortality in those facilities.<sup>311</sup> But she did see an effect, even while TDCJ's mitigation measures were in place.<sup>312</sup>

Collier also personally acknowledged having received Dr. Purdum's and Dr. Skarha's studies in 2022 and being aware of their findings.<sup>313</sup> He said that he had asked TDCJ's “research director” Barbee to “look at” Dr. Skarha's study,<sup>314</sup> but he did not recall having asked anyone at UTMB or anyone with an epidemiology degree to review that study.<sup>315</sup>

In the face of evidence that 271 people over 19 years likely died from heat in Texas prisons, Collier's Rule 30(b)(6) deponent testified that TDCJ did not give Dr. Purdum's study or Dr. Skarha's study “much credibility,” because TDCJ did not “sanction” them and was not

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<sup>305</sup> *Id.* at 27–28.

<sup>306</sup> Final Hearing Tr. (Aug. 2, 2024) at 237:16–238:4; Pls.' Hearing Ex. 55 at 14.

<sup>307</sup> Pls.' Hearing Ex. 55 at 31–32.

<sup>308</sup> Final Hearing Tr. (Aug. 2, 2024) at 235:11–17; Pls.' Hearing Ex. 55 at 18.

<sup>309</sup> Final Hearing Tr. (Aug. 2, 2024) at 240:16–241:18; Pls.' Hearing Ex. 55 at 20.

<sup>310</sup> Pls' Hearing Exs. 70 & 75.

<sup>311</sup> Final Hearing Tr. (July 30, 2024) at 172:24–173:7.

<sup>312</sup> *Id.* at 173:9–11.

<sup>313</sup> Final Hearing Tr. (Aug. 2, 2024) at 234:8–235:23, 243:10–245:11.

<sup>314</sup> *Id.* at 244:6–245:11.

<sup>315</sup> *Id.* at 244:21–245:11.

“involved” in them.<sup>316</sup> Collier’s deponent called Dr. Skarha’s study “nothing more than writing on a piece of paper.”<sup>317</sup> Collier’s deponent testified that TDCJ did not do anything to investigate the findings of either study.<sup>318</sup> Nor did Collier or anyone else who testified at the hearing on his behalf identify any actions or policy changes made in response to either study.

Plaintiffs’ corrections expert Dean Williams testified that, if he received notice of something like the Skarha study, he would not ignore it; instead, it would have raised “high alarms” with him.<sup>319</sup> In Williams’s view, not responding to evidence of deaths, staff illnesses, inmate illnesses, and scientific studies puts people’s health and safety at risk.<sup>320</sup> Collier’s own corrections expert, John Baldwin (“Baldwin”), agreed that if he received a study from a credible source alerting him to dangerous conditions in his prison system, he would review the study.<sup>321</sup> Baldwin acknowledged that, if he received information like what was contained in Dr. Purdum’s study, he would investigate it.<sup>322</sup> And Collier’s corrections and correctional risk management expert, Paul Morales testified that “any reasonable person in [his] position . . . or in Collier’s position” would look into the Purdum study’s findings.<sup>323</sup>

Even if he was not moved to action by multiple reputable studies, Collier knew TDCJ’s heat mitigation policies were inadequate. He admittedly knew that dozens of TDCJ inmates had died or fallen ill because of extreme heat with those measures in place. Evidence presented at the hearing, which he attended, underscored those inadequacies.

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<sup>316</sup> Dkt. 155, TDCJ 30(b)(6) Dep. at 260:15–261:14.

<sup>317</sup> *Id.*, at 262:19–263:1.

<sup>318</sup> *Id.*, at 270:21–274:23, 283:18–284:14.

<sup>319</sup> Final Hearing Tr. (July 31, 2024) at 240:23–241:24.

<sup>320</sup> *Id.* at 242:23–243:2.

<sup>321</sup> Final Hearing Tr. (Aug. 2, 2024) at 54:24–55:3.

<sup>322</sup> *Id.* at 59:13–60:11.

<sup>323</sup> Final Hearing Tr. (Aug. 1, 2024) at 278:16–280:13.

1. TDCJ's heat score system is arbitrary, inadequate, and ineffective.

In 2014, Collier was sued by a group of inmates at one TDCJ prison, the Pack Unit.<sup>324</sup> That case, *Cole v. Collier*, also concerned excessive heat conditions.<sup>325</sup> The case ultimately settled, and as part of the 2018 settlement, TDCJ contracted with an outside medical expert to create a method of determining which inmates most needed air-conditioned housing.<sup>326</sup> A "heat score" is generated using information from the inmate's electronic health record.<sup>327</sup> Inmates are given a preliminary heat score upon intake,<sup>328</sup> and inmates then receive a starting heat score after the 30-day intake process has concluded.<sup>329</sup> If an inmate has a heat score of one or above, an inmate is placed in a cool bed.<sup>330</sup> Heat scores are updated multiple times a day, and TDCJ reviews a report of changes in heat scores and a report of all inmates with heat scores, which are both generated at 10 p.m. every night.<sup>331</sup> Individuals without a heat score but who have suffered from heat-related illness are placed in cool beds.<sup>332</sup> Further, developmentally disabled inmates who are in the "DDP" mental health program are placed in cool beds whether they have a heat score or not.<sup>333</sup> Wardens have discretion to place individuals without heat scores in cool beds if extra cool beds exist.<sup>334</sup>

The testimony during the preliminary injunction hearing revealed that TDCJ's heat score system is, in practice, arbitrary, inadequate, and ineffective. Although all TDCJ inmates face a

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<sup>324</sup> *Cole v. Collier*, No. 4:14-CV-1698, 2017 WL 3049540 (S.D. Tex. July 19, 2017).

<sup>325</sup> *Id.*

<sup>326</sup> Final Hearing Tr. (Aug. 2, 2024) at 163:3–9.

<sup>327</sup> Final Hearing Tr. (Aug. 1, 2024) at 111:3–9.

<sup>328</sup> *Id.* at 160:6–10.

<sup>329</sup> *Id.* at 160:6–161:19.

<sup>330</sup> *Id.* at 196:12–13.

<sup>331</sup> *Id.* at 170:22–171:6.

<sup>332</sup> *Id.* at 167:10–168:3; 102:15–24; Def.'s Hearing Ex. 72.

<sup>333</sup> Final Hearing Tr. (Aug. 1, 2024) at 187:5–16.

<sup>334</sup> *Id.* at 180:14–181:5.

substantial risk of serious harm from the extreme heat in unair-conditioned facilities,<sup>335</sup> only approximately 12,289 of the 134,500 individuals incarcerated in the TDCJ system (i.e., less than 10%) currently have a heat score.<sup>336</sup> Collier's deponent and Fitzpatrick confirmed that Tiede does not currently have a heat score, even though he is 65 years old and has been diagnosed with a stroke, diabetes, chronic obstructive pulmonary disease, hypertension, and obesity.<sup>337</sup> As Dr. Vassallo testified, if TDCJ's heat score system does not warrant housing Tiede in an air-conditioned cell, she has no confidence in the legitimacy or adequacy of the heat score system.<sup>338</sup> Castillo apparently did not have a heat score, either, despite being diagnosed with epilepsy and taking both an antiseizure medication and an SSRI at the time of his death.<sup>339</sup> Nor did Hagerty (despite being a diabetic, having an unspecified mood disorder, and taking an SSRI at the time of her death),<sup>340</sup> Womack (despite being diagnosed with major depressive disorder, and taking an SSRI and an anticholinergic at the time of his death),<sup>341</sup> or Southards (despite taking an SSRI and an anticholinergic at the time of his death) have a heat score.<sup>342</sup>

Dr. Vassallo testified about conditions and medications that can increase an inmate's risk of heat-related illness or death. Dr. Vassallo stated that "[s]tudies of heat-related deaths during heat waves have indicated that subjects with mental illness had an increased risk of death."<sup>343</sup> She explained that several classes of prescription drugs "impair thermoregulation," including: (1)

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<sup>335</sup> Final Hearing Tr. (July 31, 2024) at 127:7–11.

<sup>336</sup> Final Hearing Tr. (Aug. 1, 2024) at 25:3–5.

<sup>337</sup> Dkt. 155, TDCJ 30(b)(6) Dep. at 205:7–206:7; Final Hearing Tr. (Aug. 1, 2024) at 200:25–201:14.

<sup>338</sup> Final Hearing Tr. (July 31, 2024) at 124:13–125:5.

<sup>339</sup> Pls.' Hearing Ex. 161 at 12.

<sup>340</sup> Pls.' Hearing Ex. 169-A at 27.

<sup>341</sup> Pls.' Hearing Ex. 200, at 6.

<sup>342</sup> Pls.' Hearing Ex. 192-A at 65.

<sup>343</sup> Dkt. 50-2, Ex. B, S. Vassallo Decl. ¶ 36.

cardiovascular drugs, (2) diuretics, (3) sympathomimetics or vasoconstrictors (such as nasal decongestants like Sudafed), (4) anticholinergics, and (5) SSRIs.<sup>344</sup> She further concluded that “[p]eople over the age of 65 have 10-12 times increased risk of heat-related illness and death than those younger than 65,” and that the “mortality from heatstroke in the elderly exceeds 50%.”<sup>345</sup> UTMB’s own policies identify many of the same conditions and medications that affect heat tolerance—which, by and large, are not incorporated into TDCJ’s heat score algorithm.<sup>346</sup>

Indeed, as Dr. Leonardson acknowledged, the following individuals would not receive a heat score under TDCJ’s system: (1) a 90-year old with hypertension; (2) an individual with seizure disorder; (3) an individual with diabetes who is under the age of 65; (4) an individual with liver cirrhosis who is under the age of 65 and not taking certain medications; (5) an individual with asthma or pulmonary disease who is under the age of 65; or (6) a 48-year-old inmate with diabetes, peripheral vascular disease, obesity, asthma, and bilateral below-the-knee amputations due to diabetic gangrene.<sup>347</sup> And, Dr. Leonardson is not aware of any policy requiring the TDCJ’s health service liaison (who are not medical doctors, but rather, nurses) to follow a doctor’s recommendation that an inmate be placed in an air-conditioned cell.<sup>348</sup> Baldwin testified that inmates’ medical providers should determine which inmates are vulnerable and need to be housed in air-conditioned cells.<sup>349</sup>

## 2. Respite areas are inadequate and ineffective.

Respite areas—i.e., designated air-conditioned areas in TDCJ facilities—are also

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<sup>344</sup> *Id.* ¶ 37.

<sup>345</sup> Dkt. 50-2, Ex. B, S. Vassallo Decl. ¶ 38.

<sup>346</sup> Final Hearing Tr. (Aug. 1, 2024) at 126:20–127:9, 135:17–136:22; Pls.’ Hearing Ex. 274.

<sup>347</sup> Final Hearing Tr. (Aug. 1, 2024) at 114:16–115:6, 135:24–136:2-22, 140:11–24.

<sup>348</sup> *Id.* at 102:25–103:13; 123:16–21.

<sup>349</sup> Final Hearing Tr. (Aug. 2, 2024) at 51:6–10.

inadequate and ineffective at reducing the substantial risk of harm posed by extreme heat.

In practice, evidence presented at the hearing established that inmates do not have sufficient access to respite areas. TDCJ policy states that inmates “may request access to a respite area 24 hours per day, seven days per week.”<sup>350</sup> However, corrections staff is required to administer access to respite areas, and as Collier acknowledged, there are staffing shortages throughout TDCJ.<sup>351</sup> He called staffing a “significant problem,” and TDCJ itself recognized in a report to the Texas Legislature that staffing is TDCJ’s “most significant major issue.”<sup>352</sup> Professor Michele Deitch (“Professor Deitch”), an expert in prison policy, testified that TDCJ’s widespread understaffing has had an “enormous impact” on TDCJ’s ability to implement its heat-mitigation measures.<sup>353</sup> She testified that understaffing prevents TDCJ from effectively managing the respite room system, and that the respite areas do not have enough space to accommodate all of the inmates who would like to use them.<sup>354</sup> This is consistent with what has been publicly reported: TDCJ’s respite areas are “crowded and uncomfortable,” “packed with inmates,” and “almost nonexistent” because of the agency’s staffing crisis.<sup>355</sup>

Professor Deitch’s testimony is also consistent with testimony from current and former TDCJ inmates. In a video, Tiede confirmed that TDCJ has a “huge” staff shortage because corrections officers “don’t want to come to work” in the heat, and that the ratio of corrections officers to inmates is completely “out of proportion” as a result.<sup>356</sup> Tiede said that respite areas are

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<sup>350</sup> Def.’s Hearing Ex. 1 at 24.

<sup>351</sup> Final Hearing Tr. (Aug. 2, 2024) at 239:17–19.

<sup>352</sup> *Id.* at 254:10–20; Pls.’ Hearing Ex. 266 at 303–04.

<sup>353</sup> Final Hearing Tr. (July 31, 2024) at 152:6–18.

<sup>354</sup> *Id.* at 149:1–24.

<sup>355</sup> Dkt. 50-35, Ex. 24.

