UNITED STATES COURT OF APPEALS
FOR THE FOURTEENTH CIRCUIT

No. 18-4738

ROSEMARY DEACON, Plaintiff-Appellant, v. CITY OF LOCKTON DEPARTMENT OF PUBLIC HEALTH, Defendant-Appellee.	Appeal from the United States District Court for the District of Arcadia No. 19-CV-02496-ATS-DJH The Honorable Alexander Sandoval, District Judge

Docketing Notice

Appellant Rosemary Deacon, having filed a Notice of Appeal on September 13, 2019, from the Judgment of the United States District Court for the District of Arcadia dated September 10, 2019; and the appropriate Docketing Fee having been paid and Docketing Statement filed, along with statements of representation by both parties; the Court hereby gives notice, pursuant to Federal Rule and Circuit Rule 12 of Appellate Procedure, that this appeal has been docketed as of today's date.

SO ORDERED:

/s/ Benjamin Wooden
Benjamin Wooden,
Clerk of the Court

Dated: September 14, 2019

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF ARCADIA

ROSEMARY DEACON, Plaintiff, v. CITY OF LOCKTON DEPARTMENT OF PUBLIC HEALTH, Defendant.	19-CV-02496-ATS-DJH

DOCKET

Item #

16. Notice of Appeal—September 13, 2019
15. Memorandum Decision and Judgment—September 10, 2019
14. Plaintiff's Memorandum in Opposition to Summary Judgment—August 7, 2019 [omitted]
13. Defendant's Motion for Summary Judgment—July 30, 2019 [omitted]
12. Deposition of Tony Love—July 15, 2019 (Exhibit 1 to Defendant's Motion for Summary Judgment)
11. Plaintiff's First Amended Complaint—July 2, 2019 [omitted]
10. Police Report—July 1, 2019 (Exhibit 2 to Defendant's Motion for Summary Judgment)
9. City of Lockton Department of Public Health Notice of Data Breach—June 24, 2019 (Exhibit 1 to Plaintiff's Memorandum in Opposition to Summary Judgment)
8. Defendant's Answer—June 25, 2019 [omitted]
7. Plaintiff's Complaint—June 16, 2019 [omitted]
6. City of Lockton Department of Public Health Email Communication from Dr. Ellen Bartnet—April 13, 2019 (Exhibit 2 to Plaintiff's Memorandum in Opposition to Summary Judgment)
5. City of Lockton Department of Public Health Medical Record of Rosemary Deacon (Exhibit 3 to Plaintiff's Memorandum in Opposition to Summary Judgment)
4. Alan Randsman's *Washington Examiner* Newspaper Articles regarding Lockton data breaches—August 21, 2018 – July 4, 2019 (Exhibit 4 to Plaintiff's Memorandum in Opposition to Summary Judgment)
3. Security Camera Stills from "Grim Breacher" data breaches—August 20, 2018 – June 23, 2019 (Exhibit 5 to Plaintiff's Memorandum in Opposition to Summary Judgment)
2. Lockton Administrative Code § 115-92-105A
1. Arcadia Code § 5-12-42-3

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF ARCADIA

ROSEMARY DEACON, Plaintiff, v. CITY OF LOCKTON DEPARTMENT OF PUBLIC HEALTH, Defendant.	19-CV-02496-ATS-DJH

NOTICE OF APPEAL

Plaintiff, Rosemary Deacon, by counsel, Kevin Jenkins, respectfully appeals the Judgment of this Court entered September 10, 2019, to the United States Court of Appeals for the Fourteenth Circuit.

Respectfully submitted,

/s/ Kevin Jenkins
Kevin Jenkins, No.22487
Attorney for Rosemary Deacon

Dated: September 13, 2019

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF ARCADIA

ROSEMARY DEACON, Plaintiff, v. CITY OF LOCKTON DEPARTMENT OF PUBLIC HEALTH, Defendant.	19-CV-02496-ATS-DJH

MEMORANDUM DECISION AND JUDGMENT

Plaintiff, Rosemary Deacon ("Deacon") filed her Complaint against the Defendant, Department of Public Health of the City of Lockton, Arcadia ("City"), alleging two violations of the Civil Rights Act, 42 U.S.C. § 1983. Deacon alleges that actions taken pursuant to a regulation promulgated by the City, Lockton Administrative Code section 115-92-105A, were contrary to her Fourteenth Amendment Due Process property and privacy rights.

Deacon later amended her complaint, adding a third count for negligence. Following discovery, the City filed a Motion for Summary Judgment pursuant to Fed. R. Civ. P. 56. The Motion raises two novel questions:

(1) Whether there is a fundamental property and/or privacy interest in DNA that is protected under the Due Process Clause of the Fourteenth Amendment; and

(2) Whether or when a breach of one's personally identifiable information can constitute an injury-in-fact that satisfies constitutional standing under Article III.

For the reasons stated below, I hereby GRANT the City's Motion for Summary Judgment as to all counts.

FACTS

The facts below were established by affidavits and exhibits submitted in support of, and in opposition to, summary judgment. The parties have stipulated that these facts (including those cited in any studies or articles cited in the text or footnotes below) are not in dispute.

Green Isle Virus

In February 2019, on the sandy, northern shores of Arcadia, a northeastern American state, a mysterious animal carcass was found by residents. The carcass was unfamiliar to local residents, who were used to the usual fish and juvenile whales found onshore after severe storms. Days after the discovery, several Arcadians near where the carcass was discovered became ill with flu-like symptoms. Instances of these symptoms spread rapidly throughout the area, eventually making their way to Fairview, the second largest city in the state.

Scientists soon traced these symptoms back to the carcass. Within days of discovering this connection, the animal was identified as a reindeer that had lived roughly 50,000 years ago and had been frozen in permafrost in Greenland. Due to consistently above average temperatures in Greenland, the permafrost began to melt, causing the reindeer to slide into the ocean in its frozen form. By the time the carcass arrived upon the northern beaches of Arcadia, the reindeer had thawed, unfreezing and

releasing a particularly pernicious virus unfamiliar to modern-day human immune systems. Scientists named the virus "Green Isle," after its geographic origin.

Green Isle is highly contagious and can be spread by contact with any contaminated surface or bodily substance.[1] Thus, an infected person's exhalations may propel saliva droplets into the air, putting at risk others nearby who breathe the contaminated air. The reported cases of Green Isle share many of the same characteristics. Symptoms tend to appear within five to seven days of first contact with the virus. At first, victims complain of mild feverishness and weakness. These relatively minor complaints tend to escalate quickly to complaints of severe flu-like symptoms including nausea; vomiting; fever; aches and pains; difficulty breathing; and, in some cases, mild to severe hallucinations. In most cases, Green Isle causes death within three weeks of the onset of symptoms.

On March 11, 2019, a case of Green Isle was reported in central Arcadia, near Washington County. This news stirred panic among the Washington County community, quickly dominating media attention and public discussion. Concerned residents from nearby counties asked their local public officials to take whatever steps necessary to avoid the introduction of Green Isle into their communities.

Contact Tracing

In response to the growing sense of trepidation, several municipal governments near the cited cases of Green Isle, including the City of Lockton, decided to begin collaborative efforts to track and contain the spread of the virus. Pursuant to Lockton

---

[1] However, persons who are infected with Green Isle remain contagious only for seven days after their first contact with the virus.

Administrative Code section 115-92-105A, the Department of Public Health of the City of Lockton, as well as the public health departments in the other nearby municipalities (collectively, the "Health Departments"), launched an investigation to track all persons who may have come into contact with others known to have been infected.

Through a process known as "contact tracing," the Health Departments conducted extensive interviews with infected persons to find all other individuals with whom the infected people might have interacted during the period of their known infection. Because Green Isle spreads easily through the air and through contact with contaminated surfaces, massive numbers of people may be at risk for infection.

For example, if an infected person visited a grocery store while contagious from 3 p.m. to 4 p.m. on a certain day, all employees and customers who were in the grocery store on that day from 3 p.m. to 4:30 p.m. are deemed at risk for Green Isle.[2] The Health Departments' job is to ascertain the identities of all persons in the grocery store during that time period.

Once the Health Departments have identified as many individuals as possible who may have had contact with an infected person, however brief or casual, those individuals are tested for Green Isle. If an individual's test comes back positive, the relevant department performs additional contact tracing interviews with that individual in order to identify all potential cases of the infection.

