Compulsory DNA Collection: A Fourth Amendment Analysis

Anna C. Henning
Legislative Attorney

January 23, 2009
Summary

Despite relying on different legal standards, courts have generally upheld laws authorizing law enforcement’s compulsory collection of deoxyribonucleic acid (DNA) as reasonable under the Fourth Amendment of the U.S. Constitution. However, several developments might call this judicial consensus into question.

First, whereas prior laws authorized compelled extraction of DNA samples only from people who had received a criminal conviction, new state and federal laws have expanded law enforcement’s DNA collection authority to include people who have been arrested or detained but not convicted on criminal charges. On the federal level, the U.S. Department of Justice implemented this expanded authority with a final rule that took effect January 9, 2009. In addition, several states now require DNA samples from arrestees. This expansion is likely to alter the Fourth Amendment analysis in DNA collection cases. In cases upholding DNA collection laws, courts relied in part on the reduction in privacy rights that accompanies post-conviction punishment under Fourth Amendment precedent. For people whom the government has arrested but not yet convicted, it appears that this reduction in privacy rights either does not apply or applies to a lesser extent.

Second, emerging scientific research suggests that the type of DNA used in forensic analysis might implicate a greater privacy intrusion than courts had previously assumed. Federal Bureau of Investigation (FBI) analysts derive DNA profiles from so-called “junk DNA,” which is non-genic DNA, because it is thought to lack both a biological purpose and indicators of sensitive medical characteristics. However, as new studies call this assumption into question, the privacy intrusion caused by DNA analysis might weigh more heavily against the government in Fourth Amendment decisions.

Finally, most courts have yet to review the constitutionality of storing convicts’ DNA profiles beyond the time of sentence completion. Especially as law enforcement officers collect DNA samples from people convicted for crimes with relatively short sentences, defendants are likely to challenge ongoing DNA storage under the Fourth Amendment.

With these developments, it is possible that future DNA collection cases might raise graver Fourth Amendment privacy concerns than previous cases. This change might lead courts to apply a more stringent legal standard or to find that the intrusion upon petitioners’ privacy rights outweighs governmental interests in the general Fourth Amendment balancing test. However, statutory protections, such as the existing federal provision requiring expungement of DNA evidence after an arrestee’s acquittal, might safeguard the government against a finding that DNA collection or analysis constitutes an unreasonable search or seizure under the Fourth Amendment. This report surveys existing case law and provides a constitutional analysis of these issues.
Contents

Introduction ..................................................................................................................................... 1
Background on Law Enforcement Use of DNA ............................................................................ 2
Statutory Framework ....................................................................................................................... 3
  Expansion of Statutory Authorities for DNA Collection and Analysis ..................................... 3
  Expungement Provisions ........................................................................................................... 5
Fourth Amendment Overview ........................................................................................................ 5
  Search or Seizure ....................................................................................................................... 5
  “Reasonableness” Inquiry When the Fourth Amendment Applies ............................................ 6
  Diminishment of Convicts’ Privacy Expectations Under Supreme Court Precedent .......... 8
Case Law on DNA Collection ....................................................................................................... 9
Issues the Courts are Likely to Consider .................................................................................... 11
  Expansion of DNA Collection Laws to Arrestees ................................................................. 12
  New Research on Junk DNA .................................................................................................. 14
  Storage of DNA Profiles After Punishment Ends ................................................................. 14
Conclusion ..................................................................................................................................... 15

Contacts

Author Contact Information ........................................................................................................ 15
Introduction

In recent years, state and federal laws have facilitated law enforcement’s expanded use of deoxyribonucleic acid (DNA) for investigating and prosecuting crimes.1 Such laws authorize compulsory collection of biological matter, which local law enforcement agencies send to the Federal Bureau of Investigation (FBI) for analysis. The FBI then stores unique DNA profiles in a national distributive database, through which law enforcement officials match individuals to crime scene evidence. Early laws authorized compulsory extraction of DNA only from people convicted for violent or sex-based felonies, such as murder, kidnapping, and offenses “related to sexual abuse” – crimes associated with historically high recidivism rates and for which police were likely to find evidence at crime scenes.2 Since the turn of the century, new laws have greatly extended the scope of compulsory DNA collection, both by expanding the range of offenses triggering collection authority, and, more recently, by authorizing compulsory collection from people who have been arrested but not convicted.