<sup>356</sup> Pls.’ Hearing Ex. 243.

“hard to come by” in his unit.<sup>357</sup> Further, Simmons testified that she and other inmates in her unit could not use respite rooms late at night, and they “never had respite available” after midnight.<sup>358</sup> Starting at about 10:00 a.m., women in her unit would start asking to go to a respite room, and sometimes the response from staff would be “respite’s not open yet,” or that they did not “have anybody [on staff] to open respite yet.”<sup>359</sup> Access to respite rooms can also vary depending on an inmate’s security level; inmates in restrictive custody face even more difficulties accessing respite. When Simmons was in a higher security level cell, respite was only available once a day around 8:00 or 9:00 p.m.<sup>360</sup>

Simmons further testified that her unit was often short-staffed, and even more so in the summer months, which affected her ability to use respite rooms.<sup>361</sup> There were also significant barriers to using the respite rooms—inmates were required to get fully dressed in their TDCJ uniform and clean their cells, and respite rooms “can only fit so many people,” so inmates often had to wait in line, in the heat, to access one.<sup>362</sup> Once in the respite rooms, inmates were sometimes told “to face the wall,” “not to talk,” or to “sit on the floor.”<sup>363</sup> And, although TDCJ policy states that inmates “shall be permitted to stay in the respite area as long as necessary,”<sup>364</sup> Simmons testified that she could only stay in those areas for fifteen minutes to an hour.<sup>365</sup> As a result, the respite rooms were not effective in reducing the physical effects of the heat.<sup>366</sup> If

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<sup>357</sup> Pls.’ Hearing Ex. 244.

<sup>358</sup> Final Hearing Tr. (July 30, 2024) at 41:1–11.

<sup>359</sup> *Id.* at 41:3–7.

<sup>360</sup> *Id.* at 41:7–11.

<sup>361</sup> *Id.* at 41:18–42:5, 43:6–11.

<sup>362</sup> *Id.* at 43:12–44:12.

<sup>363</sup> *Id.* at 46:1–10.

<sup>364</sup> Def.’s Hearing Ex. 1 at 24.

<sup>365</sup> Final Hearing Tr. (July 30, 2024) at 41:15–17.

<sup>366</sup> Final Hearing Tr. (July 30, 2024) at 47:23–25.



inmates refused to leave the respite area, they would be physically removed and placed in solitary confinement.<sup>367</sup>

Malouff's access to respite rooms was similarly limited. While he was in the Wallace Pack Unit, the respite room was located in a different building that was a "quarter [or] half mile" away.<sup>368</sup> He had to put in a written request for a TDCJ staff member to escort him, and sometimes it would take a half-hour to an hour for him to be escorted, depending on the number of staff available.<sup>369</sup> There were times when his written request for respite "wasn't responded to at all."<sup>370</sup> And he could spend a "very short" period of time there—"maybe 15 [or] 20 minutes"—before he was brought back to his unair-conditioned dorm.<sup>371</sup> He believes short staffing also affected his ability to use respite rooms.<sup>372</sup> From his perspective, the respite rooms were not effective at reducing the effects of the heat on him because "it was short-term," "it really didn't do anything for you, and as soon as you left, you went right back into that heat."<sup>373</sup>

Not only are respite rooms ineffective as administered by TDCJ, but even when available, they still fail to provide meaningful relief from excessive heat. Even assuming inmates could readily access a respite area, that still puts the onus on them to affirmatively identify that they are exhibiting symptoms of a heat-related illness. The issue with that approach, according to Dr. Vassallo, "is that people don't know they are in trouble" from the heat, so they can "start having cognitive problems from heat illness before they realize they need to go to [a respite room]."<sup>374</sup> In

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<sup>367</sup> *Id.* at 46:17–47:4.

<sup>368</sup> *Id.* at 185:8–13.

<sup>369</sup> *Id.* at 185:14–186:3.

<sup>370</sup> *Id.* at 186:4–6.

<sup>371</sup> *Id.* at 186:10–14.

<sup>372</sup> *Id.* at 186:7–9.

<sup>373</sup> *Id.* at 186:15–21.

<sup>374</sup> Dkt. 50-42, Ex. 32 at 135:19–136:15.

other words, “the rapidity, the speed at which heatstroke strikes means that checking people that are walking around, somebody is sleeping in their bed, everything looks fine . . . , and they can still suffer a heatstroke without the correction staff realizing they’re in trouble.”<sup>375</sup> This is consistent with the medical literature on heat stroke, which notes that patients experiencing heat stroke may only initially complain of “weakness, lethargy, nausea, or dizziness,” and “[t]he presentation of older adults with heat stroke may be subtle and nonspecific early in the course of the disease.”<sup>376</sup>

Moreover, even if inmates were able to readily access respite areas, these areas are, by definition and design, only a temporary respite from the permanent condition of extreme summer heat in unair-conditioned prisons. As Dr. Vassallo testified in *Cole* case, when inmates are not in air conditioning, “they are subjected to the temperatures . . . which are risky and cause harm, including sickness, morbidity, and mortality.”<sup>377</sup> Thus, even if TDCJ inmates get “three or four or five hours” in respite—which does not happen in practice based on the evidence presented at the hearing—“that leaves . . . 19 or 20 hours in these heat conditions.”<sup>378</sup> In other words, “it’s the total accumulated heat stress for the 20 hours you’re in the [extreme] temperatures” that “matters” from a risk perspective.<sup>379</sup> This opinion was supported by a study, which concluded that there were “ten percent more death[s]” among people who simply visited an air-conditioned location, as compared to those who had air conditioning in their homes full-time.<sup>380</sup>

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<sup>375</sup> Dkt. 50-42, Ex. 32 at 135:23–136:5.

<sup>376</sup> Pls.’ Hearing Ex. 275.

<sup>377</sup> Dkt. 50-42, Ex. 32 at 135:25–136:12.

<sup>378</sup> *Id.* at 135:16–18.

<sup>379</sup> Final Hearing Tr. (July 31, 2024) at 43:1–12.

<sup>380</sup> *Id.* at 40:16–41:19; Pls.’ Hearing Ex. 13.

3. Cold showers do not guard against the health risks of constant extreme heat.

TDCJ policy says that, at times of high heat, prisons should “[a]llow additional showers for inmates when possible.”<sup>381</sup> However, Professor Deitch testified that TDCJ’s widespread understaffing issues prevent TDCJ staff from consistently bringing inmates to cold showers.<sup>382</sup> This testimony was supported by that of the former TDCJ inmates at the hearing. Indeed, Simmons testified that cold showers were not available in her unit at all for several hours during count times and overnight from 10:00 p.m. to 7:00 a.m.<sup>383</sup> Even when they were available, her unit had only one cold shower for “80 to 125 women” who “need[ed] to get relief from the heat.”<sup>384</sup> And, as discussed, the night before he died, Womack’s request for a respite shower was denied.<sup>385</sup> One of Womack’s fellow inmates noted that this denial was “nothing unusual for [the] Coffield [Unit],” and that the “excuse is always we are understaffed.”<sup>386</sup>

Moreover, even if TDCJ provided inmates with sufficient access to cold showers, the relief provided from showers is, much like that provided by respite areas, temporary in nature. Dr. Vassallo testified that cold showers only work “while you’re wet” and while you are experiencing “evaporative cooling.”<sup>387</sup> As soon as you are dry, “you are no longer being cooled by that shower.”<sup>388</sup> In other words, the shower will only “fix” the problem—i.e., extreme heat—“for about ten minutes” until the inmate “dries off.”<sup>389</sup> Dr. Vassallo also discussed a meta-analysis of various heat-mitigation measures, which concluded that increased cold showers or baths did not

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<sup>381</sup> Defs.’ Hearing Ex. 1 at 41–42.

<sup>382</sup> Final Hearing Tr. (July 31, 2024) at 352:6–12.

<sup>383</sup> Final Hearing Tr. (July 30, 2024) at 49:12–14.

<sup>384</sup> *Id.* at 49:14–17.

<sup>385</sup> Pls.’ Hearing Ex. 200-B at 2, 42.

<sup>386</sup> *Id.* at 42.

<sup>387</sup> Final Hearing Tr. (July 31, 2024) at 113:3–20.

<sup>388</sup> *Id.* at 113:19–20.

<sup>389</sup> *Id.* at 135:5–21.

lead to a “statistically significant” difference in mortality rates from high heat.<sup>390</sup> In short, Dr. Vassallo believes that “taking frequent [cold] showers doesn’t help” address the substantial risk of serious harm posed by extreme heat.<sup>391</sup>

4. Fans are inadequate and can be counter-productive in extreme heat.

According to Dr. Vassallo, fans do not lessen the risk of heat-related illness, either.<sup>392</sup> In fact, when the heat index exceeds 99°, “fans elevate the risk of heat-related illness, increasing the heat load on the body by moving hot air across the skin.”<sup>393</sup> In other words, “increased wind speeds of hot air can actually raise the skin temperature and thus produce opposite results by increasing core body temperature.”<sup>394</sup> This is consistent with guidance from the United States Environmental Protection Agency, which warns: “[U]sing a portable electric fan alone when heat index temperatures exceed 99°f actually *increases* the heat stress the body must respond to by blowing air that is warmer than the ideal body temperature over the skin surface.”<sup>395</sup> Dr. Vassallo has therefore opined that “providing additional fans does nothing to address the health risks of the extreme temperatures.”<sup>396</sup>

5. Access to cold water is inconsistent and does not reduce the long-term effects of the heat on TDCJ inmates.

As Professor Deitch testified, TDCJ’s widespread understaffing issues prevent TDCJ staff from consistently bringing inmates ice or water.<sup>397</sup> This testimony was supported by the experiences

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<sup>390</sup> Final Hearing Tr. (July 31, 2024) at 42:7–14; Pls.’ Hearing Ex. 13 at 5–6.

<sup>391</sup> Final Hearing Tr. (July 31, 2024) at 117:18–25.

<sup>392</sup> Dkt. 50-2, Ex. B, S. Vassallo Decl., ¶ 41.

<sup>393</sup> *Id.* ¶ 41.

<sup>394</sup> Pls.’ Hearing Ex. 13 at 5–6.

<sup>395</sup> Dkt. 50-28, Ex. 17, Excessive Heat Events Guidebook (March 2016), U.S. Environmental Protection Agency, at 37 (emphasis added).

<sup>396</sup> Dkt. 50-2, Ex. B, S. Vassallo Decl., ¶ 41.

<sup>397</sup> Final Hearing Tr. (July 31, 2024) at 152:6–18.

of former TDCJ inmates, including Simmons, who testified that there was rarely enough ice water to meet the demand of the women in her unit, as they would only receive one cooler for a dorm with 124 women.<sup>398</sup> Malouff testified that, while he was incarcerated, it could take up to eight hours for TDCJ staff to refill the water cooler in his unit.<sup>399</sup> Individuals incarcerated in TDCJ also reported to Robertson that they went “eight to nine hours at a time with no water” in July 2024, and Wilson repeatedly emailed Robertson about the shortage of water—and the fact that inmates in his unit would only receive water once per day—in the weeks before he died.<sup>400</sup>

Dr. Vassallo also opined that “the provision of additional ice [water], on its own, does not mitigate the risk of heat-related illness.”<sup>401</sup>

6. Evidence submitted by Collier raises substantial concern about whether TDCJ implements its heat mitigation measures in accordance with TDCJ policy.

According to TDCJ policy, units are only required to provide inmates access to respite areas “during periods of excessive heat,” and they are only required to provide inmates other heat mitigation measures—cold showers, fans, and ice water—“where the heat index is above 90°F.”<sup>402</sup> So, TDCJ’s heat mitigation measures depend on TDCJ staff diligently and accurately monitoring and reporting the heat index at their units.

Evidence presented by Collier at the preliminary injunction hearing cast substantial doubt on TDCJ’s own processes and procedures for keeping track of the heat index and, in turn, whether TDCJ is complying with its own heat-mitigation policy. Collier introduced into evidence a manual temperature log reporting the outside air temperature, humidity, and heat index at the

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<sup>398</sup> Final Hearing Tr. (July 30, 2024) at 48:16–50:9.

<sup>399</sup> *Id.* at 187:4–10.

<sup>400</sup> Pls.’ Hearing Exs. 137 & 264.

<sup>401</sup> Dkt. 50-2, Ex. B, S. Vassallo Decl. ¶ 41.

<sup>402</sup> Def.’s Hearing Ex. 1 at 41–42.