The typical test for Green Isle consists of a buccal[3] swab—that is, the application of a cotton swab to the inside of a person's cheek. Lockton Administrative Code section

---

[2] Green Isle viruses can remain infectious for up to thirty minutes after leaving the body.
[3] (Pronounced "buckle")

115-92-105A(c) authorizes the City to test persons thought to be at risk for certain diseases for the presence or absence of those diseases, including by use of a buccal swab. Pursuant to section 105A(f), the City is further authorized to collect and retain information about tested persons in the event they test positive for the specific disease.

Through this process of identifying individuals at risk for infection and then testing those individuals to see whether they are actually infected, the Health Departments worked together to create a comprehensive map of the virus.[4]

The Buccal Swab

Rosemary Deacon is a twenty-five-year-old graduate student at Arcadia State University ("ASU"). She lives in Lockton and works part time as a waitress at La Taqueria Viva, a taco and margarita bar. Deacon is studying architecture at ASU and plans to return to her hometown of Eagleton, Indiana, to work as a city planner.

On March 22, 2019 at 10:31 p.m., Deacon purchased a bottle of water from the JJ's convenience store on 14th and Lincoln in Washington County. Security camera footage from JJ's revealed that a man ("Doe"), later identified to be infected with Green Isle, entered JJ's to use the restroom at 10:12 p.m. on March 22, 2019 and left the building at 10:15 p.m.

Through contact tracing interviews with Doe, the City learned that he visited JJ's. The City subsequently sought to locate all persons who visited the JJ's between 10:12 p.m. and 10:45 p.m. on March 22, 2019. Through a search of the convenience store's credit card records, the City discovered Deacon's bottled water purchase, among other

[4] In cases of severe outbreaks, the Health Departments usually share contact tracing information with the Center for Disease Control.

purchases made by nineteen customers. The City tasked one of its public health investigators, Tony Love ("Love"), with contacting and investigating each of the nineteen individuals believed to have been at the JJ's during the relevant period.

On March 29, 2019, Love went to Deacon's home to conduct his investigation and collect a buccal swab from her to test for Green Isle. Deacon answered a knock at her door to find Love, who announced his credentials and told Deacon that the City believed she was at risk for Green Isle. Love first asked Deacon if she had any symptoms of the illness. Deacon replied that she had none and that she felt, actually, quite well. Love next asked Deacon to provide some basic information, such as her email address and social security number. Deacon reluctantly complied. Love then asked Deacon if she minded if he took a buccal swab to test her for Green Isle.

Deacon balked at the idea of giving the swab. She told Love that she had already offered as much information as she felt comfortable giving and that she was not willing to provide any more. Love admonished Deacon that he was authorized by law to collect her swab and displayed to her a pamphlet, which set forth section 105A in full. He told her, "We could even take your DNA if we wanted."

Upon hearing this, Deacon resisted even more vehemently. In response, Love told her that the City could obtain a court order directing her to comply with the buccal swab procedure.[5] Love explained that "everything would be easier" if she simply complied. Defeated, Deacon allowed Love to swab her cheek.

---

[5] Arcadia Code § 5-12-42-3 authorizes enforcement of the City's regulations by court orders from Arcadia superior courts.

Love provided Deacon's buccal swab to the City, which tested her cheek cells for Green Isle. Pursuant to section 105A(f), the City may collect and retain information about tested persons that is germane to their treatment. The City construes this grant of authority broadly. Mindful that Clustered Regularly Interspaced Short Palindromic Repeats ("CRISPR") is a burgeoning technology[6] and that "gene therapy" may be used to treat certain illnesses in the near future, the City collects and maintains, whenever practical, a sample of tested persons' DNA. Because DNA can be found in cheek cells, it was practical for the City to take a sample of Deacon's DNA, as is standard practice for the City to do with buccal swabs.

On April 3, 2019, Deacon received a phone call from Love, who told her that she had tested positive for Green Isle. Love warned her about the grave risks of the virus and recommended that she contact a physician immediately. Shocked by the news, Deacon informed Love that she still felt entirely normal and had no symptoms whatsoever, perplexing Love due to the typical trajectory of infected patients. Love asked whether Deacon would be willing to submit to further testing. Deacon promptly declined and, until filing this lawsuit, had no further contact with the City.

<u>The Sequencing</u>

After Love got off the phone with Deacon, he informed his colleagues that he had spoken with someone who tested positive for Green Isle but who, apparently, had not yet developed symptoms, despite having been initially infected with the virus

---

[6] *See, e.g.*, Megan Molteni, *The Wired Guide to CRSPR*, Wired (Mar. 12, 2019, 6:00 a.m.), https://www.wired.com/story/wired-guide-to-crispr/.

nearly two weeks earlier. At that time, 477 Arcadians, including Deacon, had tested positive for Green Isle. However, Deacon was the only person in this group who had not become ill; everyone else began to show signs of sickness within seven days of their exposure to the virus.

Lacy Potter ("Potter") is a laboratory technician who works for the City and is acquainted with Deacon. Potter invited Deacon to lunch under the pretext of a friendly reunion. When Deacon accepted the invitation, Potter spent the meal observing her behavior. Potter noticed that Deacon was jubilant and that she enthusiastically endorsed her new exercise routine, which included waking up at 5:30 a.m. each morning to run. After their rendezvous, Deacon and Potter went their separate ways and Potter recounted the encounter to her colleagues at the City.

Potter's story corroborated Love's. Rumors began to circulate among City employees and consensus formed that Deacon's case was highly unusual. Love suspected that Deacon had a genetic immunity to Green Isle and, on that basis, inserted a note into her electronic record that read "possib immune to G.I. vir?" He peddled his theory to his colleagues and a dynamic discussion ensued.

Soon after, the City decided to put Love's hypothesis to the test. It began the process of "sequencing" Deacon's genome. Through various laboratory procedures, the City duplicated Deacon's DNA molecules (which it obtained from her cheek cells through the buccal swab) and inputted the molecules in a machine to decode her DNA sequence. This process created a string of the letters A, G, C, and T, the order of which

corresponds to the order of certain molecules in Deacon's DNA.[7] In other words, the specific order in which the letters appear represents Deacon's unique genomic sequence.

As of the date of this opinion, the City has not conclusively developed a cure or treatment, genetic or otherwise, to the Green Isle virus.

The Data Breach

In the early morning hours of June 23, 2019 the cybersecurity measures of the City's online record-keeping system were compromised. An unidentified thief managed to break into the City's building through a small door on the roof. The thief hacked into the City's record-keeping system and gained unfettered access to potentially hundreds of thousands of sensitive files shared on a network between departments of public health throughout the State of Arcadia. Among the data available to the thief were the genetic sequences of persons from whom that data was collected and the notes in each person's file.

Soon after the break-in, hundreds of Arcadia residents found that their personally identifiable information ("PII")[8] was being sold or offered for sale online. Detective Silvia, a forensic investigator, was able to confirm that the City's records had been hacked. Two Arcadia residents had bank accounts fraudulently opened using their social security numbers. After further investigation, the Arcadia State Police

---

[7] The City conducted what is referred to as a full exome sequence, which examines the protein-coding regions of one's DNA to identify the specific genetic variants responsible for, among other things, genetic anomalies, such as disease immunity. *See generally* Nat'l. Inst. Health, *What are whole exome sequencing and whole genome sequencing?* U.S. Nat'l. Lib. of Med., https://ghr.nlm.nih.gov/primer/testing/sequencing.
[8] PII refers to any information that can be used to positively identify an individual. Examples include names, addresses, fingerprints, social security numbers, and financial account information.

Department ("ASPD") found that the PII of over three hundred Arcadia residents had been sold or offered for sale online, including the genetic sequences of five people.

News of the data breach spread. In response, the Health Departments distributed a notice to all Arcadians for whom they had records. The City took care to emphasize in its notice that its security measures were top of the line and that there was no way its employees could have known about or prevented a hack. Nevertheless, the notice states, "[t]o ensure the security of your identity, it is highly advisable to purchase credit monitoring protection to minimize your risk."

Deacon received the notice from the City. Upon reading it, she apparently feared that her identity, including her genetic information, was at risk for theft and subsequently researched certain credit-monitoring programs.