Mark W. Stiles Unit from July 2022.<sup>403</sup> During the direct examination of Collier, his counsel focused on the outside temperature at the unit on July 12, 2022, which was logged at a consistent 79° from 12:30 a.m. to 4:30 p.m.<sup>404</sup>

After having consulted an authoritative source on the matter during the hearing, this Court took judicial notice that, on July 12, 2022, the temperature actually reached a high of 96° in Beaumont, Texas (where the Stiles Unit is located), despite TDCJ's log indicating that the temperature never exceeded 87°.<sup>405</sup> Additionally, the log recorded the heat index as being *lower* than the ambient temperature, despite 90% humidity.<sup>406</sup> And the temperatures included in the log for that day were noted as being recorded by two different people, despite being in the same handwriting.<sup>407</sup> Because of these discrepancies, the Court expressed concern that the temperature log for July 12, 2022 was fabricated, or at least inaccurate.<sup>408</sup> The logs for several other days in Defendants' Exhibit 76 have similar discrepancies—including July 1 and 2, 2022 (“Wheeler” is in different handwriting, despite purportedly being entered by the same person); July 6, 2022 (similar handwriting for entries purportedly by different people); July 7, 2022 (similar handwriting and pen for entries purportedly by different people); July 13, 2022 (same); and July 14, 2022 (same).<sup>409</sup> The July 12, 2022 temperature log, Defendant's Exhibit 76, is seen below.

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<sup>403</sup> Final Hearing Tr. (Aug. 2, 2024) at 195:12–15, 217:20–219:1 (admitting Def.'s Ex. 76 into evidence).

<sup>404</sup> Def.'s Hearing Ex. 76 at 12.

<sup>405</sup> Final Hearing Tr. (Aug. 2, 2024) at 276:16–277:10.

<sup>406</sup> *Id.* at 277:10–15.

<sup>407</sup> *Id.* at 277:16–19.

<sup>408</sup> *Id.* at 278:20–279:1.

<sup>409</sup> Def.'s Hearing Ex. 76 *passim*.

TEXAS DEPARTMENT OF CRIMINAL JUSTICE  
Temperature Log

UNIT: MARK W. STILES

DATE: 7/12/22	Outside Air Temperature	Humidity or Wind Speed	Heat Index or Wind Chill*	Person Recording
12:30 a.m.	79°	97% / 0	70°	JONES
1:30 a.m.	79°	97% / 0	75°	JONES
2:30 a.m.	79°	97% / 0	70°	JONES
3:30 a.m.	79°	97% / 0	75°	JONES
4:30 a.m.	79°	97% / 0	75°	JONES
5:30 a.m.	79°	97% / 0	75°	JONES
6:30 a.m.	79°	97% / 0	79°	JONES
7:30 a.m.	79°	97% / 0	79°	JONES
8:30 a.m.	79°	99% / 1	80°	JONES
9:30 a.m.	79°	99% / 1	80°	JONES
10:30 a.m.	79°	99% / 1	80°	JONES
11:30 a.m.	79°	99% / 1	82°	JONES
12:30 p.m.	79°	97% / 1	82°	JONES
1:30 p.m.	79°	97% / 1	83°	JONES
2:30 p.m.	79°	97% / 1	83°	JONES
3:30 p.m.	79°	94% / 1	83°	JONES
4:30 p.m.	79°	97% / 1	83°	JONES
5:30 p.m.	87°	71% / 1	85°	JONES
6:30 p.m.	87°	79% / 1	85°	JONES
7:30 p.m.	85°	84% / 1	84°	JONES
8:30 p.m.	82°	84% / 1	84°	JONES
9:30 p.m.	80°	86% / 1	83°	JONES
10:30 p.m.	78°	84% / 1	83°	JONES
11:30 p.m.	77°	86% / 1	83°	JONES

\* Temperatures between 51 and 79 degrees Fahrenheit (°F) are not represented on the Wind Chill Index (Attachment A) or the Heat and Humidity Index (Attachment B). Indicate (N/A) in these fields when applicable.

Following the hearing, an investigator hired by Collier to investigate the discrepancies in the temperature logs concluded the July 12, 2022, temperature log “is obviously and clearly false.”<sup>410</sup> The investigator’s report, submitted to the Court by Plaintiffs<sup>411</sup> and unobjected to by Collier,<sup>412</sup> concluded that the temperature log was “not reflective of actual events” and that “the evidence supports periods of carelessness in record creation and/or retention and an attempt by

<sup>410</sup> Dkt. 200-2.  
<sup>411</sup> Dkt. 200-3.  
<sup>412</sup> See Resp., Dkt. 201.

the unit to avoid reporting missing temperature logs.”<sup>413</sup> When temperature logs were collected, “staff reported there were logs the unit could not locate or had been defaced (e.g. doodles, stick figure cartoons, etc.) by staff working the duty post.”<sup>414</sup> So, “the unit’s approach was to ‘recreate’ these logs,” and it is “unlikely [the staff] would have done so without knowledge and/or consent of unit administrators.”<sup>415</sup> The investigator observed at least two other logs exhibited the same irregularities as the July 12, 2022 log.<sup>416</sup>

The falseness of Defendant’s Exhibit 76 and the discrepancies between the number of heat-related illnesses that UTMB reports to TDCJ and the number TDCJ reports to the Texas Legislature (discussed in Section IV.G., *supra*) raise significant questions about the veracity and reliability of the other documents Collier presented at the hearing regarding TDCJ’s compliance with its own heat mitigation policies.<sup>417</sup> As a result, the Court has no confidence in the data that TDCJ generates and uses to implement its heat mitigation measures and record the conditions within its facilities. The Court has no doubt that TDCJ is undercounting heat-related injuries and deaths, keeping unreliable records about temperature conditions, and inadequately providing heat mitigation measures.

#### **F. Air Conditioning is the Only Effective Protection from Extreme Heat.**

1. Reducing temperatures to safe levels is the least restrictive means to address the risks posed by extreme heat.

The parties do not disagree on the central issue in this case: that air conditioning is sorely needed across TDCJ facilities as a matter of inmate health and safety. Even Collier’s Rule

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<sup>413</sup> Dkt. 200-3 at 3.

<sup>414</sup> *Id.* at 4.

<sup>415</sup> *Id.*

<sup>416</sup> *Id.*

<sup>417</sup> Final Hearing Tr. (Aug. 2, 2024) at 282:20–283:6 (“If what [TDCJ] is] saying is they’re doing all this good stuff but they’re doing it [relying on these temperature logs], that’s a problem.”).



30(b)(6) deponent agreed that installing air conditioning “is the right thing to do, it is the humane thing to do, and it is something [TDCJ] should have done a long time ago.”<sup>418</sup> He testified that it is “the right thing to do because of the increased temperatures that the state is seeing, the increase of medication that . . . inmates are on as opposed to 20 years ago, 30 years ago, 40 years ago,” and because “[t]here’s a lot of factors that exacerbate the need for wanting to air condition” TDCJ facilities.<sup>419</sup> Collier’s Rule 30(b)(6) deponent was not aware of any heat-related illnesses at the Wallace Pack Unit since air conditioning was installed there.<sup>420</sup> And he was not aware of any heat-related illnesses that have occurred in air-conditioned housing areas in the TDCJ system in the last 30 years.<sup>421</sup>

TDCJ’s former Director of Facilities, Cody Ginsel, agreed that installing air conditioning in all of TDCJ’s facilities would reduce the risk of heat-related injuries among TDCJ staff.<sup>422</sup> And Collier’s corrections and correctional risk management expert, Morales, confirmed that air conditioning TDCJ’s facilities would “eliminate the risk of injury from the heat.”<sup>423</sup> Collier himself acknowledged that he wants air conditioning in all TDCJ facilities and recognized that air conditioning is the best solution to reduce temperatures in TDCJ facilities.<sup>424</sup> He stated that the only reason air conditioning has not been installed in all housing areas throughout TDCJ is because the Texas Legislature has not appropriated the funds for TDCJ to do so.<sup>425</sup>

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<sup>418</sup> Pl.’s Hearing Ex. 255, TDCJ 30(b)(6) Dep. at 304:23–305:4.

<sup>419</sup> *Id.* at 38:13–39:11.

<sup>420</sup> *Id.*, 99:25–100:3, 161:8–12.

<sup>421</sup> *Id.*, 99:25–100:3, 161:13–21.

<sup>422</sup> Final Hearing Tr. (Aug. 1, 2024) at 254:19–23.

<sup>423</sup> Final Hearing Tr. (Aug. 2, 2024) at 283:8–16.

<sup>424</sup> *Id.* at 254:24–255:20.

<sup>425</sup> Pls.’ Hearing Ex. 254, Collier’s Resp. to Interr. 17.

Dr. Vassallo opined that TDCJ inmates are “still dying” from extreme heat despite the mitigation measures, because those measures “do[] not remove the heat.”<sup>426</sup> Dr. Vassallo explained that having working air conditioning has been “associated with an 80% reduction in the risk of death due to heat and cardiovascular disease and a 66% reduction in mortality due to cardiovascular disease.”<sup>427</sup> “In one study, it was estimated that 50% of the deaths related to a heat wave could have been prevented with a working air conditioner. Lack of air conditioning was reported in 91% of deaths in one report.”<sup>428</sup> Dr. Vassallo opined that this data is “directly applicable to the Texas prisons.”<sup>429</sup> In her view, “excess morbidity and mortality in TDCJ facilities resulting from the extreme heat of the Texas summers can only be combatted by bringing the temperature in the prisons down.”<sup>430</sup> “[P]utting everyone” in the TDCJ system “in air conditioned housing [is] the only way to eliminate the heat risk and the deaths and illnesses.”<sup>431</sup> Or, as Dr. Vassallo put it, if “[y]ou remove the heat” through temperature control, then “nobody dies [from the] heat.”<sup>432</sup>

According to the Skarha study, the risk of dying in Texas prisons with air-conditioned housing areas actually decreased as the heat index increased.<sup>433</sup> There was no association between an increase in temperature and the risk of death in prisons with air conditioning—which indicates that air conditioning has a protective effect on human health.<sup>434</sup>

Plaintiffs’ corrections expert, Williams testified that TDCJ’s mitigation measures are not

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<sup>426</sup> Final Hearing Tr. (July 31, 2024) at 39:4–12.

<sup>427</sup> Dkt. 50-2, Ex. B, S. Vassallo Decl., ¶ 40.

<sup>428</sup> *Id.*

<sup>429</sup> *Id.*

<sup>430</sup> *Id.*

<sup>431</sup> Final Hearing Tr. (July 31, 2024) at 71:11–14.

<sup>432</sup> *Id.* at 39:9–12.

<sup>433</sup> Pls.’ Hearing Ex. 70 at 5.

<sup>434</sup> Final Hearing Tr. (July 30, 2024) at 162:22–163:2, 168:16–23; Pls.’ Hearing Ex. 70 at 5.

an appropriate solution because they “accept[] the fact that” people “are going to die as a result of” the heat, and that the underlying problem “can’t be fixed by other means.”<sup>435</sup> In Williams’s view, the only solution to the risks posed by extreme heat is air conditioning.<sup>436</sup> Collier’s corrections expert, Baldwin, likewise agreed that the solution to the problem of extreme heat is to install air conditioning.<sup>437</sup>

In *Cole v. Collier*, Judge Ellison granted a preliminary injunction in 2017 (before the parties reached a settlement) that, in part, ordered Collier to “lower the temperature in the housing areas of heat-sensitive inmates” in the Wallace Pack Unit.<sup>438</sup> To comply, Collier installed temporary air conditioning in the Wallace Pack Unit.<sup>439</sup> Malouff was in the Wallace Pack Unit when TDCJ installed temporary air conditioning.<sup>440</sup> Malouff testified that he believed that the temporary air conditioning installed in the Wallace Pack Unit was effective at reducing the effects of the heat on him and his fellow inmates, unlike TDCJ’s heat mitigation measures.<sup>441</sup> Wallace Pack Unit is air-conditioned today.<sup>442</sup>

2. Air conditioning the entire TDCJ system is feasible—but takes time and resources.

TDCJ’s Facilities Director Hudson testified that air conditioning is currently the Facilities Division’s number one priority.<sup>443</sup> TDCJ agrees that installing temporary air conditioning is technically feasible, and if ordered by the Court to install air conditioning, it would do so.<sup>444</sup> Collier

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<sup>435</sup> Final Hearing Tr. (July 31, 2024) at 255:3–19.

<sup>436</sup> Final Hearing Tr. (July 31, 2024) at 255:20–256:8.

<sup>437</sup> Final Hearing Tr. (Aug. 2, 2024) at 31:16–19.

<sup>438</sup> *Cole v. Collier*, No. 4:14-CV-1698, 2017 WL 3049540, at \*46 (S.D. Tex. July 19, 2017).

<sup>439</sup> Final Hearing Tr. (Aug. 2, 2024) at 261:12–19.

<sup>440</sup> Final Hearing Tr. (July 30, 2024) at 187:13–17.

<sup>441</sup> *Id.* at 187:24–188:5.

<sup>442</sup> Final Hearing Tr. (Aug. 1, 2024) at 15:5–7.

<sup>443</sup> Final Hearing Tr. (Aug. 2, 2024) at 74:14–16.

<sup>444</sup> Dkt. 155, TDCJ 30(b)(6) Dep. at 42:16–43:4, 120:3–10.

also acknowledged that it is feasible to install temporary or permanent air conditioning in every TDCJ facility.<sup>445</sup> Hudson, TDCJ's current Director of the Facilities Division, likewise, agreed that temporary and permanent air conditioning "can be installed i[n] every TDCJ facility."<sup>446</sup>

TDCJ's Facilities Division's engineering department employs a lead engineer, two deputy engineers, seven additional engineers, and two architects internally; they also contract with 18 outside engineering firms to manage roughly 350 projects in design or in construction.<sup>447</sup> Four of the 18 outside engineering firms are contracted to work on the air-conditioning projects to design the HVAC system as well as the backup generators and ensuring the units have enough electrical power.<sup>448</sup> TDCJ has a variety of facility designs, and each unit design requires its own air conditioning plan, which can take a year.<sup>449</sup> Installing air conditioning is an especially intensive process in older units, which need to be retrofitted; the newest TDCJ unit was built in 1997,<sup>450</sup> the oldest unit was built in the mid-1800s, and some units were built in the early 1900s.<sup>451</sup> For example, some TDCJ facilities have open windows that never shut and span entire walls; these windows must be changed before air conditioning can be installed.<sup>452</sup> TDCJ estimates that it will need to purchase 65,000 tons of air conditioning equipment to air condition the whole system.<sup>453</sup> Further, some of the water chillers needed are estimated to take more than a year or two years to arrive after being ordered.<sup>454</sup>

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<sup>445</sup> Final Hearing Tr. (Aug. 2, 2024) at 258:13–16.

<sup>446</sup> *Id.* at 137:5–11.

<sup>447</sup> Final Hearing Tr. (Aug. 2, 2024) at 75:3–15.

<sup>448</sup> *Id.* at 76:4–11.

<sup>449</sup> *Id.* at 97:4–11; 106:10–24; Def.'s Ex. 78; Def.'s Ex. 79.

<sup>450</sup> *Id.* at 80:21–22.

<sup>451</sup> *Id.* at 93:7–25.

<sup>452</sup> *Id.* at 89:4–9.

<sup>453</sup> *Id.* at 154:14–17.

<sup>454</sup> *Id.* at 154:18–155:11.

Collier also presented credible evidence that any funds and time dedicated to installing temporary air conditioning will impair the time and money allocated to installing permanent air conditioning. TDCJ estimates that the cost to install temporary air conditioning equipment and fuel for generators for the seven summer months would be \$700-800 million; the fuel would cost \$600 million each year.<sup>455</sup> TDCJ has twice been required to install temporary air conditioning and has done so. Malouff, who was in the Wallace Pack Unit when TDCJ installed temporary air conditioning in response to Judge Ellison’s order in the *Cole* case, offered un rebutted testimony that it took TDCJ 60 to 90 days to install it.<sup>456</sup> Since, over \$1 million has been spent on upgrades to the Pack Unit HVAC system that were necessary because of the quick installation.<sup>457</sup>

TDCJ also installed temporary air conditioning at three units in response to Governor Abbott’s statewide order for undocumented immigrants to be arrested on state criminal charges and incarcerated in TDCJ facilities—which was called “Operation Lone Star.”<sup>458</sup> Because these individuals had not been convicted, TDCJ had to comply with the Texas Board of Jail Standards—which, among other things, require that indoor temperatures be between 65° and 85°.<sup>459</sup> To comply with Governor Abbott’s order, TDCJ installed temporary air conditioning in the Briscoe, Segovia, and Lopez Units,<sup>460</sup> within approximately three to four months—i.e., from May 2021 to August or September 2021.<sup>461</sup> Those units have all had temporary air conditioning since then.<sup>462</sup> TDCJ did not have to go through a design phase to comply with Governor Abbott’s order for

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<sup>455</sup> *Id.* at 91:22–92:3; 86:22–87:14; 90:9–91:6.

<sup>456</sup> Final Hearing Tr. (July 30, 2024) at 187:18–23.

<sup>457</sup> Final Hearing Tr. (August 2, 2024) at 76:13–17.

<sup>458</sup> Final Hearing Tr. (Aug. 2, 2024) at 126:20–127:10.

<sup>459</sup> *Id.* at 127:14–21 (Hudson); *id.* at 259:8–260:4 (Collier).

<sup>460</sup> *Id.* at 127:22–128:4.

<sup>461</sup> *Id.* at 128:5–13.

<sup>462</sup> *Id.* at 84:6–12, 128:15–130:15.

Operation Lone Star.<sup>463</sup> The Texas Department of Emergency Management and the Legislature's Operation Lone Star Funding funded the temporary air conditioning for these units.<sup>464</sup>

3. TDCJ's current plan to install air conditioning is inadequate.

It is Collier's goal to air condition the entire TDCJ system.<sup>465</sup> Collier's team presented evidence regarding the amount of funding TDCJ has requested and received from the Texas Legislature in recent years, and how much funding TDCJ has spent on air conditioning. In the 2020–2021 fiscal year, TDCJ spent \$13.4 million on air conditioning 3,407 beds.<sup>466</sup> In the 2022–2023 fiscal year, TDCJ spent \$15.5 million on air conditioning.<sup>467</sup> In the 2024–2025 fiscal year, the 88<sup>th</sup> Legislature ear-marked \$85.7 million dollars for TDCJ to spend on air conditioning, the first time the Legislature had done so,<sup>468</sup> which occurred after Collier presented a four-phase plan to the Legislature in 2022.<sup>469</sup> However, the Legislature did not appropriate enough funds to TDCJ to enact the plan, which called for \$225 million for the first phase alone.<sup>470</sup> Collier plans to request far more than \$85 million for air conditioning in the next legislative session.<sup>471</sup>

As of the final day of the hearing, TDCJ had not solicited bids for installing permanent air conditioning throughout the system.<sup>472</sup> According to the Texas Comptroller of Public Accounts' 2024–2025 Certification Revenue Estimate, Texas has an estimated \$18.29 billion surplus for this

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<sup>463</sup> *Id.* at 156:15–18.

<sup>464</sup> Final Hearing Tr. (August 2, 2024) at 267:19–25; 268:1–8.

<sup>465</sup> *Id.* at 17; 5–9.

<sup>466</sup> *Id.* at 115:1–7.

<sup>467</sup> *Id.* at 115:8–16.

<sup>468</sup> *Id.* at 116:12–23.

<sup>469</sup> *Id.* at 152:23–153:6.

<sup>470</sup> *Id.* at 179:14–180:4.

<sup>471</sup> *Id.* at 185:5–9.

<sup>472</sup> *Id.* at 124:24–125:1.

upcoming legislative session.<sup>473</sup> And, although TDCJ has a multi-billion-dollar budget,<sup>474</sup> it has allocated only \$115.5 million to installing air conditioning in TDCJ units since 2018.<sup>475</sup>

Approximately 96,500 of TDCJ's 142,240 beds remain unair-conditioned.<sup>476</sup> When asked about Defendant's Exhibit 79, Hudson could not provide a month and year by which air conditioning will be installed in any of the facilities highlighted in yellow (air conditioning in design/construction 2024–2025) or gray (air conditioning investigatory for design in 2026–2027) or not highlighted at all (no plans)—a total of 62 facilities.<sup>477</sup> Hudson and Baldwin testified that, at TDCJ's average rate of installing air-conditioned beds since 2018 (1,376 beds per year), it would take 70 years—i.e., until 2094—to install air conditioning throughout TDCJ.<sup>478</sup> Hudson also acknowledged that, even at a rate of 3,100 new air-conditioned beds per year (which is the rate TDCJ averaged in 2023 and 2024), it would take TDCJ 30 years—i.e., until 2054—to install permanent air conditioning throughout the system.<sup>479</sup>

#### 4. Other Prisons Air Condition Their Systems.

Since 1994, state-wide regulations adopted by the Texas Commission on Jail Standards have required all jails in Texas to maintain indoor temperatures between 65° and 85°.<sup>480</sup> Other

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<sup>473</sup> 2024-2025 Certification Revenue Estimate, Texas Comptroller of Public Accounts, <https://comptroller.texas.gov/transparency/reports/certification-revenue-estimate/2024-25/docs/cre-2024-25.pdf>. Under Rule 201 of the Federal Rules of Evidence, that Court may take judicial notice of a fact that is not subject to reasonable dispute because it can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned. The Court finds that the Texas surplus as estimated by the Texas Comptroller of Public Accounts is such a fact, and that the Texas Comptroller of Public Accounts is a source whose accuracy cannot reasonably be questioned.

<sup>474</sup> Pls.' Hearing Ex. 266 at 35–39.

<sup>475</sup> Def.'s Ex. 17.

<sup>476</sup> Pls.' Hearing Ex. 204, Collier's Resp. to Interr. 2.

<sup>477</sup> Final Hearing Tr. (Aug. 2, 2024) at 151:4–21; Def.'s Hearing Ex. 79.

<sup>478</sup> *Id.* at 34:1-17 (Baldwin); *id.* at 141:6–142:2 (Hudson); Pls.' Hearing Exs. 150, 204.

<sup>479</sup> Final Hearing Tr. (Aug. 2, 2024) at 147:12-148:7; Def.'s Hearing Ex. 17.

<sup>480</sup> 37 Tex. Admin. Code §§ 259.160, 260.154, 261.255.

government buildings in Texas must maintain “comfortable” levels (e.g., between 68° and 78°).<sup>481</sup> North Carolina’s administrative code for its jail system requires “heating, ventilation, and air conditioning systems that are capable of maintaining temperatures in confinement units at not less than 68 degrees Fahrenheit during the heating season and not more than 85 degrees Fahrenheit during the cooling season.”<sup>482</sup> Tennessee requires that local correctional facilities “have a temperature of not less than sixty-five (65) degrees Fahrenheit and not more than eighty (80) degrees Fahrenheit.”<sup>483</sup> And, while there are no temperature requirements under federal law, the Bureau of Prisons operations manual says that target temperatures should be 76° in the summer and 68° in the winter, with the caveat that facilities may be a few degrees higher or lower.<sup>484</sup> TDCJ has nevertheless refused to implement the same (or similar) standards.

#### **IV. CONCLUSIONS OF LAW**

To obtain a preliminary injunction, the party must show (1) a likelihood of success on the merits, (2) irreparable harm, (3) that the balance of equities tips in its favor, and (4) that an injunction is in the public interest. *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. at 20. The Court finds that Plaintiffs have clearly met their burden on the first two factors but not on the other two factors.

##### **A. Likelihood of Success on the Merits**

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<sup>481</sup> See 25 Tex. Admin. Code § 297.8 (a)(1) (providing that “room temperature for a typical occupied office or classroom environment should be kept between 72 to 76 degrees Fahrenheit in the summer and 70 to 75 degrees in Fahrenheit in the winter and controlled within a temperature range of  $\pm 2$  degrees in Fahrenheit for a given day”).

<sup>482</sup> Dkt. 50-1, D. Williams Decl. (Apr. 11, 2024) ¶ 19.

<sup>483</sup> *Id.* ¶ 20.

<sup>484</sup> *Id.* ¶ 16.



At the outset, Collier argues Plaintiffs cannot be likely to succeed on the merits for two reasons: (1) the organizational Plaintiffs lack standing, and (2) Plaintiffs have not exhausted their remedies as required under the PLRA. The Court disagrees.

1. The organizational Plaintiffs have established associational standing.

The Court has already determined that Plaintiffs have standing, and that the Organizational Plaintiffs “meet the requirements of associational standing.” (Order, Dkt. 95 at 6–10 (denying Collier’s Rule 12(b)(1) motion to dismiss)). With respect to associational standing, the Court specifically determined that “at least one of the Organizational Plaintiffs, Lioness, is a traditional membership organization with hundreds of members who are TDCJ prisoners,” and that “the Organizational Plaintiffs’ members are not required to participate in this lawsuit individually.” *Id.* at 8, 10.

While the Court does not need to revisit these determinations,<sup>485</sup> the evidence at the hearing further confirms that Lioness is a traditional “voluntary membership organization with identifiable members.”<sup>486</sup> *SFFA III*, 600 U.S. at 201. The evidence shows that Lioness has hundreds of members who have joined voluntarily, support the organization’s mission, and are current TDCJ prisoners assigned to unair-conditioned units.<sup>487</sup> Moreover, Lioness’s members would have standing to sue in their own right—members housed in unair-conditioned units in particular face a “substantial risk of serious harm and death” from the extreme heat, that injury is traceable to Collier’s deliberate indifference and refusal to take the necessary steps to protect

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<sup>485</sup> See, e.g., *Students for Fair Admissions, Inc. v. President & Fellows of Harvard Coll.* (“*SFFA IP*”), 397 F. Supp. 3d 126, 184 (D. Mass. 2019) (relying on earlier associational standing analysis when denying Rule 12(b)(1) as part of the court’s post-trial conclusions of law) (citing *Students for Fair Admissions, Inc. v. President & Fellows of Harvard Coll.* (“*SFFA P*”), 261 F. Supp. 3d 99, 110–11 (D. Mass. 2017)) (cited with approval in *Students for Fair Admissions, Inc. v. President & Fellows of Harvard Coll.* (“*SFFA IIP*”), 600 U.S. 181, 199 (2023)).