The Lawsuit

On June 16, 2019, Deacon filed the instant lawsuit pursuant to 42 U.S.C. § 1983[9] and *Monell v. Department of Social Services of City of New York*, 436 U.S. 658 (1978). She alleged that the City's taking of her buccal swab, pursuant to its regulation,[10] and subsequent sequencing and maintenance of her DNA was (1) a deprivation of her property without due process of law and (2) violated her "fundamental right to privacy against compelled disclosure of [her] genetic sequence" and her "fundamental right to avoid medical treatment," in contravention of the Due Process Clause.

[9] Sovereign immunity is no bar to suits brought against a governmental entity pursuant to 42 U.S.C. § 1983, which creates a private cause of action against governmental entities for the deprivation of constitutional rights under color of state law.

[10] The parties agree that Lockton Administrative Code section 115-92-105A constitutes an official policy or regulation of the City for the purposes of *Monell*.

On July 2, 2019, Deacon amended her complaint to add a count, under the Arcadia Tort Claims Act ("ATCA"), Arcadia Code section 20-13-69-01,[11] for the City's negligence in handling her PII. She argues that, by collecting and retaining her sensitive information, the City had a duty to adopt and maintain more effective cybersecurity measures than the ones it had, a duty the City did not discharge.

On July 30, 2019, the City filed a Motion for Summary Judgment, arguing that it was entitled to judgment on Deacon's *Monell* claims and that Deacon lacked standing to bring her negligence claim.

DISCUSSION

This court has jurisdiction pursuant to 28 U.S.C. § 1331 and § 1332.[12]

I. Plaintiff's Fourteenth Amendment Claims

Monell extends liability under 42 U.S.C. § 1983 to municipalities that cause constitutional violations to be committed through "policy statement[s], ordinance[s], regulation[s], or decision[s] officially adopted and promulgated by that body's officers," as well as "governmental 'custom[s]' even though such … custom[s] [have] not received formal approval through the body's official decisionmaking channels." 436 U.S. 658, 690-91 (1978). *See generally Bradley v. Univ. Park*, 929 F.3d 875 (7th Cir. 2019); *Mogard v. City of Milbank*, 932 F.3d 1184 (8th Cir. 2019).

[11] The ACTA places government entities in the same position as private citizens and waives sovereign immunity to the extent that an individual, acting under like circumstances, could be held liable in tort. The parties do not dispute that if the City were a private entity, it could be held liable for negligence under like circumstances. Thus, sovereign immunity does not bar Deacon's claim.
[12] The parties do not dispute that this Court has diversity jurisdiction over Deacon's negligence claim.

Deacon challenges Lockton Administrative Code section 115-92-105A, arguing that the regulation, which was "adopted and promulgated by [the City's] officers," authorizes infringement her of Fourteenth Amendment due process rights.

A. Deprivation of Property

Deacon first argues that section 105A, which authorizes the collection of her DNA, facilitates a deprivation of property without a prior hearing, as is mandated by the Due Process Clause of the Fourteenth Amendment. *Brotherton v. Cleveland*, 923 F.2d 477, 482 (6th Cir. 1991). Cognizant that there is no judicial precedent from the State of Arcadia squarely addressing this issue,[13] I must stand in the shoes of the Arcadia Supreme Court and determine *de novo* the question of whether such a property right exists as a matter of state law.[14]

When addressing Fourteenth Amendment property deprivation claims, courts ask first whether a plaintiff has been deprived of a protected property interest, and then whether that deprivation occurred without due process. *See GEFT Outdoors, LLC v. City of Westfield*, 922 F.3d 357, 365 (7th Cir. 2019). The Fourteenth Amendment and section 1983 do not themselves create property rights; rather, property rights arise from and are defined by independent sources, such as state law or rules. "Although procedural due process protects an underlying substantive interest rooted in an 'independent source

---

[13] Arcadia has adopted verbatim the Uniform Anatomical Gift Act. A.C. 32-16-13 *et seq.*

[14] Federal courts are not precluded from affording relief just because the state supreme court or legislature has not enunciated a clear rule. *J.P. Morgan Chase Bank, N.A. v. KB Home*, 632 F. Supp. 2d 1013, 1024-25 (D. Nev. 2009). Instead, the job of federal courts is to "'predict how the highest state court would decide the issue using intermediate appellate court decisions, decisions from other jurisdictions, statutes, treatises, and restatements as guidance.'" *Id.* (quoting *Credit Suisse First Boston Corp. v. Grunwald,* 400 F.3d 1119, 1126 (9th Cir. 2005)).

such as state law,' it is federal law that determines if the Due Process Clause protects that interest." *United States v. Streett*, 363 F. Supp. 3d 1212, 1312 (D.N.M. 2018).

The City urges that persons have no property rights in their DNA. I agree. I find persuasive the City's analogy to the well-known case, *Moore v. Regents of University of California*, 793 P.2d 479 (Cal. 1990). There is no meaningful distinction between the plaintiff's cells in *Moore* and Deacon's DNA here. Deacon's references to *Brotherton*, 923 F.2d 477 and *York v. Jones*, 717 F. Supp. 421 (E.D. Va. 1989) are misplaced, as neither case held that the plaintiff had a property right in their *own* bodily material. The former case established in favor of surviving spouses a property right in the bodily material of a decedent spouse; the latter case arguably established in favor of sperm and egg donors a property right in a pre-zygote formed using the donors' sperm and egg cells. *Cf. Crocker v. Pleasant*, 778 So. 2d 978 (Fla. 2001).

Furthermore, Deacon's reference to *Pioneer Hi-Bred International, Inc. v. Holden Foundation Seeds, Inc.*, No. CIV. 81-60-E, 1987 WL 341211 (S.D. Iowa Oct. 30, 1987), *aff'd Pioneer Hi-Bred International v. Holden Foundation Seeds, Inc.*, 35 F.3d 1226 (8th Cir. 1994), is inapposite. Ostensibly, that case held that a property right exists in a genetic sequence only when that sequence (1) is realized from the scrupulous inventive efforts of the rightsholder and (2) has independent economic value. Deacon expended no effort to create her genetic sequence and she is unable to prove beyond mere speculation that her genetic sequence is economically valuable. Nor does *Pioneer* lend support to Deacon's allegation that her genetic sequence is protectible under trade secret law. In order to qualify as a trade secret, information must derive its economic value from not being

generally known or readily ascertainable. *See, e.g.,* Restatement (Third) of Unfair Competition § 39 (1995). If Deacon's genome has any economic value at all, that value can only be realized if her genome is disclosed to one or more third parties.

The proposition that persons have no property or proprietary rights in their DNA gains support in other ways. First, it is usually the job of legislatures, not courts, to define property rights. Second, it is well-settled patent law that no person may obtain a patent directed to naturally-occurring DNA. *See, e.g., Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576 (2013). This proposition echoes one of the main tenets of intellectual property law: no one person may control the fundamental tools of scientific research (e.g., DNA), which, for the purposes of advancing science and technology, need to be accessible to all. This policy applies with equal force to the instant case. Deacon should not be allowed to exclude others from accessing what could very well be a fundamental building-block of scientific research.

For the foregoing reasons, I hold that Deacon has no property right in her DNA and therefore cannot maintain her claim for the City's appropriation of her genetic sequence.

B. Privacy Invasions

There are two types of privacy interests "implicit in the concept of ordered liberty" and founded on the Fourteenth Amendment's concept of personal liberty. *Roe v. Wade*, 410 U.S. 113, 152-53 (1973).[15] "One is the individual interest in avoiding

[15] "[T]he Supreme Court never has recognized 'a generalized right' to privacy in the substantive due process context." *Students v. United States Dep't of Educ.*, No. 16-CV-4945, 2016 WL 6134121, at *21 (N.D. Ill. Oct. 18, 2016).

disclosure of personal matters, and another is the interest in independence in making certain kinds of important decisions." *Whalen v. Roe*, 429 U.S. 589, 599–600 (1977). Deacon argues that the City's regulations violate both of these fundamental liberty interests.

Because Deacon alleges that a fundamental liberty interest has been infringed, I apply a two-tiered test. First, I must ask whether the right to keep private your genetic sequence or right to avoid medical treatment is a fundamental liberty interest. If I find that either is, I must then engage in strict scrutiny analysis, asking whether the City has a "compelling . . . interest" in disclosure of the information and whether its policies are "narrowly tailored" to effectuate that interest.