<sup>486</sup> See Findings of Fact, Section A.1, *supra*.

<sup>487</sup> See Findings of Fact, Section A.1, *supra*.

members from the extreme summer heat, and the injunctive relief sought will redress their injuries. *See Cranford v. Hinds Cty. Bd. of Supervisors*, 1 F.4th 371, 375 (5th Cir. 2021) (listing elements for Article III standing). Under *SFFA III*, that is all the evidence that is required to support associational standing. 600 U.S. at 201; *see also VanDerStok v. Garland*, 680 F. Supp. 3d 741, 762 (N.D. Tex. 2023) (relying on affidavits from organizations’ leadership describing membership to find that they are traditional membership organizations), *vacated in part on other grounds*, 86 F.4th 179 (5th Cir. 2023); *Nat’l Rifle Ass’n of Am., Inc. v. ATF*, No. 3:23-CV-1471-L, 2024 WL 1349307, at \*6 (N.D. Tex. Mar. 29, 2024) (same). “Where, as here, an organization has identified members and represents them in good faith, [the Supreme Court’s decisions] do not require further scrutiny into how the organization operates.” *SFFA III*, 600 U.S. at 201. In short, Lioness is a traditional voluntary membership organization that has standing to sue on behalf of its members.

The evidence shows that the remaining Organizational Plaintiffs also meet the requirements for associational standing, as they have constituents housed in unair-conditioned units who “were effectively members” of the organization. *Id.* at 199–200 (discussing *Hunt v. Washington State Apple Advertising Comm’n*, 432 U.S. 333, 336–44 (1977)). The Court finds that CTD, TCPA, and TX C.U.R.E. each have standing to assert claims on behalf of their constituents, which includes TDCJ prisoners housed in unair-conditioned units, because those prisoners possess sufficient “indicia of membership” in their respective organizations.<sup>488</sup> *Hunt*,

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<sup>488</sup> As Lioness is a traditional membership organization, the “indicia of membership” analysis does not need to be addressed. *See SFFA III*, 600 U.S. at 201; *La Unión Del Pueblo Entero v. Abbott*, 614 F. Supp. 3d 509, 526 (W.D. Tex. 2022). However, even if Lioness were subject to the “indicia of membership” test for associational standing, it would satisfy the criteria. *See, e.g., AARP v. United States Equal Employment Opportunity Comm’n*, 226 F. Supp. 3d 7, 17 (D.D.C. 2016) (finding that the Court need not address whether AARP was a “traditional membership organization” where it otherwise “satisfies the ‘indicia of membership’ criteria”).

432 U.S. at 344-45.

*Hunt*'s "indicia of membership" test ensures that an organization "represent[s] the individuals it claims as members" and "provide[s] the means by which those individuals express their collective views and protect their collective interest." *Funeral Consumers All., Inc. v. Serv. Corp. Int'l*, 695 F.3d 330, 344 n.9 (5th Cir. 2012). The test is satisfied when a group serves a "specialized segment" of the community that is "the primary beneficiary of its activities." *Hunt*, 432 U.S. at 344; *see also Oregon Advoc. Ctr. v. Mink*, 322 F.3d 1101, 1111 (9th Cir. 2003) (finding associational standing where constituents—incapacitated criminal defendants—comprised a "specialized segment" of the community that was the primary beneficiary of the group's activities); *ARP*, 226 F. Supp. 3d at 17 (finding associational standing where an organization with a "defined mission" serves a "discrete, stable membership with a definable set of common interests").

CTD, TPCA, and TX C.U.R.E. each have a "defined mission" and serve a "discrete" segment with a "definable set of common interests" in this action.<sup>489</sup> *ARP*, 226 F. Supp. 3d at 17; *see also Am. Leg. Found. v. F.C.C.*, 808 F.2d 84, 90 (D.C. Cir. 1987). Specifically, TPCA and TX C.U.R.E. serve incarcerated Texans and their families, and CTD serves incarcerated Texans with disabilities.<sup>490</sup> The three organizations' constituents also play a role in "guiding [the organization's] activities" and can "participate directly in making and implementing day-to-day decisions."<sup>491</sup> TX C.U.R.E. engages in directly with its constituents, including specific individuals who "have suffered from exposure to excessive heat" in unair-conditioned TDCJ units.<sup>492</sup> TPCA similarly engages regularly with its incarcerated constituents and has "team members" inside TDCJ

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<sup>489</sup> *See* Findings of Fact, Sections I.B. through I.D., *supra*.

<sup>490</sup> *See* Findings of Fact, Sections A.2 through A.4, *supra*.

<sup>491</sup> *See* Findings of Fact, Sections A.2 through A.4, *supra*.

<sup>492</sup> *See* Findings of Fact, Section A.2, *supra*.

prisons work directly with the organization.<sup>493</sup> Thus, each of these organizations “is sufficiently identified with and subject to the influence of those it seeks to represent as to have a personal stake in the outcome of the controversy.” *Mink*, 322 F.3d at 1111 (quotations omitted). Under *Hunt*’s “indicia of membership” test, CTD, TCPA, and TX C.U.R.E. also have associational standing to represent the interests of their constituents. Therefore, lack of standing does not bar Plaintiffs’ likelihood of success on the merits.

2. The Prison Litigation Reform Act’s (“PLRA”) Exhaustion Requirement Does Not Apply to the Organizational Plaintiffs.

Nor are the Organizational Plaintiffs required to exhaust under the Prison Litigation Reform Act (the “PLRA”). The Organizational Plaintiffs are not persons capable of being incarcerated or detained, so they are not “prisoners” as the term is defined by the PLRA. 42 U.S.C. §§ 1997e(a), (h); *see also Alabama Disabilities Advoc. Pgm. v. Wood*, 584 F. Supp. 2d 1314, 1316 (M.D. Ala. 2008); *Dunn v. Dunn*, 219 F. Supp. 3d 1163, 1176 (M.D. Ala. 2016). The PLRA’s exhaustion requirement thus does not apply to the Organizational Plaintiffs. This holding is consistent with those of other courts that have found that those who sue as representatives of prisoners are not “prisoners” under the PLRA and thus are not bound by the exhaustion requirements of the PLRA. *See, e.g., Tretter v. Pennsylvania Dept. of Corrections*, 558 F. App’x 115, 157 (3rd Cir. 2014) (unpublished) (representative of deceased inmate and administratrix of his estate was not a “prisoner” required to exhaust administrative remedies); *Rivera-Rodriguez v. Pereira-Castillo*, No. 04-1389(HL), 2005 WL 290160, \*6 (D.P.R. Jan. 31, 2005) (finding that the plain language of the PLRA excludes family members and guardians of incarcerated minors); *see also Wormley v. United States*, 601 F. Supp. 2d 27, 46 (D.D.C. 2009) (finding PLRA applies only to a “prisoner” and does not require exhaustion

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<sup>493</sup> *See* Findings of Fact, Section A.3, *supra*.

by non-prisoners, even for claims related to their earlier detentions). Therefore, the Organizational Plaintiffs' likelihood of success on the merits is not barred by exhaustion requirements under the PLRA.

3. Plaintiffs are likely to succeed on the merits of their Eight Amendment claims.

The Court now turns to the merits of Plaintiffs' claims. The Eighth Amendment to the United States Constitution prohibits "cruel and unusual punishment." U.S. Const. amend. XII. The Constitution "does not mandate comfortable prisons." *Blackmon v. Garza*, 484 F. App'x 866, 868–69 (5th Cir. 2012) (quoting *Rhodes v. Chapman*, 452 U.S. 337, 349, (1981)); (*see also* Resp. 12(b)(6) Mot., Dkt. 88, at 1 ("This case is not and has never been about being comfortable.")). However, "prison officials must provide humane conditions of confinement; prison officials must ensure that inmates receive adequate food, clothing, shelter, and medical care, and must take reasonable measures to guarantee the safety of the inmates." *Blackmon*, 484 F. App'x at 868–69 (quoting *Farmer v. Brennan*, 511 U.S. 825, 832 (1994), & *Hudson v. Palmer*, 468 U.S. 517, 526–27 (1984)) (internal quotations omitted). What is cruel or unusual is not set in stone, but rather, is based on what is "socially acceptable," *Ball I*, 792 F.3d at 599, or what is consistent with "[a] sufficient national consensus," *Roper v. Simmons*, 543 U.S. 551, 562 (2005). In other words, the extreme deprivation of any "minimal civilized measure of life's necessities" violates the Eighth Amendment. *Davis v. Scott*, 157 F.3d 1003, 1006 (5th Cir. 1998) (citation omitted).

"It is well-established in [the Fifth Circuit] 'that the Eighth Amendment guarantees inmates a right to be free from exposure to extremely dangerous temperatures without adequate remedial measures.'" *Yates v. Collier*, 868 F.3d 354, 359 (5th Cir. 2017) (quoting *Hinojosa v. Livingston*, 807 F.3d 657, 669 (5th Cir. 2015)). Indeed, the Fifth Circuit has "repeatedly recognized the serious risk of harm that excessive heat can pose in the prison context absent adequate mitigating measures, and [it

has] consistently found evidence sufficient in these cases to support an Eighth Amendment violation, even when certain mitigating measures were available.” *Id.* at 361. The Fifth Circuit has recognized this risk for at least the last twenty years. *See Gates v. Cook*, 376 F.3d 323, 340 (5th Cir. 2004).

In *Gates*, the Fifth Circuit held that inmates in the Mississippi Department of Corrections (the “MDOC”) faced a substantial risk of serious harm based on the MDOC’s failure to “provide fans, ice water, and daily showers when the heat index is 90 degrees or above.” *Gates*, 376 F.3d at 334, 339–40. In *Ball I*, the Fifth Circuit affirmed the district court’s finding that the heat within a prison housing area posed a substantial risk of serious harm to inmates, where the heat index ranged from 81.5° to 107.79° and surpassed 100° on five or more days during a roughly two-week period. 792 F.3d at 590–94. The Fifth Circuit did so even though those inmates had continued access to potable water and ice. *Id.* at 590, 592. And in *Cole*, the district court found that extremely hot conditions at TDCJ facilities (a heat advisory warned that the heat index could reach “near or above 108” degrees) constituted a substantial risk of serious harm sufficient to satisfy the Eighth Amendment’s objective test. 2017 WL 3049540, at \*39 (Ellison, J.). In the two decades since *Gates*, the Fifth Circuit has repeatedly acknowledged the serious risk of harm that excessive heat poses in the prison context. *See Yates*, 868 F.3d at 359; *see also Hinojosa*, 807 F.3d at 669.

Here, to establish an Eighth Amendment violation, Plaintiffs must show (1) the heat poses an unreasonable risk of serious harm, and (2) Collier acted with deliberate indifference to the risk posed. *See e.g., Hinojosa*, 807 F.3d at 665.

a. The Organizational Plaintiffs Are Likely to Show Heat Exposes their Constituents to Unreasonable Risk of Serious Harm

The Organizational Plaintiffs have shown that extreme heat in TDCJ’s uncooled prisons constitutes a well-established substantial risk of serious harm that constitutes cruel and unusual

punishment. Approximately 96,500 of TDCJ's 142,240 beds remain unair-conditioned.<sup>494</sup> In the last two summers, TDCJ logs have shown outdoor heat indexes as high as 134°, and indoor temperatures above 85° nearly every day from May 1, 2023 to September 30, 2023.<sup>495</sup> This evidence is consistent with testimony from current and former prisoners, who have observed temperature readings in their units exceeding 110° and 130°. <sup>496</sup> TDCJ agrees that outdoor temperatures at every Texas prison are expected to exceed 85° each summer, and that the temperatures prisoners are exposed to inside unair-conditioned prisons are so high and dangerous that adequate mitigation measures are required.<sup>497</sup> The heat will only get worse with climate change. As Dr. Mearns explains, increasing extreme temperatures and more frequent heat waves are likely to continue, which will result in an increasing heat index, and number of hours per day with extreme heat index values.<sup>498</sup> Collier has offered no evidence to the contrary and, in fact, acknowledged that summers are hot in Texas, have been hot for years, and are likely to continue to be hot.<sup>499</sup>

It is undisputed that heat “is one of the leading weather-related killers in the United States, resulting in hundreds of fatalities each year.”<sup>500</sup> As set forth above, a heat index of 88° or higher poses a substantial risk of adverse health outcomes for everyone—even young, healthy people.<sup>501</sup> Those risks include heat exhaustion, heat rash, dehydration, heat cramps, heat syncope, and heat stroke—the last of which carries a “high mortality rate” and can have lasting negative health

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<sup>494</sup> See Findings of Fact, Section F.3, *supra*.

<sup>495</sup> See Findings of Fact, Section C.1, *supra*.

<sup>496</sup> See Findings of Fact, Section C.1, *supra*.

<sup>497</sup> See Findings of Fact, Section C.1, *supra*.

<sup>498</sup> See Findings of Fact, Section C.1, *supra*.

<sup>499</sup> See Findings of Fact, Section C.1, *supra*.

<sup>500</sup> See Findings of Fact, Section C.1, *supra*.

<sup>501</sup> See Findings of Fact, Section C.1, *supra*.

consequences for those people who do not die.<sup>502</sup> High heat also exacerbates mental illness.<sup>503</sup> People with mental health disorders exhibit higher rates of suicidality, agitation, impulsivity, and slowing of cognitive processing when exposed to high heat, and mental health episodes requiring hospitalization increase under these conditions.<sup>504</sup> These risks were uncontested by Collier. Indeed, TDCJ's own training documents acknowledge that "[i]ncreased body temperatures, if left uncontrolled, may lead to delirium, convulsions, seizures, and possibly even death."<sup>505</sup> Collier acknowledged through his 30(b)(6) deponent that extreme heat is a dangerous condition in the TDCJ system that "has killed inmates, and [has] caused numerous inmates and officers to suffer heat-related illnesses."<sup>506</sup> And Collier's own internal medicine expert, Dr. Leonardson, agreed that people exposed to severe environmental heat between 90° to 105° Fahrenheit are at serious risk of illness and death.<sup>507</sup>

Plaintiffs need not prove "that death or serious injury has already occurred" to satisfy the Eighth Amendment's objective standard. *Ball I*, 792 F.3d at 593 (citation omitted). Instead, they need only show "a substantial risk of serious harm" from the extreme heat. *Id.* at 594. Even so, Plaintiffs' experts Dr. Skarha and Dr. Zanolobetti established that nearly three hundred deaths were attributable to extreme heat in Texas prisons without air conditioning between 2001 to 2019, or an average of 14 deaths per year.<sup>508</sup> Dr. Skarha and Dr. Zanolobetti concluded that a one-degree temperature increase above 85° corresponds to a 0.7% increase in the risk of mortality.<sup>509</sup>

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<sup>502</sup> See Findings of Fact, Section C.1, *supra*.

<sup>503</sup> See Findings of Fact, Section C.1, *supra*.

<sup>504</sup> See Findings of Fact, Section C.1, *supra*.

<sup>505</sup> See Findings of Fact, Section C.1, *supra*.

<sup>506</sup> See Findings of Fact, Section C.1, *supra*.

<sup>507</sup> See Findings of Fact, Section C.1, *supra*.

<sup>508</sup> See Findings of Fact, Section D.2, *supra*.

<sup>509</sup> See Findings of Fact, Section D.2, *supra*.



Neither heat-related deaths nor heat-related illnesses have abated since 2019. TDCJ admitted to three heat-related deaths of inmates just last summer alone.<sup>510</sup> That number is almost certainly an undercount, given Plaintiffs' unrebutted evidence of two additional heat-related deaths (neither of which were classified as such by TDCJ), and TDCJ's failure to timely perform autopsies, failure to consistently take core body temperatures, and refusal to classify a death as "heat-related" unless heat was the sole cause of the inmate's death.<sup>511</sup> Plaintiffs, likewise, presented unrebutted testimony from Dr. Zanobetti and Dr. Skarha that inmates in unair-conditioned Texas prisons will continue to die from the heat unless these facilities are air conditioned.<sup>512</sup>

The heat also continues to cause inmates and staff to suffer heat-related illnesses. TDCJ's public reports to the Texas Legislature acknowledged that 17 TDCJ inmates suffered heat-related illnesses in 2023, though Plaintiffs' evidence shows this, too, is likely an undercount, with TDCJ's medical services provider, UTMB, reporting 35 prisoners with heat-related injuries in just June 2023 alone.<sup>513</sup> And according to TDCJ's training documents, heat-related illness is the fifth-leading cause of serious injuries among TDCJ employees.<sup>514</sup> TDCJ also reported 35 heat-related illnesses of staff to the Texas Legislature in 2023, and Plaintiffs presented evidence of nearly 80 heat-related workers' compensation claims filed by corrections staff in 2022 and 2023.<sup>515</sup>

Notably, these deaths and heat-related illnesses and injuries occurred during a summer when, as Collier's witnesses testified and TDCJ documents indicate, the prisons were implementing all of TDCJ's heat mitigation measures, including their heat score system, access to cooled respite areas,

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<sup>510</sup> See Findings of Fact, Section D.3, *supra*.

<sup>511</sup> See Findings of Fact, Section D.4-D.6, *supra*.

<sup>512</sup> See Findings of Fact, Section D.2, *supra*.

<sup>513</sup> See Findings of Fact, Section D.6, *supra*.

<sup>514</sup> See Findings of Fact, Section D.8, *supra*.

<sup>515</sup> See Findings of Fact, Section D.8, *supra*.

distribution of water and ice, cool showers, and fans.<sup>516</sup> TDCJ's mitigation measures are ineffective because of the temporary nature of the relief.<sup>517</sup> And in some instances, such as using fans when the temperature reaches a certain threshold, the mitigation measures actually increase the risk of heat-related illness, injury, or death.<sup>518</sup> And even if the mitigation measures were effective, inmates have severely limited access to these resources due to understaffing.<sup>519</sup> Based on this evidence, Plaintiffs have shown that every TDCJ inmate in an unair-conditioned cell faces a substantial risk of death or serious bodily injury from the extreme heat, absent the installation of air conditioning.

b. Tiede is Likely to Show the Heat Exposes Him to Unreasonable Risk of Serious Harm

The Court has already determined that Tiede is “substantially likely to prove an Eighth Amendment violation because of his enhanced sensitivity to extreme heat due to his medical conditions,” (Order, Dkt. 17 at 4), and finds this remains true. While TDCJ currently houses Tiede in an air-conditioned cell, TDCJ moved him there after the Court entered a temporary restraining order compelling the TDCJ to do so. As for his continued placement in an air-conditioned cell, the Court has also determined that “this voluntary cessation does not moot his request for relief, as it is not ‘absolutely clear that the allegedly wrongful behavior could not reasonably be expected to recur.’” (Order, Dkt. 95 at 7 (quoting *Sossamon v. Texas*, 560 F.3d 316, 325 (5th Cir. 2009) (cleaned up), *aff'd*, 563 U.S. 277 (2011))). Despite his undisputed heat-sensitive co-morbidities, Tiede has not been assigned a heat score that would require TDCJ to place him in an air-conditioned cell pursuant to its heat score policy.<sup>520</sup> Further, every TDCJ witness who testified at the hearing, including Collier,

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<sup>516</sup> See Findings of Fact, Section E, *supra*.

<sup>517</sup> See Findings of Fact, Section E.1, *supra*.

<sup>518</sup> See Findings of Fact, Section E.4, *supra*.

<sup>519</sup> See Findings of Fact, Section E.1, *supra*.

<sup>520</sup> See Findings of Fact, Section B, *supra*.

would not commit to keeping Tiede in an air-conditioned cell.<sup>521</sup> Thus, Tiede is at risk of being moved into unair-conditioned housing at any time and therefore being subjected to the dangers of extreme heat detailed above.

The evidence from the hearing also shows that placing Tiede in unair-conditioned housing would be detrimental to his health and put him at a substantial risk of serious harm, including death.<sup>522</sup> Tiede's condition has only worsened since the Court entered its temporary restraining order, as he was diagnosed with a new "acute or subacute" stroke in his thalamus in April 2024.<sup>523</sup> Tiede, 66 years old, also suffers from COPD, diabetes, hypertension, and bleeding on his right retina.<sup>524</sup> He testified that his health improves when he's housed in air conditioning and would decline if placed back in extreme heat.<sup>525</sup> Dr. Vassallo offered unrebutted testimony that Tiede is particularly vulnerable to heat, and that placing Tiede in unair-conditioned housing would put him at a substantial risk of death or serious harm.<sup>526</sup> And again, the evidence at the hearing established that TDCJ's heat mitigation measures are insufficient to protect inmates like Tiede from a substantial risk of death or serious harm.<sup>527</sup>

In sum, TDCJ refuses to guarantee Tiede will remain in an air-conditioned unit, has failed to assign him a heat score that would require such a guarantee, and would provide only woefully inadequate mitigation measures if he is removed from the air conditioning. Accordingly, TDCJ fails to take reasonable measures to guarantee the safety of Tiede, as required by the Eight Amendment.

c. Plaintiffs are substantially likely to show that Collier acted with deliberate indifference.

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<sup>521</sup> See Findings of Fact, Section B, *supra*.

<sup>522</sup> See Findings of Fact, Section B, *supra*.

<sup>523</sup> See Findings of Fact, Section B, *supra*.

<sup>524</sup> See Findings of Fact, Section B, *supra*.

<sup>525</sup> See Findings of Fact, Section B, *supra*.

<sup>526</sup> See Findings of Fact, Section B, *supra*.

<sup>527</sup> See Findings of Fact, Section E, *supra*.

To satisfy the Eighth Amendment’s subjective standard, Plaintiffs must show that it is substantially likely that Collier “knows that inmates face a substantial risk of serious harm and disregards that risk by failing to take reasonable measures to abate it.” *Farmer v. Brennan*, 511 U.S. 825, 847 (1994). This knowledge can be inferred “from circumstantial evidence,” and the Court “may conclude that [Collier] knew of a substantial risk of serious harm from the very fact that the risk was obvious.” *Gates*, 376 F.3d at 333, 340 (affirming finding of deliberate indifference “based on the open and obvious nature of these conditions and the evidence that inmates had complained of symptoms of heat-related illness”); *see also Ball I*, 792 F.3d at 595 (affirming finding of deliberate indifference based “on the totality of the record evidence” showing prison official’s subjective knowledge). This knowledge may also be shown by evidence that the risk is “longstanding, pervasive, well-documented, or expressly noted by prison officials in the past,” and “the circumstances suggest that [Collier]” was exposed to that information. *Farmer*, 511 U.S. at 842–43. These standards are met here.

Plaintiffs have shown it likely that Collier knows inmates face serious harm from the extreme heat in Texas’s unair-conditioned prisons, and that the risk of harm is obvious, well-documented, longstanding, and pervasive, and has been expressly noted by TDCJ officials in the past.

First, Collier admitted during the hearing that he was aware of the several heat-related deaths, multiple heat-related illnesses of inmates, dozens of workers’ compensation claims, dozens of staff-related illnesses, and thousands of heat-related grievances from inmates in the last two summers alone.<sup>528</sup> And Collier knows that this is not a new phenomenon. Indeed, he testified under oath in the *Cole* case during the summer of 2019 that he believed that inmates confined in

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<sup>528</sup> *See* Findings of Fact, Section E, *supra*.

temperatures of 95° were at a serious health risk.<sup>529</sup> Collier's Rule 30(b)(6) deponent also acknowledged that the temperatures TDCJ inmates are exposed to during the summer months are so high and potentially dangerous that they are at a very real risk of harm and serious injury unless adequate measures are taken to protect them.<sup>530</sup> And the deponent admitted that extreme heat is a dangerous condition in the system that "has killed inmates, and [has] caused numerous inmates and officers to suffer heat-related illnesses."<sup>531</sup> Thus, Collier is personally aware of the substantial risk of harm faced by TDCJ inmates in unair-conditioned prisons, despite TDCJ's heat mitigation measures.

Second, Collier is well aware of the substantial risk of harm from extreme heat, given the numerous lawsuits that have been filed against him, his predecessors, and TDCJ itself over the last twenty-five years for deaths and serious illnesses caused by extreme heat. TDCJ has previously acknowledged heat-related deaths dating back to 1998. As Judge Ellison found in a case arising out of the death of TDCJ prisoner Larry McCollum:

It is undisputed that five men died in 1998 from environmentally-caused hyperthermia while incarcerated in TDCJ facilities. Between 1999 and 2010, five more individuals are known to have died from hyperthermia or other heat-related illnesses while incarcerated in Texas prisons. In 2011, Texas experienced an "unprecedented" heat wave, and ten more individuals died from hyperthermia. McCollum was the second individual to die of heat-related illness during the summer of 2011.

*McCollum v. Livingston*, No. 4:14-CV-3253, 2017 WL 608665, at \*1 (S.D. Tex. Feb. 3, 2017). As the Fifth Circuit has recognized, "TDCJ officials are, or have been, defendants in numerous other

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<sup>529</sup> See Findings of Fact, Section D.1, *supra*. In that case, Judge Ellison found that Collier was aware that a risk of serious harm existed as a result of the extreme temperatures in the Wallace Pack Unit and, alternatively, that the risk of harm was obvious. See *Cole*, 2017 WL 3049540, \*40.

<sup>530</sup> See Findings of Fact, Section D.1, *supra*.