Deacon urges this Court to follow the approach set forth in *United States v. Westinghouse Electric Corporation*, 638 F.2d 570, 579 (3d Cir. 1980) (holding that there is a constitutionally-protected privacy right in medical information), and *Kurtenbach v. Jackley*, No. CV 16-5021-JLV, 2018 WL 1542499, at *10 (D.S.D. Mar. 29, 2018) (same). Alternatively Deacon advocates for the approach utilized by the Tenth Circuit in *Ortlieb v. Howery*, 74 F. App'x 853, 857 (10th Cir. 2003) (basing the inquiry on the litigant's "legitimate expectation of privacy"). I decline to adopt either of these theories because they unduly expand the zone of interests protected by the Fourteenth Amendment.

Instead I will follow the narrower approach urged by the City, as set forth in *Matson v. Board of Education of City School District of New York*, 631 F.3d 57, 66 (2d Cir. 2011), which provides constitutional protection only to information that would cause public "opprobrium"—that is, only "serious" medical conditions that "expose a person

'not to understanding or compassion but to discrimination and intolerance'" are protected by the Fourteenth Amendment against disclosure. *See also Jarvis v. Wellman*, 52 F.3d 125, 126 (6th Cir. 1995) (holding that constitutional right to privacy does not protect disclosure of medical records).

I find that a person's potential genetic immunity is not a "serious" condition that would lead to "discrimination and intolerance" and therefore is not protected under the Fourteenth Amendment. *Accord Wilson v. Collins*, 517 F.3d 421, 428 (6th Cir. 2008) ("[L]iberty interest in . . . personal DNA information is not such a 'fundamental right' 'implicit in the concept of ordered liberty' as to receive protection under the rubric of substantive due process").

The Supreme Court has addressed DNA privacy only in the context of Fourth Amendment searches and seizures. *See, e.g., Maryland v. King*, 569 U.S. 435 (2013) (holding that "[the defendant's] expectations of privacy were not offended by the minor intrusion of a brief swab of his cheeks" and were outweighed by the "significant state interests in identifying [him]"). I am aware that the defendant in *King* was an arrestee and that arrestees have reduced expectations of privacy. However, the Court's characterization of a buccal swab as a minimal intrusion significantly undermines Deacon's characterization of the same as an invasion of a fundamental right.[16]

Therefore, because I find no constitutionally-cognizable privacy interest in a person's DNA sequence, I do not need to reach the second prong of the inquiry, the strict scrutiny analysis.

---

[16] *Cf. Haskell v. Brown*, 317 F. Supp. 3d 1095 (N.D. Cal. 2018).

Alternatively, Deacon alleges that the City's policy to test her for Green Isle infringed her fundamental right to avoid medical treatment. She cites to numerous cases supporting the proposition that the Fourteenth Amendment's conception of liberty[17] contemplates a fundamental right to make certain decisions regarding one's body. *See, e.g.*, *Roe*, 410 U.S. 113; *In re Cincinnati Radiation Litig.*, 874 F. Supp. 796, 810-11 (S.D. Ohio 1995) ("The right to be free from state-sponsored invasion of a person's bodily integrity is protected by the Fourteenth Amendment"); *Bouvia v. Superior Court*, 179 Cal. App. 3d 1127 (1986).

The concept of individual autonomy is deeply enshrined in our Constitution and our culture. Because the body and mind are so closely intertwined, restrictions imposed on the body can lead to immense mental suffering and the arrest, if not termination, of the process of self-actualization. Bodily restrictions may interfere with individuals' abilities to exercise and assign their rights and discharge and delegate their duties. Bodily restrictions may be capable of wholly incapacitating people—physically, mentally, and financially—and could be imposed and enforced arbitrarily. For these reasons, it is difficult to imagine a right more fundamental than that to choose the destiny of one's own body.

Because I find that the Fourteenth Amendment protects individuals' fundamental right to avoid medical treatment, I now must ask whether section 105A is narrowly tailored to effectuate a compelling government interest. *Reno v. Flores*, 507 U.S. 292, 301-02 (1993). I find that the City's proffered interest, prevention of the spread of a

[17] *See, e.g., Griswold v. Connecticut*, 381 U.S. 479 (1965).

deadly disease, is indeed "compelling" and that section 105A is "narrowly tailored" to effectuate that interest. It is not possible to know the nature of every public health crisis. Necessarily, the tests and preventative measures needed to mitigate the spread of any disease vary depending upon the nature of the disease and the state of technology. A decision in favor of Deacon could improvidently limit the remedial actions available to City agents. Therefore, I hold that section 105A does not run afoul of the Fourteenth Amendment's guarantee of due process.

II. Plaintiff's Data Breach Claim

The City does not dispute that Deacon may maintain a negligence action against it under the ATCA.[18] However, it argues that Deacon has not suffered an "injury-in-fact" from its alleged negligence (i.e. its sub-par security measures) and that Deacon, therefore, does not have standing to bring her negligence claim in the first instance.

A. Standing

The Constitution vests Congress with the "legislative Powers," U.S. Const. art. I, § 1; the President with the "executive Power," U.S. Const. art. II, § 1, cl. 1; and the federal courts with the "judicial Power of the United States," U.S. Const. art. III, § 1. To remain faithful to the tripartite structure, the federal judiciary may not overstep its carefully meted authority. *See DaimlerChrysler Corp. v. Cuno,* 547 U.S. 332, 341 (2006). The judiciary's role in this structure is to exercise power over "Cases" and "Controversies." U.S. Const. art. III, § 2.

[18] The City also does not dispute that Arcadia law supplies the rule of decision in this case because the alleged misconduct occurred entirely in Arcadia, Deacon's harm (if any) was felt in Arcadia, and Arcadia has a greater interest than Indiana in resolving a case that affects an Arcadian municipality. *See generally* Restatement (Second) of Conflict of Laws § 6 (1971).

Article III standing derives from the "Cases" and "Controversies" requirement. *See Raines v. Byrd,* 521 U.S. 811, 818 (1997). The doctrine of standing limits the class of plaintiffs who may maintain suit in federal court to ensure that courts do not exercise jurisdiction over matters that are neither "Cases" nor "Controversies." *See, e.g., Warth v. Seldin,* 422 U.S. 490, 498-99 (1975). In other words, by ensuring that plaintiffs have standing, courts ensure that they fulfill their role of administering justice *ex post* and that they refrain from making policy judgments and issuing binding orders *ex ante*. Standing is an essential ingredient of subject-matter jurisdiction and, without it, courts may not properly exercise power over any matter. "[A] plaintiff must demonstrate standing separately for each form of relief sought." *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 185 (2000).

Article III standing has three requirements. The plaintiff must have (1) suffered an injury-in-fact, (2) that is fairly traceable to the challenged conduct of the defendant, and (3) that is likely to be redressed by a favorable judicial decision. *Lujan v. Defenders of Wildlife*, 504 U.S. 560–61 (1992). The City does not challenge traceability or redressability. Thus, I need only address whether Deacon has established the presence of an injury-in-fact.

To establish injury-in-fact, a plaintiff must show that they suffered "an invasion of a legally protected interest" that is "concrete and particularized" and "actual or imminent, not conjectural or hypothetical." *Spokeo, Inc. v. Robins*, 136 S. Ct. 1540, 1548 (2016). Allegations of *future* harm may suffice to establish injury-in-fact if that harm is "certainly impending," or if there is a "substantial risk" that the harm will occur.

Clapper v. Amnesty Int'l USA, 568 U.S. 398, 409, 414 n.5 (2013). Mere allegations of "possible future injury," however, "are not sufficient." *Id.* at 409.

B. Analysis

Deacon argues that she has suffered a constitutionally sufficient injury-in-fact because the hack of the City's servers put her at a greater risk for identity theft. Specifically, she alleges that she has suffered generalized anxiety because it is now more likely than it was before that her identity will be stolen. Acting upon this anxiety, Deacon took it upon herself to spend time researching credit-monitoring services. She alleges that this time should be recompensed.

Courts have reached divergent conclusions about whether the increased risk of identity theft attendant to a hack constitutes an injury-in-fact for the purposes of Article III standing. For example, in *Remijas v. Neiman Marcus Group, LLC*, the Seventh Circuit held that the plaintiffs, customers of Neiman Marcus, adequately pled an injury-in-fact, increased risk of identity theft, when they alleged that hackers stole numerous credit card numbers from Neiman Marcus. 794 F.3d 688, 692, 694-95 (7th Cir. 2015) ("Presumably, the purpose of the hack is, sooner or later, to make fraudulent charges or assume those consumers' identities").

In contrast, the court in *Reilly v. Ceridian Corporation*, 664 F.3d 38, 40 (3d Cir. 2011) held that the mere fact that hackers breached the database of Ceridian, a payroll processing firm, did not vest customers of Ceridian with standing. "[The customers'] contentions rely on speculation that the hacker: (1) read, copied, and understood their personal information; (2) intends to commit future criminal acts by misusing the

information; and (3) is able to use such information to the detriment of [the customers] by making unauthorized transactions in [their] names." *Id.* at 42.

The *Reilly* court also drew analogies to *City of Los Angeles v. Lyons*, 461 U.S. 95 (1983). In that case, a citizen sought to enjoin the Los Angeles Police Department from utilizing a certain chokehold technique on arrestees. *Id.* at 105-06. The Court found that the citizen had no standing to enjoin the police department despite the fact that police had utilized the chokehold on him previously. *Id.* The instant case is not readily distinguishable from *Reilly* or *Lyons*.

Furthermore, Deacon's stolen PII is not as sensitive as the stolen PII in *Remijas*. In that case, hackers stole credit card numbers, which are far more likely to lead to identity theft than the names, addresses, genetic information, and social security numbers stolen here. Because I find *Remijas* distinguishable on its facts, I do not take a position as to the propriety of its reasoning. Under the doctrine set forth in *Reilly*, Deacon has no standing to sue.

Nevertheless, Deacon argues that the unique circumstances of this case require this Court to find that she has suffered an injury-in-fact. Deacon advances two arguments to this end: (1) the fact that she may have a rare genetic immunity renders her a more attractive victim for identity thieves; and (2) that others similarly situated to her have had their identities fraudulently used.

Deacon's potentially prodigious genome does not solve her standing problem. Deacon relies on the likelihood that the thief will (1) locate her file, (2) read the notes therein, (3) understand the abbreviations in the notes, (4) understand the potential

economic value of her genome,[19] and (5) misappropriate her genome to malicious ends.[20] It is not certain that any one of the foregoing events will likely occur. It is exponentially less certain that any *two* will likely occur. The probability of all five contingencies likely occurring is still several times lower.

In support of her second argument, Deacon emphasizes the facts that two Arcadians had bank accounts fraudulently opened and that three hundred Arcadians had their information offered for sale on the dark web. From this, she asks this Court to infer that she herself will soon be a victim of identity theft. However, there is no evidence to suggest those accounts were opened, or that information was offered for sale, as a result of the data breach in question. Furthermore, Deacon has not shown that she ever was the target of identity theft or that she will become a target in the near future.[21]

---

[19] *See generally* Mariya Yao, *Your Electronic Medical Records Could Be Worth $1000 To Hackers*, Forbes (Apr. 14, 2017, 10:05 p.m.) https://www.forbes.com/sites/mariyayao/2017/04/14/your-electronic-medical-records-can-be-worth-1000-to-hackers/#3ec2100f50cf.

[20] I recognize the potential nefarious ends to which one's DNA could be misappropriated, *see generally* Kaleigh Rogers, *What Can a Hacker Do with Your Genetic Information?*, Vice (July 26, 2016, 2:00 p.m.) https://www.vice.com/en_us/article/gv5w7j/what-can-a-hacker-do-with-your-genetic-information (discussing the use of DNA to, for example, expose an individual's genetic susceptibility to a disease, using it in a kind of genetic blackmail scheme); however, Deacon has not alleged any *actual* harm stemming from the breach of her genetic information.

[21] The "mosaic theory" of privacy may apply where large quantities of personal information are disclosed. *See, e.g., United States v. Jones*, 565 U.S. 400, 413 (2012) (Sotomayor, J., concurring). Under the mosaic theory, several bits and pieces of information may coalesce to form a comprehensive "mosaic" picture of a person's private life. In such cases, the large quantities of data, having limited value in their unaggregated form, develop value when put together into a puzzle that can reveal many aspects of a person's life. The Supreme Court has recognized that the unwarranted disclosure of these mosaic pictures, or of the pieces from which they could be constructed, intrudes upon individual privacy to a greater extent than when less comprehensive data are disclosed. Thus, although using a beeper to track someone's car during a discrete "automotive journey" is constitutional, *United States v. Knotts*, 460 U.S. 276, 285 (1983), larger quantities of information compiled by sophisticated systems, such as cell-site location information, may invade one's expectation of privacy, *Carpenter v. United States*, 138 S. Ct. 2206 (2018).

Alternatively, Deacon argues that I should find standing here because the Arcadia Supreme Court[22] found standing under similar circumstances in *Witt v. Gene Genie, Inc.*, 50 Arc. 2102 (2018). In that case, the class-plaintiffs sued the defendant, a genetic testing company, for negligence after hackers stole consumer data from the defendant, allegedly facilitated by the defendants' inadequate cybersecurity measures. *Id.* at 2103. The defendant filed a motion to dismiss for lack of standing, which the court denied:

> We have long recognized that "records custodians" have an "affirmative duty to establish appropriate administrative, technical, and physical safeguards to insure [*sic*] the security and confidentiality of records and to protect against any anticipated threats or hazards to their security or integrity." *Brubaker v. Gallant*, 44 Arc. 36, 40 (2014). Unquestionably, Gene Genie is a "records custodian." It maintains basic information about its customers, including large stores of genomic information. As such, Gene Genie has an unflagging obligation under this state's laws to maintain the security and integrity of its records.
>
> This duty would be meaningless if there were no remedy for its breach. Thus, we agree that the petitioners have alleged a "demonstrable injury," sufficient to survive a 12(b)(1) motion, insofar as they allege undue anxiety resulting from their increased risk of identity theft. Because of the hack, [nominal plaintiff] Toby Witt has allegedly experienced "depression, anxiety, insomnia, nightmares, and severe emotional distress." We cannot say that these are unreasonable or uncharacteristic symptoms. When their otherwise private information is disseminated to the world, reasonable people may understandably worry about injuries to their credit, reputations, or abilities to make certain financial decisions.
>
> Although we may not extend Article VI standing, under our state's constitution, to Plaintiffs who have not experienced a "demonstrable injury," we have repeatedly held that "intangible harms can qualify as demonstrable injuries whenever they bear a close relationship to a harm recognized at common law as the basis for maintaining a lawsuit." *Carl v. Stompf,* 48 Arc. 103, 106 (2017). Numerous common law torts—assault, nuisance, defamation, breach of confidentiality, and Prosser's privacy

---

[22] The Arcadia Supreme Court is the court of last resort in the State of Arcadia.

> torts—rest on quintessentially emotional harms. *See* Daniel Solove & Danielle Keats Citron, *Risk and Anxiety: A Theory of Data Breach Harms*, 96 Tex. L. Rev. 737 (2018).
>
> We believe that the emotional harm wrought by a data breach bears a close resemblance to the harm identified with the aforementioned common law torts, none of which involves a physical invasion or pecuniary loss. Surely, no one would doubt that these torts are actionable—that is, the harms visited by them constitute "demonstrable injur[ies]." We see no meaningful reason to treat differently anxiety caused by an increased risk of identity theft. We therefore hold that Toby Witt and all others similarly situated have adequately alleged a "demonstrable injury" for the purposes of Article VI standing.

Id. at 2103-04.

I have no reason to doubt the soundness of the *Witt* court's conclusion. However, Deacon misses a crucial point: *Witt* modifies the law of standing developed under Article VI of the Arcadia State Constitution. This Court, as a court of the United States, is bound to apply the law of standing developed in connection with Article III of the U.S. Constitution.[23] Ultimately, although I appreciate that hacks can bring about much anxiety among consumers, I am bound by the Supreme Court's doctrine as set forth in *Clapper*, *Lujan*, and *Lyons*.