<sup>531</sup> See Findings of Fact, Section D.1, *supra*.

cases alleging Eighth Amendment violations based on excessive heat in prison.” *Yates*, 868 F.3d at 360 (citing *Hinojosa*, 807 F.3d at 661 (deciding appeal involving TDCJ prisoner who suffered a seizure at night due to high indoor temperatures, “[fell] out of his bed and was convulsing,” and died twenty minutes later); *Webb v. Livingston*, 618 F. App’x 201, 204 (5th Cir. 2015) (deciding appeal involving the “heat-related deaths of five prisoners who died while housed in facilities operated by [TDCJ]”); *Valigura v. Mendoza*, 265 F. App’x 232, 233–34 (5th Cir. 2008) (deciding appeal involving prisoner who alleged that “temperatures in the bunk area reached into the nineties and hundreds due to poor ventilation” and that “he was not able to use the restroom or showers without lengthy waits, which caused him severe discomfort”). Collier admitted that he was aware of ten heat-related deaths in the summer of 2011 alone. Thus, these lawsuits not only placed Collier on notice of the substantial risk of serious harm Texas inmates face from extreme heat, but they also established the obviousness of that risk.

Third, multiple studies were sent to Collier personally, warning him and TDCJ that heat-related deaths had occurred in TDCJ prisons. For instance, the study published by Dr. Skarha and Dr. Zanobetti in 2022 concluded that 271 deaths were attributable to extreme heat in Texas prisons without air conditioning from 2001 to 2019—an average of 14 deaths per year.<sup>532</sup> The same study concluded that there was not a single heat-related death in TDCJ’s air-conditioned prisons during this period.<sup>533</sup> Likewise, Dr. Purdum’s study, published in 2022, revealed that 29% of the TDCJ inmates surveyed said that they knew of at least one heat-related death either in their own unit or at another unit.<sup>534</sup> Dr. Purdum’s study also warned that “increasing annual temperatures and the increase of days over 100 degrees in Texas will continue

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<sup>532</sup> See Findings of Fact, Section D.1, *supra*.

<sup>533</sup> See Findings of Fact, Section D.1, *supra*.

<sup>534</sup> See Findings of Fact, Section E, *supra*.

to exacerbate the degradation of health for both incarcerated people and staff in the TDCJ system.”<sup>535</sup> Collier admitted during the hearing that he had received and reviewed both of these studies.<sup>536</sup>

Lastly, Collier is well aware of the substantial risk of serious harm from extreme heat because of safe-temperature mandates in jails and federal prisons in Texas and in other state prison systems across the country. Since 1994, state-wide regulations adopted by the Texas Commission on Jail Standards have required all jails in Texas to maintain indoor temperatures between 65° and 85°. <sup>537</sup> Notably, this range departs significantly upward from the temperatures required inside other government buildings in Texas to maintain “comfortable” levels (e.g., between 68° and 78°). <sup>538</sup> North Carolina, Tennessee, and the federal Bureau of Prisons have implemented similar standards.<sup>539</sup> TDCJ has nevertheless not done the same.

The “mere presence of remedial measures” is not a defense to an Eighth Amendment violation. *Webb*, 618 F. App’x at 209 n.7; *see also Cole*, 2017 WL 3049540, at \*41 (rejecting Collier’s argument TDCJ was not deliberately indifferent simply because TDCJ “implemented several mitigating measures since the deaths in 2011 and 2012”). Prison officials cannot “insist[] upon a course of action that has already proven futile.” *Lewis v. Cain*, No. CV 15-318-SDD-RLB, 2023 WL 7299130, at \*47 (M.D. La. Nov. 6, 2023). Nor can they rely on mitigation measures that have nothing more than a “negligible impact” on the danger posed to inmates from extreme heat. *Laube v. Haley*, 234 F. Supp. 2d 1227, 1251 (M.D. Ala. 2002). They are instead required to implement mitigation measures that “adequate[ly] . . . protect inmates from the extreme heat.”

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<sup>535</sup> See Findings of Fact, Section E, *supra*.

<sup>536</sup> See Findings of Fact, Section E, *supra*.

<sup>537</sup> See Findings of Fact, Section D.4, *supra*.

<sup>538</sup> See Findings of Fact, Section D.4, *supra*.

<sup>539</sup> See Findings of Fact, Section D.4, *supra*.

*Webb*, 618 F. App'x at 209 n.7; *see also Cole*, 2017 WL 3049540, at \*41 (“[T]he effectiveness of the measures implemented by TDCJ is relevant to the Court’s analysis.”).

Seven years ago, Judge Ellison held that many of the same mitigation measures Collier relies on in his defense in the instant case—respite rooms, cold showers, access to water and ice, and fans—“do not stop Plaintiffs from experiencing the symptoms of heat-related illnesses and do not reduce the risk of serious injury or death to a socially acceptable level.” *Cole*, 2017 WL 3049540, at \*40. Judge Ellison explained that those measures were “by and large ineffective at reducing the heat stress placed on Plaintiffs’ bodies” and were nothing more than “the bare minimum.” *Id.* at \*40-42. By implementing such measures, Judge Ellison held, Collier “ignored the risk of harm faced by the population [he] serve[s]” and was thus deliberately indifferent to the substantial risk of serious harm that inmates in the Wallace Pack Unit faced from the extreme heat. *Id.* at \*42. The Texas House Corrections Committee reached the same conclusion the following year: “Based on the medical information known about human health and heat-related health risks, TDCJ cannot rely only on mitigation factors to assure the well-being of inmates and corrections personnel.”<sup>540</sup>

Despite Judge Ellison’s opinion, the Texas Legislature’s clear mandate, and the benefit of seven years to adequately address the substantial risk of serious harm (including illness and death) that extreme heat poses to inmates in unair-conditioned cells, Collier has failed to implement the installation of air conditioning in TDCJ facilities. Instead, he largely relies on the same mitigation measures that Judge Ellison found inadequate in the *Cole* case.

Unsurprisingly, the uncontroverted evidence shows that those heat mitigation measures are *still* inadequate, just as Judge Ellison found seven years ago. Even when available, respite is, by its

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<sup>540</sup> *See* Findings of Fact, Section E, *supra*.



very nature, temporary, and it places the onus on inmates to recognize when they are developing symptoms of a heat-related illness, even though such symptoms can be subtle and can include cognitive impairments that render inmates unable to recognize that they need help.<sup>541</sup> Cold showers, even when available, have no statistically significant impact on heat-related mortality and, at best, provide relief for only a few minutes.<sup>542</sup> Fans are not only ineffective but actually *increase* the risk of heat-related illness at heat indexes over 99°. <sup>543</sup> Even unfettered access to ice and water, which Plaintiffs' evidence demonstrates not consistent in practice, is insufficient.<sup>544</sup> The Court notes again that TDCJ surveillance video captured Castillo visiting the water cooler 23 times in the 24 hours before his heat-related death and that Womack was seen passing water bottles in his cell in the hours before his death.<sup>545</sup> And, as Professor Deitch testified, even if these measures worked in theory, understaffing has had an “enormous impact” on TDCJ's ability to implement these heat mitigation measures.<sup>546</sup>

Nor is TDCJ's “heat score” system—which was implemented as a result of the settlement agreement in the *Cole* case—an adequate manner of remedying the substantial risk of serious harm faced by TDCJ inmates in unair-conditioned facilities. To begin with, although *all* TDCJ inmates (even the young and healthy) face such a risk, only approximately 12,289 of the 134,500 individuals incarcerated in the TDCJ system (i.e., less than 10%) have a heat score.<sup>547</sup> This is reason enough to find the system inadequate. Nor does the system even accomplish its purported goal of protecting especially vulnerable, heat-sensitive inmates. For instance, inmates do not

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<sup>541</sup> See Findings of Fact, Section E.1, *supra*.

<sup>542</sup> See Findings of Fact, Section E.3, *supra*.

<sup>543</sup> See Findings of Fact, Section E.4, *supra*.

<sup>544</sup> See Findings of Fact, Section E.5, *supra*.

<sup>545</sup> See Findings of Fact, Section D.3, *supra*.

<sup>546</sup> See Findings of Fact, Section E.1, *supra*.

<sup>547</sup> See Findings of Fact, Section E.1, *supra*.

automatically receive a score for having a mental illness, taking one of the many medications that impair thermoregulation, or being above the age of 65—all of which Plaintiffs’ experts identified as making inmates more susceptible to heat.<sup>548</sup> Indeed, many of the medical conditions and medications that UTMB’s own policies identify as affecting heat tolerance are not incorporated into the heat score algorithm it designed for TDCJ, either.<sup>549</sup> If Tiede—who is 65 years old and has been diagnosed with a stroke, diabetes, hypertension, pulmonary disease, and obesity—does not have a heat score,<sup>550</sup> then the system is arbitrary and ineffective at accomplishing even its stated, already-underinclusive goal of protecting especially heat-sensitive inmates. Collier thus cannot rely on the heat score system to avoid liability under the Eighth Amendment.

Most troubling to the Court, however, is the fact that none of these measures prevented (1) the several dozen deaths that Drs. Skarha and Dr. Zanolotti attributed to heat even after heat mitigation measures were implemented, (2) the three heat-related deaths that Collier admits occurred last summer, (3) the two additional heat-related deaths that Dr. Uribe and Dr. Vassallo testified occurred last summer, or (4) the 35 heat-related illnesses of TDCJ inmates identified by UTMB that occurred in 2022 and 2023—or the 17 heat-related illnesses that TDCJ itself reported to the Legislature. In short, TDCJ’s mitigation measures have “not stop[ped] [TDCJ inmates] from experiencing the symptoms of heat-related illnesses and [did] not reduce the risk of serious injury or death to a socially-acceptable level.” *Cole*, 2017 WL 3049540, at \*40.

What Collier has *not* done “in the face of the substantial risk of harm is also relevant to the Court’s analysis.” *Id.* at \*42. Despite knowing of the risk extreme heat poses to all inmates and the inadequacy of TDCJ’s mitigation measures, Collier has no concrete timeline for installing

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<sup>548</sup> See Findings of Fact, Section E.1, *supra*.

<sup>549</sup> See Findings of Fact, Sections B and E.1, *supra*.

<sup>550</sup> See Findings of Fact, Section D.3, *supra*.

permanent or temporary air conditioning in TDCJ inmate living areas.<sup>551</sup> TDCJ has not solicited bids for installing either temporary or permanent air conditioning throughout TDCJ facilities.<sup>552</sup> Although Collier has added 8,940 cool beds since 2018 (a number that includes the 1,436 ordered as part of the Wallace Pack Unit settlement), this averages out to only 1,376 beds per year.<sup>553</sup> At that rate, it would take TDCJ approximately 70 years—i.e., until 2094—to install air conditioning throughout the system.<sup>554</sup> Even crediting the most favorable evidence introduced at the hearing to Collier, at TDCJ's more recent, higher rate of adding cool beds, it will take 25 to 30 years to add air conditioning to all inmate living areas, assuming the Texas Legislature allocates funds to do so.<sup>555</sup> This slow timeline exposes over 95,000 inmates to the substantial risk of serious injury or death from unair-conditioned prisons and, assuming normal rates of inmate turnover, would continue to expose hundreds of thousands of inmates to the substantial risk of injury or death from extreme heat over the next two to three decades. Collier, likewise, did not identify (let alone present any evidence of) a less intrusive alternative to temperature control that would reduce the risk of death and serious bodily injury to a “socially acceptable level.” *Ball I*, 792 F.3d at 599.

In sum, the Court finds that, despite a significant risk of harm faced by inmates in unair-conditioned TDCJ prisons, Collier has implemented mitigation measures he knows are inadequate—and which the Court finds are scientifically inadequate—to reduce the substantial risks of serious harm posed by extreme heat. And he has implemented (or has a plan to implement) the only reasonable mitigation measure that he knows is adequate to reduce or eliminate the risk—air conditioning—at a pace that disregards the substantial risk of harm the

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<sup>551</sup> See Findings of Fact, Section F.3, *supra*.

<sup>552</sup> See Findings of Fact, Section F.3, *supra*.

<sup>553</sup> See Findings of Fact, Section F.3, *supra*.

<sup>554</sup> See Findings of Fact, Section F.3, *supra*.

<sup>555</sup> See Findings of Fact, Section F.3, *supra*.

inmates face due to their ongoing exposure to extreme heat. Thus, based on the totality of the evidence, it is substantially likely that Collier has acted with deliberate indifference. Accordingly, Plaintiffs have shown a likelihood of success on the merits of their Eighth Amendment claim.

### **B. Irreparable Harm**

“[A] harm is irreparable, in the context of a preliminary injunction, where there is no adequate remedy at law[.]” *Janvey v. Alguire*, 647 F.3d 585, 600 (5th Cir. 2011). “When an alleged deprivation of a constitutional right is involved, . . . most courts hold that no further showing of irreparable injury is necessary.” Wright & Miller, 11A Fed. Prac. & Proc. Civ. § 2948.1 (3d ed.) (quoted in *Cole*, 2017 WL 3049540, at \*43).

Plaintiffs have shown that TDCJ inmates housed in unair-conditioned prisons will experience irreparable harm, absent court intervention. TDCJ’s own public reports to the Texas Legislature from 2023 identify that, at minimum, three TDCJ inmates died and 17 more were injured as a result of the extreme heat in their unair-conditioned living areas last summer.<sup>556</sup> Plaintiffs’ evidence, including the testimony of Drs. Skarha, Zanolotti, Vassallo, and Uribe, demonstrates that extreme heat has injured and killed even more TDCJ inmates, in addition to those identified by TDCJ itself.<sup>557</sup> And the symptoms inmates suffer—standing alone—are constitutionally significant injuries. *See Blackmon v. Garza*, 484 F. App’x 866, 872 (5th Cir. 2012) (headaches, dizziness, nausea, lightheadedness, difficulty catching breath, and blurred vision, even without medical documentation of the symptoms, are sufficient injuries).<sup>558</sup>

The record evidence shows that exposure to the risks of extreme heat itself is also irreparable injury. *See Ball I*, 792 F.3d at 593-94. Dr. Vassallo testified that exposure to a heat index

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<sup>556</sup> See Findings of Fact, Sections D.3 and D.7, *supra*.

<sup>557</sup> See Findings of Fact, Sections D.4 through D.7, *supra*.

<sup>558</sup> See Findings of Fact, Section C.1, *supra*.

of 88° or higher poses a substantial risk of adverse outcomes for everyone and, again, Defendant's witness, Dr. Leonardson, agreed that temperatures at and above 90° expose inmates to a serious risk of heat-related illness and death.<sup>559</sup> While the Court acknowledges that Collier has a goal of installing air conditioning throughout the inmate living areas in all TDCJ prisons, the Court finds that mere goals in the absence of concrete funding and actions do not satisfy the Eighth Amendment. Cumulatively, hundreds of thousands of inmates will be exposed to extremely high temperatures in TDCJ's unair-conditioned prisons in the 25 to 30 years it will take to air-condition all inmate living areas at the most recent rate of installation. TDCJ inmates will continue to suffer scores of heat-related deaths and injuries until air conditioning is installed.

The Court finds there is no adequate remedy at law for these constitutional violations, as they will continue absent permanent air conditioning. Plaintiffs are at "a significant threat of injury from the impending action," this "injury is imminent," and "money damages would not fully repair the harm." *Humana, Inc. v. Avram A. Jacobson, M.D., P.A.*, 804 F.2d 1390, 1394 (5th Cir. 1986).

### **C. The Balance of the Equities and the Public Interest**

The Court now addresses the final point of analysis, which presents an unusual and highly frustrating challenge. When considering a preliminary injunction, "courts 'must balance the competing claims of injury and must consider the effect on each party of the granting or withholding of the requested relief.'" *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 24 (2008) (citing *Amoco Prod. Co. v. Vill. of Gambell, AK*, 480 U.S. 531, 542 (1987)). Preliminary injunctions are temporary in nature, designed to preserve the status quo and prevent irreparable harm until the

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<sup>559</sup> See Findings of Fact, Section 3.1, *supra*.

court renders a decision on the merits. *Sambrano v. United Airlines, Inc.*, No. 21-11159, 2022 WL 486610, at \*4 (5th Cir. Feb. 17, 2022) (citing *Canal Auth. of State of Fla. v. Callaway*, 489 F.2d 567, 576 (5th Cir. 1974)). In this case, the Court is further restrained by the Prison Litigation Reform Act (“PLRA”), which provides that a preliminary injunction issued with respect to prison conditions expires 90 days after its entry. 18 U.S.C. § 3636(a)(2). So, the Court also takes into consideration the temporal limitations of a preliminary injunction now, versus a lasting permanent injunction at the conclusion of this case.

It is usually the case that granting temporary relief will have the effect of benefiting the movant by preserving the status quo while a case is pending. Here, however, the Court is presented with the unsettling paradox that ordering preliminary relief in the form of temporary air conditioning while the case proceeds would be to the detriment to the ultimate goal of permanent air conditioning. Because the installation of temporary air conditioning would involve a different design and construction process than that of a permanent system, the considerable funds necessary to accomplish such temporary relief would be at the expense of the much more elaborate and expensive process of achieving permanent air conditioning. In other words, the temporary solution presented here at the preliminary injunction posture risks altering the status quo to make it *less* feasible to attain a permanent injunction after this case proceeds to a bench trial and final judgment.

Significantly, Plaintiffs and Collier share the goal of installing permanent air conditioning in all TDCJ facilities. When asked if his goal was to have air conditioning in the entire TDCJ system, Collier responded, “Absolutely.”<sup>560</sup> This is not a case where the defendant completely opposes remedying a constitutional violation. Rather, while the parties disagree over the necessary timeline and plan, Collier presents evidence that he shares Plaintiffs’ ultimate goal of air conditioning the

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<sup>560</sup> Final Hearing Tr. (August 2, 2024), at 179:5–9.

facilities permanently and agrees that it is attainable. Relatedly, since the hearing on the preliminary injunction, two bills on this issue have been introduced in the Texas Legislature, which is currently in session.<sup>561</sup> The bills, HB2997 and HB1315, both propose requiring TDCJ facilities to be maintained at a temperature between 65 degrees and 85 degrees Fahrenheit. HB2997 also proposes reporting requirements regarding air conditioning.<sup>562</sup> If passed, the bill would require TDCJ to report to the governor and the legislature each incident where the temperature in a TDCJ facility was not maintained in the required range and where an air conditioning system failed, and the steps that were taken to ensure the well-being of inmates and staff during those incidents.<sup>563</sup> Considering these bills and Collier's representations that he moves in good faith towards permanent air conditioning, it remains at the forefront of the Court's mind that Plaintiffs, Collier, and members of the legislature are striving for the same end.

In navigating a path to that end, the Court sees conflict between ordering temporary relief now at the preliminary injunction phase and Plaintiffs' likely permanent injunction at the summary judgment or trial phase. Logistically, temporary and permanent air conditioning are separate technologies and outfitting a unit with either requires different processes.<sup>564</sup> To temporarily air condition a unit, TDCJ rents, at a significant cost, stand-alone air conditioning equipment and a generator to power that equipment.<sup>565</sup> By contrast, to install permanent air-conditioning, TDCJ must employ engineers and architects to investigate the building's structure and design air conditioning to fit the building, and then the building must undergo construction to be permanently outfitted with

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<sup>561</sup> H.R. 2997, 89 Leg., Reg. Sess. (Tex. 2025); H.R. 1315, 89 Leg., Reg. Sess. (Tex. 2025).

<sup>562</sup> H.R. 2997, 89 Leg., Reg. Sess. (Tex. 2025); H.R. 1315, 89 Leg., Reg. Sess. (Tex. 2025).

<sup>563</sup> H.R. 2997, 89 Leg., Reg. Sess. (Tex. 2025).

<sup>564</sup> Final Hearing Tr. (Aug. 2, 2024) at 84:1–89:20.

<sup>565</sup> *Id.*

an air-conditioning system.<sup>566</sup> TDCJ's 101 units are of varying sizes and structures, making this an iterative process. These efforts are particularly intensive for older units, which present unique challenges such as large windows that remain open at all times.<sup>567</sup>

At the hearing, Collier explained the cost of installing air conditioning, both temporary and permanent. As previously noted, TDCJ estimates that the cost to install temporary air conditioning equipment and fuel for generators for the seven summer months would be \$700-800 million; the fuel would cost \$600 million each year.<sup>568</sup> And TDCJ estimates that it will need to purchase 65,000 tons of air conditioning equipment to permanently air condition the whole system.<sup>569</sup> The first phase alone of Collier's plan to air condition the entire system calls for \$225 million.<sup>570</sup> If the Court were to order temporary air conditioning placed in all units, vast amounts of funding and resources would be necessary to comply. Collier presented evidence that if ordered to install temporary air conditioning, TDCJ would have to stop efforts towards permanent air conditioning, due to limited staff and resources.<sup>571</sup> This diversion of resources would halt momentum towards installation of permanent air conditioning, Plaintiffs' ultimate desired outcome.

Plaintiffs did present evidence that installing temporary air conditioning in all TDCJ facilities is possible. But, they largely rely on evidence of TDCJ installing temporary air conditioning to comply with the court order in *Cole* and with the Texas Board of Jail Standards during Operation Lone Star. The instant case is of a much larger scale. The preliminary injunction in *Cole* concerned only one unit. *See Cole v. Collier*, No. 4:14-CV-1698, 2017 WL 3049540, at \*46 (S.D. Tex. July 19,

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<sup>566</sup> *Id.* at 93:5–98:3.

<sup>567</sup> *Id.* at 89:6–11.

<sup>568</sup> *Id.* at 91:22–92:3; 86:22–87:14; 90:9–91:6.

<sup>569</sup> *Id.* at 154:14–17.

<sup>570</sup> *Id.* at 179:14–180:4.

<sup>571</sup> Final Hearing Tr. (August 2, 2024), at 92:9–15.



2017). Only three units required temporary air conditioning for Operation Lone Star.<sup>572</sup> This case concerns all TDCJ units, 101 in sum. The Court wholeheartedly agrees with the precedent that “inadequate resources can never be an adequate justification for depriving any person of his constitutional rights.” *Smith v. Sullivan*, 553 F.2d 373, 378 (5th Cir. 1977) (internal citation omitted); *see also Ruiz v. Inmates of Suffolk Co. Jail*, 502 U.S. 367, 396 (1992) (O’Connor, J., concurring) (“[T]he lack of resources can never excuse a failure to obey constitutional requirements.”). But the Court is also mindful that “[p]ublic officials often operate within difficult fiscal constraints; every dollar spent for one purpose is a dollar that cannot be spent for something else.” *Ruiz*, 502 U.S. at 396 (O’Connor, J., concurring). Regrettably, the Court finds granting temporary relief now undermines the feasibility of installing permanent air conditioning in all 101 units, thereby remedying the constitutional violation with finality.

More, granting temporary relief especially undermines the speed with which TDCJ could install permanent air conditioning. Temporary air conditioning could not be installed instantly. There would still be some delay, which then delays a permanent solution, further undercutting Plaintiffs’ goal of not only receiving permanent relief, but receiving it quickly. In *Cole*, it took 60 to 90 days to install temporary air conditioning in one unit,<sup>573</sup> making it conceivable that temporary air conditioning could not be installed in all 101 units in the 90 days before a preliminary injunction would expire under the PLRA. It is a matter of reality and practicality that time and resources would be more judiciously spent securing permanent air conditioning. The Court acknowledges that Plaintiffs experience irreparable harm while Collier works to provide permanent air conditioning. But the Court finds that ordering Collier to expend limited resources on temporary relief does not

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<sup>572</sup> Final Hearing Tr. (Aug. 2, 2024) at 126:20–127:10.

<sup>573</sup> Final Hearing Tr. (July 30, 2025), at 187:14–23.

serve the public interest nor the ultimate interests of either party. Rather, it is in all parties' best interest, and the public's, to move as quickly as possible to install permanent air conditioning.

Crucially, the Court emphasizes its anticipation that Plaintiffs will ultimately succeed on the merits. The Court warns Collier that it foresees Plaintiffs being entitled to permanent relief in the form of expeditious installation of permanent air conditioning in all TDCJ facilities. Collier is implored take to the necessary steps to be prepared for this result. The Court repeats that TDCJ's current plan to install permanent air conditioning—which on the most generous timeline, would not be complete for another 25 years—is insufficient under the Eighth Amendment. While the Court has recognized the obstacles of funding, investigatory work, designing, and other practical considerations in its ruling on the preliminary injunction, the Court does not expect those factors to prevent it from ultimately finding Plaintiffs have a right to an injunction in the form of permanent air conditioning. Should Collier fail to obtain sufficient funding and demonstrate to the Court a plan for achieving the goal of providing sufficient air conditioning for the inmates of TDCJ in a timely manner, the Court reserves its right to revisit its analysis regarding the balance of equities and public interest in this case.

## V. CONCLUSION

This case concerns the plainly unconstitutional treatment of some of the most vulnerable, marginalized members of our society. The Court finds that Plaintiffs have met their burden of establishing a likelihood of success on the merits that Collier is violating the Eighth Amendment's prohibition against cruel and unusual punishment. The Court is of the view that excessive heat is likely serving as a form of unconstitutional punishment. Regrettably, the Court must also acknowledge that it will take hundreds of millions, if not billions, of dollars to install permanent air conditioning in every TDCJ facility, and that ordering temporary air conditioning now would have

the effect of diverting significant limited resources for a process that would neither be adaptable to a permanent solution nor likely even be complete before the Court's preliminary (i.e. temporary) injunction would expire. So, the Court finds it is not in the parties' or the public interest to issue a preliminary injunction at this time.

Accordingly, **IT IS ORDERED** that Plaintiffs' motion for preliminary injunction, (Dkt. 50), is **DENIED**.

The Court expects that this case will proceed along an expedited timeline to a bench trial. Keeping this timeline in mind, **IT IS FURTHER ORDERED** that the parties shall file a joint proposed scheduling order on or before **April 10, 2025**. The parties should consult the website for the U.S. District Court for the Western District of Texas ([www.txwd.uscourts.gov](http://www.txwd.uscourts.gov)), select the "Judges' Info" tab, "Standing Orders," "Austin Division," and file the joint proposed scheduling order utilizing District Judge Robert Pitman's form.

**SIGNED** on March 26, 2025.



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ROBERT PITMAN  
UNITED STATES DISTRICT JUDGE