Here, the link between the facts established and the injury complained of is simply too speculative. Too many contingencies stand in the way. Standing is not a game of roulette. The necessity of a gamble is in direct tension with the

[23] Deacon contends that the core principle of federalism counsels this Court to defer to the state's interpretation of what constitutes harm under its own laws. Furthermore, Deacon urges that federal courts' refusal to honor state definitions of harm is based on their reluctance to open the floodgates to potentially massive amounts of litigation. She submits that this constitutes a substantive policy judgment, which violates the principle of separation of powers. Deacon points to no authority in support of either of these propositions and, in any event, her arguments are foreclosed by *Hollingsworth v. Perry*, 570 U.S. 693 (2013). *Cf. Clearfield Tr. Co. v. United States*, 318 U.S. 363 (1943).

"certainly impending" or "reasonably likely" prong of standing.[24] Therefore, I hold that the increased risk of identity theft is not a cognizable injury-in-fact for purposes of Article III standing.

CONCLUSION

For the foregoing reasons, I hereby GRANT the City's Motion for Summary Judgment as to all counts, enter judgment on behalf of the Defendant, DISMISS this matter in its entirety, and direct the Clerk of the Court to enter judgment accordingly.

It is SO ORDERED.

/s/ Alexander Sandoval

Hon. Alexander Sandoval
U.S. District Court Judge
District of Arcadia

September 10, 2019

---

[24] I reject Deacon's contention that the correct test for "injury-in-fact" in this context is the 9th Circuit's "credible threat" formulation, as set forth in *Krottner v. Starbucks Corp.*, 628 F.3d 1139 (9th Cir. 2010). Deacon fails to recognize that this formulation was superseded by *Clapper v. Amnesty International USA*, 568 U.S. 398 (2013). I further reject Deacon's contention, raised during oral argument, that *Clapper* is not applicable to this class of cases.

DEFENDANT'S EXHIBIT 1

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF ARCADIA

ROSEMARY DEACON, Plaintiff, v. CITY OF LOCKTON DEPARTMENT OF PUBLIC HEALTH, Defendant.	19-CV-02496-ATS-DJH

DEPOSITION OF TONY LOVE

KEVIN JENKINS, ATTORNEY FOR ROSEMARY DEACON
TONY LOVE, AGENT, CITY OF LOCKTON DEPARTMENT OF PUBLIC HEALTH

1 JENKINS: Agent Love, thank you for meeting with us today.
2
3 LOVE: Of course, happy to help.
4
5 JENKINS: What day did you visit the plaintiff, Ms. Deacon?
6
7 LOVE: I met with her on March 29, 2019.
8
9 JENKINS: And where was this meeting?
10
11 LOVE: At her home.
12
13 JENKINS: According to our records, that address is 254
14 Collinsworth Way, Eagleton, IN 47260.
15
16 LOVE: That is correct.
17
18 JENKINS: So on March 29, 2019, you rang her doorbell-
19
20 LOVE: I believe I knocked.
21
22 JENKINS: Oh, thank you. You knocked on her door and spoke with
23 her for how long?
24
25 LOVE: I think it was around 15 minutes.
26
27 JENKINS: So what did you discuss with Ms. Deacon?

DEFENDANT'S EXHIBIT 1

1
2 LOVE: I told her she was at risk for Green Isle and asked for a
3 cheek swab and some routine information.
4
5 JENKINS: What is this routine information?
6
7 LOVE: Information to secure and archive her sample at the Health
8 Department. Also, we collect her contact information in case we
9 need to follow up.
10
11 JENKINS: Specifically, what information did you request?
12
13 LOVE: Name, address, date of birth, social security number, a
14 photo of her identification. And her email and phone number to
15 contact her if there's trouble.
16
17 JENKINS: And you followed the Health Department's regulatory
18 procedure during your investigation?
19
20 LOVE: Of course! I always do, just like they trained us.
21
22 JENKINS: Training? What do you mean by that?
23
24 LOVE: Well, as you noted, there's a strict regulatory procedure
25 that we have to follow when collecting these samples. It's
26 beaten into us early on how important that procedure is, so
27 everyone always complies. We can be fired if we don't follow it.
28
29 JENKINS: So how often do you actually have to follow these
30 procedures?
31
32 LOVE: Anytime there's a public health crisis. Which is more
33 frequent than you'd think. Last year's flu epidemic was
34 particularly bad. The number of investigations we conducted had
35 everyone working overtime. Green Isle is even worse. We've never
36 seen anything like this.
37
38 JENKINS: Yeah, neither have I. So, what happened after the
39 information and cheek swab were taken from Ms. Deacon?
40
41 LOVE: The cheek sample was put in a sterile bag and taken back
42 to the county lab. The information was input into the computer
43 and the Health Department's network server.
44
45 JENKINS: When you say "the information," you mean the name,
46 social security number, and other things like that?
47

DEFENDANT'S EXHIBIT 1

1 LOVE: Yes, correct.
2
3 JENKINS: Thank you. Back to the cheek swab. Did Ms. Deacon give
4 you permission to take the sample?
5
6 LOVE: She did.
7
8 JENKINS: She did?
9
10 LOVE: Well, not at first. But I explained that Green Isle was a
11 threat to public health and that I had the authority from the
12 county to take a swab. I told her we can even store DNA samples
13 from people who we take swabs from.
14
15 JENKINS: When you say "swab," do you mean a cheek swab?
16
17 LOVE: Correct.
18
19 JENKINS: And what is involved in that swab? It's technically a
20 buccal swab, right?
21
22 LOVE: Right. I take a cotton swab and press it, gently, to the
23 side of the patient's mouth. It collects cheek cells and saliva
24 for analysis at the lab.
25
26 JENKINS: And what are those cells used for?
27
28 LOVE: Epidemiologists at the Department test the cells for Green
29 Isle.
30
31 JENKINS: What happens after the test?
32
33 LOVE: We log whether the individual has tested positive for
34 Green Isle, and then we notify the individual of their status.
35 It's especially important that individuals who have tested
36 positive be notified so we can work with them to take
37 preventative measures. Green Isle is so contagious that infected
38 individuals have to be quarantined. Or we track every person or
39 place they come in contact with.
40
41 JENKINS: Okay, that makes sense. Do you always take a buccal
42 swab?
43
44 LOVE: Not always. We're allowed to take other types of samples.
45
46 JENKINS: Such as?
47

DEFENDANT'S EXHIBIT 1

1 LOVE: Sometimes a nasal swab, other times a urine sample. It
2 doesn't really matter what type of sample, we just need
3 something. In Deacon's case, I took a buccal swab.
4
5 JENKINS: And then you took her swab to the Department for
6 testing?
7
8 LOVE: Yes.
9
10 JENKINS: What were the results of her test?
11
12 LOVE: Positive. Which was strange.
13
14 JENKINS: Why's that?
15
16 LOVE: All of the other people in her contact tracing group
17 tested positive *and* exhibited symptoms.
18
19 JENKINS: But Deacon didn't exhibit symptoms of Green Isle?
20
21 LOVE: Correct. So at that point, we strongly suspected her
22 immunity. Her friend, Lucy Porter—or something like that, said
23 she saw Deacon at the gym working out.
24
25 JENKINS: Lacy Potter. And she just started a new exercise
26 regime: running every morning.
27
28 LOVE: Yeah, that's right.
29
30 JENKINS: Had you encountered other individuals with an immunity?
31
32 LOVE: No, this was the first time we'd come across anything like
33 this.
34
35 JENKINS: So her DNA was valuable because you thought it might
36 contain a cure or something?
37
38 LOVE: Well, we suspect her DNA contains a gene variant that
39 makes her immune to Green Isle. If we can locate that, then we
40 can use CRISPR, a relatively new gene-editing technology, to
41 potentially find a cure.
42
43 JENKINS: Okay, that's all we need from you at this point, Agent
44 Love. I'll contact you if we have further questions.
45
46 [END]

DEFENDANT'S EXHIBIT 1

I have read the foregoing transcript of my deposition on the date below and find it is a true and accurate representation of my testimony.

Signed this 15th day of July, 2019.

Tony Love

Tony Love

DEFENDANT'S EXHIBIT 2

Washington County Sherriff's Department
Offense Report

File Number:	AR-6-11020
Victims:	City of Lockton
Suspect:	Unknown
Location:	201 N. Linden Street
Offense:	TBD
Date of Offense:	June 23, 2019
Date of Report:	July 1, 2019
By:	Detective Silvia, #87

Arrival at the Scene of the Offense

Detective Mills and I responded to an internal call regarding a possible digital theft at the Washington County Public Health Department located at 201 N. Linden Street in Lockton, Arcadia. We arrived on scene at 0735 hours on June 23, 2019. The facility is approximately 5,700 square feet over two floors. Their facility has a large parking lot on the east side of the building. One entrance is in the front of the building facing the parking lot. A second entrance is located on the north side of the building. A third entrance is located on the south side of the building. There is an exit on the roof of the building, which is approximately 24 feet above ground level.

We entered through the front of the building and I spoke with the Director of the County's Information Technology (IT) department, Mr. Manuel Cardaza. I then called in the police department's forensic technology expert to review the servers.

While I spoke with Mr. Cardaza, Detective Mills inspected all doors for signs of a break in, including the rooftop exit. Upon inspection of the rooftop exit, Detective Mills discovered that someone had broken the lock and used a crowbar-like device to pry open the door. This was confirmed upon inspection of camera recordings around the building.

Theft of Digital Information

Upon inspection of the server, the department's forensic technology expert determined that the thief had hacked into the Health Department's server and copied thousands of files onto a private hard drive. This hack began at 0312 hours on June

23, 2019 and ended at 0324 hours on the same date. The copied files include the following:

- Name, address, date of birth, and consumer information tied to instances of food-borne illness (salmonella, e-coli, etc.).
- Name, address, date of birth, hair color, eye color, social security numbers, illness report, photocopy of driver's license, and DNA data of individuals affected during disease outbreaks.
- Employment and application information of Health Department employees.

The files provided information on 4,638 residents of Washington County. The hack occurred from a computer on the first floor typically used by receptionists for filing and logging information from Health Department officials. The forensic technology expert tracked on the server log the break-in of a registered account within the network. The access was timestamped at 0312 hours. The registered account belonged to ██████, a ██████ at the Department, giving the thief access to any and all records on the Department's server. The expert was then able to trace the activity of the registered accounts to each of the 4,638 residents.

The computer had numerous security features to prevent a hack, but the system as a whole, with respect to security, had not been updated since December 2018.

The Suspect

After entering the building, the suspect was captured on the building's internal and external security cameras. The best image we were able to obtain was captured in the north-west stairwell as the suspect traveled from the first to second floor, likely as they were leaving the building. Video footage from the rest of the facility caught only partial images of the suspect's face. The body of the suspect is difficult to estimate due to the dark nature of the video. The suspect was wearing dark colored clothing, likely navy blue or black. They stand between 5'8" and 6'1" with an athletic build. The suspect was wearing a "Guy Fawkes" mask to conceal their identity, making determination of the suspect impossible from the video, though we are familiar with that mask. It is clear that the suspect has a strong understanding of computers and technology.

Based on the footage, the forensic technology expert, Detective Reynolds, and I are confident that the hacker is the same as is responsible for the Dentin Hospital hack in August 2018, as well as the hack into City Counselman

Howerton's computer in November 2018. Security footage from both scenes in those cases has featured a similar modus operandi and what appears to be the same mask. Based on the similarities to the Hack at Dentin Hospital, it is likely the hacker will attempt to sell the files on the dark web.

PLAINTIFF'S EXHIBIT 1

City of Lockton, Department of Public Health Date: June 24th, 2019

NOTICE OF DATA BREACH

Dear Lockton resident:

We are contacting you about a data breach that has occurred at the City of Lockton's Department of Public Health.

What Happened?

During the early morning of June 23rd, 2019, an unauthorized third party accessed sensitive data on our network server. Whether that information has been misused is unknown to county officials at this time.

Hacks like this are unpredictable and unavoidable. We want to reassure you that our cybersecurity system is two times more secure than the industry standard. We have always maintained state of the art cybersecurity and will continue to do so in the future. We understand that your sensitive data demands the best protection and we are committed to providing that.

What Information Was Involved?

This incident could possibly involve your name, address, social security number, email address, phone number, and genetic information.

What We Are Doing

Your security is important to us. County officials contacted the police immediately after learning of the incident. We have removed all sensitive information from our servers and have stored it in a more secure location. Additionally, we have updated our security measures to ensure this type of data breach does not occur again.

Should you have any questions regarding the data breach, please contact us at the Department of Public Health. We have setup a 24/7 hotline to answer your concerns. Call 1-800-382-5968.

What You Can Do

We recommend that you place a fraud alert on your credit file. A fraud alert tells creditors to contact you before they open any new accounts or change your existing accounts. Call any one of the three major credit bureaus to set this up. As soon as one credit bureau confirms your fraud alert, the others are notified to place fraud alerts. The initial fraud alert stays on your credit report for one year. You can

renew it after one year. To ensure the security of your identity, it is highly advisable to purchase credit monitoring protection to minimize your risk.

Equifax: equifax.com or 1-800-685-1111

Experian: experian.com or 1-888-397-3742

TransUnion: transunion.com or 1-888-909-8872

Request that all three credit reports be sent to you, free of charge, for your review. Even if you do not find any suspicious activity on your initial credit reports, the Federal Trade Commission (FTC) recommends that you check your credit reports periodically. Thieves may hold stolen information to use at different times. Checking your credit reports periodically can help you spot problems and address them quickly.

If your personal information has been misused, visit the FTC's site at IdentityTheft.gov to get recovery steps and to file an identity theft complaint. Your complaint will be added to the FTC's Consumer Sentinel Network, where it will be accessible to law enforcement for their investigations.

You also may want to consider contacting the major credit bureaus at the telephone numbers above to place a free credit freeze on your credit file. A credit freeze means potential creditors cannot get your credit report. That makes it less likely that an identity thief can open new accounts in your name.

We recommend you visit IdentityTheft.gov to learn about additional steps you can take to help protect yourself from identity theft, depending on the type of information exposed.

For More Information

Call 1-800-382-5968 or go to www.locktondoh.gov.

Sincerely,

Leslie Yepp
Communications Director,
City of Lockton Department of Public Health

PLAINTIFF'S EXHIBIT 2

Lockton City Health Department Official Internal Communication

From:	Ellen Bartnet <ebartnet@cityoflockton.gov>
Sent:	Apr. 13, 2019, 10:05 AM
To:	ALL STAFF
Subject:	Green Isle Research Update

Dear Colleagues,

It is my pleasure to announce a significant development in the fight against Green Isle. We have identified an individual who appears to have genetic immunity to the disease, and we are currently in the process of sequencing the individual's DNA in the hopes of locating the genetic mutation responsible for the immunity. In collaboration with other health departments and research organizations, we hope to use CRISPR to cleave and replicate the relevant portion of DNA so that a treatment can be developed. We are very optimistic about the prospects of this research and will continue to update as new developments occur.

Sincerely,

Ellen J. Bartnet, MD, PhD
Medical Director, Lockton City Health Department
(812) 654-3456 ext. 3333
ebartnet@cityoflockton.gov

PLAINTIFF'S EXHIBIT 3

ARC-DPH-2355-11-03-1988

RECORD	DEPARTMENT OF PUBLIC HEALTH OF THE CITY OF LOCKTON, ARCADIA	2019

PATIENT DETAILS

NAME Rosemary Deacon				Phone 555-283-5428
HOME ADDRESS 254 Collinsworth Way, Eagleton, IN 47260				EMAIL rdeacon@gmail.com
LOCAL ADDRESS 257 Ponderosa Way, Lockton, Arcadia 02192				DOB 7/14/1994
SEX F	EYES BLUE	HAIR BROWN		SSN [redacted]

TEST DETAILS

TEST: Green Isle Buccal
RESULT: Positive

DNA results on next page.

See next page for DNA SEQUENCE.

NOTES

possib immune to G.I. vir?

STANDARD FORM 439 *(REV. 04-26)*
Approved by TCB/ICMR

PLAINTIFF'S EXHIBIT 3

DNA SEQUENCE: ROSEMARY DEACON

[CONFIDENTIAL: REDACTED]

PLAINTIFF'S EXHIBIT 4

The Washington County Examiner

Your Online Source for Local News

Login | Subscribe Search

LOCAL NATION SPORTS LIFE BUSINESS ENTERTAINMENT OPINION

Data breach at Dentin Medical puts thousands at risk, hacker remains at large

By Alan Randsman
Tuesday, August 21, 2018

Early Monday morning, authorities say a hacker stole more than 23,000 medical and personnel files from the Dentin Medical System, the largest medical group in Washington County.

The thief apparently broke into Dentin Hospital, the only hospital in the group that closes overnight, and hacked into a computer located near the nurses' breakroom. According to initial reports, the thief's face was obscured by a mask. Authorities have not yet identified a suspect.

This is a developing story. Sometimes initial reporting of these kinds of events turns out to be incomplete or inaccurate. We will update and correct our reporting as we learn and verify details.

MENU The Washington County Examiner

Your Online Source for Local News

Login | Subscribe Search

LOCAL NATION SPORTS LIFE BUSINESS ENTERTAINMENT OPINION

'Grim Breacher' still on the loose

By Alan Randsman
Thursday, August 23, 2018

The thief who broke into Dentin Day Hospital last Monday is still on the loose. Little additional information on the thief—nicknamed the "Grim Breacher"— has been revealed since Tuesday's article, but security footage from within the building shows an individual of unknown gender wearing a pale mask, a dark sweater, and dark colored pants.

Police have now confirmed that nearly 30,000 files were taken from the entire network. These files contained information on over 4,300 patients seen at Arcadia public health facilities over the last ten years. The stolen files contain sensitive information, ranging from prescriptions and diagnoses to names, addresses, and social security numbers.

This is a developing story. Sometimes initial reporting of these kinds of events turns out to be incomplete or inaccurate. We will update and correct our reporting as we learn and verify details.

MENU
The Washington County Examiner
Your Online Source for Local News
Login | Subscribe Search
LOCAL NATION SPORTS LIFE BUSINESS ENTERTAINMENT OPINION

Dentin data breach results in fraudulent activity

By Alan Randsman
Monday, October 22, 2018

Authorities believe that the 'Grim Breacher' has used information from the Dentin System to either steal numerous patients' identities or sell the files on the dark web. Several patients from the Dentin System reported credit cards and bank accounts being opened in their names. Authorities state that they have no new leads on the suspect and are not providing any additional information on the matter, though they do request that affected patients report any suspicious activity to police.

This is a developing story. Sometimes initial reporting of these kinds of events turns out to be incomplete or inaccurate. We will update and correct our reporting as we learn and verify details.

PLAINTIFF'S EXHIBIT 4

'Grim Breacher' strikes again

By Alan Randsman
Tuesday, November 27, 2018

The Grim Breacher who stole thousands of medical records from Dentin Day Hospital last August is believed to have struck again. Lockton City Councilman Edgar Howerton reported a break-in at his Washington County office early Monday morning. Early reports from officials indicate that sensitive digital information, including Howerton's personal emails stored on a private server, has been stolen. Authorities believe the hack was politically motivated in an attempt to blackmail the councilman ahead of an upcoming primary election.

Security camera footage showed a masked figure in dark clothes approaching the office around 3:00 AM Monday morning, leading authorities to suspect the culprit is the same one responsible for the Dentin hack. Officer Silvia from the Arcadia State Police Department assures the public that ASPD is doing everything it can to track down the mysterious hacker: "We are working around the clock to stop this hacker," Silvia said in a brief press conference held Monday morning. "They are wreaking havoc on the privacy and safety of our community." Officer Silvia urged other local companies and organizations who store user data to take extra precautionary measures to secure the information, "If you store folks' personal information, especially sensitive information, you need to make sure it's encrypted or otherwise foolproof. We don't know where this hacker will go next."

This is a developing story. Sometimes initial reporting of these kinds of events turns out to be incomplete or inaccurate. We will update and correct our reporting as we learn and verify details.

MENU
The Washington County Examiner
Your Online Source for Local News
Login | Subscribe Search
LOCAL NATION SPORTS LIFE BUSINESS ENTERTAINMENT OPINION

Break-in at Lockton Health Department, 'Grim Breacher' suspected

By Alan Randsman
Monday, June 24, 2019

The Grim Breacher continues to terrorize Washington County. In the early morning hours of Sunday, the hacker broke into the Lockton City Health Department and is believed to have stolen thousands of digital records. Authorities say the records contain personal information, including names, addresses, social security numbers, and genetic information. Department officials say the hack comes at an especially unfortunate time because their scientists are on the cusp of developing a treatment for Green Isle, and now they fear their research may be compromised. Manuel Cardaza, the Department's technology director, maintains the security measures were rigorous: "Our storage system employs the latest and best cybersecurity technology available." He later acknowledged that the system had not been updated since December 2018, but says it still met industry-standard protocol. The investigation remains on-going.

This is a developing story. Sometimes initial reporting of these kinds of events turns out to be incomplete or inaccurate. We will update and correct our reporting as we learn and verify details.

The Washington County Examiner
Your Online Source for Local News
Login | Subscribe Search
LOCAL NATION SPORTS LIFE BUSINESS ENTERTAINMENT OPINION

Data stolen from Lockton Health Dept. leaked online

By Alan Randsman
Thursday, July 04, 2019

Police investigation reveals that hundreds of affected victims of the Lockton Health Department hack have had their information put up for sale online. The reports reveal that two residents had bank accounts fraudulently opened in their names, and five had their genetic sequences published online. Forensic investigators are still uncovering potential victims and working to understand the reach of the Grim Breacher's latest attack.

The Health Department has distributed a notice to all persons whose information may have been compromised, urging them to take steps to protect their information.

This is a developing story. Sometimes initial reporting of these kinds of events turns out to be incomplete or inaccurate. We will update and correct our reporting as we learn and verify details.

PLAINTIFF'S EXHIBIT 5

Still from Dentin Hospital security camera footage, August 20, 2018.

PLAINTIFF'S EXHIBIT 5

Still from Councilman Edgar Howerton's office security camera footage, November 26, 2018.

PLAINTIFF'S EXHIBIT 5

Still from Lockton City Health Department's security camera footage, June 23, 2019.

LOCKTON ADMINISTRATIVE CODE

TITLE 115: PUBLIC HEALTH
CHAPTER 92: COMMUNICABLE DISEASES; EPIDEMICS
SECTION 105A: PROCEDURES

105A PROCEDURES

- **(a)** Authorization. In the case of a grave threat to public health, officers are authorized to take remedial action, as further defined and set forth in this Section, to mitigate the spread of any contagion or pathogen that infiltrates or is certain to infiltrate the borders of any county, city, or municipality within this State.
- **(b)** Scope. "Remedial action" shall include, in addition to the conduct authorized by this Section, preventing the spread of disease through air, water, or contact with other individuals, including the sequestration and isolation of infected residents.
- **(c)** Testing.
    - **(i)** Upon reasonable suspicion that a resident is capable of presently transmitting any serious disease, officers may conduct reasonable tests to detect the presence or absence of that serious disease, including collecting and retaining samples of residents' bodily substances through
        - **(1)** A urine sample;
        - **(2)** A blood sample;
        - **(3)** A buccal swab; and/or
        - **(4)** A nasal swab.
- **(d)** Definitions. As used in this Section, and except as otherwise provided in subsection (b) of this Section,
    - **(i)** "Bodily substance" shall mean any portion of the human body, including cells and microbiological material;
    - **(ii)** "Grave threat" shall mean any factor that does or is substantially certain to cause the serious illness or death of a significant number of people within the City, as determined by the Director of Public Health in their sole discretion;
    - **(iii)** "Officer" shall mean any City employee classified greater than grade three (3);
    - **(iv)** "Resident" shall mean any natural person who is within the borders of Arcadia, without regard to their citizenship or the location of their domicile; and
    - **(v)** "Serious disease" shall mean any disease or medical condition that compromises the health of an individual in a disabling or lethal manner.
- **(e)** Enforcement. This Section may be enforced by the Superior Courts of Arcadia, pursuant to A.C. § 5-12-42-3.
- **(f)** Data Retention. Officers may collect and retain all information that is germane to the treatment of any serious disease, including, but not limited to, personal information needed to contact residents and archive any sample of their bodily substance.

ARCADIA CODE

TITLE 5: COURTS AND COURT OFFICERS
ARTICLE 12: SUPERIOR COURTS
CHAPTER 42: JURISDICTION
SECTION 3: ADMINISTRATIVE LAWS

A.C. § 5-12-42-3 The Superior Courts of this State shall have jurisdiction to issue, in the interests of justice, all orders necessary to effectuate the administrative laws of this State, upon a petition by any administrative agency of this State and upon a determination by the court of good cause.