There is no question that DNA is an incredibly powerful tool for identifying criminal perpetrators. However, increasing reliance on DNA in forensic science implicates constitutional concerns. In particular, many litigants have challenged compulsory collection and the subsequent analysis and storage of DNA as unreasonable searches and seizures under the Fourth Amendment to the U.S. Constitution.

Although they have reached their conclusions using different analytical approaches, federal and state courts have generally upheld compulsory DNA collection as non-violative of the Fourth Amendment. However, despite the emerging consensus regarding the constitutionality of compelled DNA extraction, it is too early to conclude that no Fourth Amendment constraints limit the practice, for several reasons. First, previous cases involved the collection of DNA samples from people who had been convicted of a crime, including prisoners, parolees, probationers, and individuals on supervised release – groups who are deemed to have a reduced expectation of privacy by virtue of their post-conviction status. Courts have not fully considered legal implications of recent extensions of DNA-collection to people whom the government has arrested but not tried or convicted. Second, despite the “rapid pace of technological development in the area of DNA analysis,”3 much of DNA’s scientific value remains a mystery. A discovery that DNA analysis reveals more sensitive biological information than previously assumed could alter the balance of government interests versus privacy concerns in Fourth Amendment cases. Third, courts have yet to evaluate the FBI’s ongoing storage of convicted individuals’ DNA profiles beyond the completion of sentences. After summarizing the statutory authorities, constitutional principles, and case law related to compulsory DNA extraction, this report analyzes potential impacts of these developments for Fourth Amendment cases.

1 For more on the progression of federal legislation authorizing use of DNA, see CRS Report RL32247, DNA Testing for Law Enforcement: Legislative Issues for Congress, by Nathan James.

2 For example, offenses triggering DNA collection authority under the original DNA Analysis Backlog Elimination Act of 2000, P.L. 106-546 (2000), included: murder, voluntary manslaughter, and other offense relating to homicide; offenses relating to sexual abuse, sexual exploitation or other abuse of children, or transportation for illegal sexual activity; offenses relating to peonage and slavery; kidnapping; offenses involving robbery or burglary; certain offenses committed within Indian territory; and attempt or conspiracy to commit any of the above offenses.

3 United States v. Weikert, 504 F.3d 1, 3 (1st Cir. 2007).
Background on Law Enforcement Use of DNA

DNA is a complex molecule found in human cells and “composed of two nucleotide strands,” which “are arranged differently for every individual except for identical twins.”\(^4\) Relatively new technology enables DNA analysts to determine the arrangement of these strands, thereby creating unique DNA profiles.\(^5\)

In the law enforcement context, DNA profiles function like “genetic fingerprints” that aid in matching perpetrators to their crimes.\(^6\) As with fingerprints, law enforcement officers collect DNA samples from specific classes of individuals, such as prisoners. However, compulsory DNA collection generally entails blood or saliva samples rather than finger impressions, and DNA profiles can later match any of many types of biological matter obtained from crime scenes.\(^7\) For these reasons, DNA matching is a “critical complement to,” rather than merely a supplement for, fingerprint analysis in identifying criminal suspects.\(^8\)

The FBI administers DNA storage and analysis for law enforcement agencies across the country. After a law enforcement agency’s phlebotomist collects a blood sample pursuant to state or federal law, the agency submits the sample to the FBI, which creates a DNA profile and stores the profile in the Combined DNA Index System, a database through which law enforcement officers match suspects to DNA profiles at the local, state, and national levels.\(^9\)

FBI analysts create DNA profiles by “decoding sequences of ‘junk DNA.’”\(^10\) So-called “junk DNA,” the name for “non-genic stretches of DNA not presently recognized as being responsible for trait coding,” is “purposefully selected” for DNA analysis because it is not “associated with any known physical or medical characteristics,” and thus theoretically poses only a minimal invasion of privacy.\(^11\) However, scientific research on junk DNA is still emerging, and new research suggests that junk DNA has more biological value than previously assumed. For example, in October 2008, University of Iowa researchers released study findings showing that

\(^{4}\) United States v. Kincade, 345 F.3d 1095, 1096 n.2 (9th Cir. 2003), vac’d and rehearing en banc granted, 354 F.3d 1000 (9th Cir. 2003).

\(^{5}\) Forensic scientists use “short tandem repeat” technology to analyze 13 DNA regions, or “loci.” Although it is theoretically possible that two unrelated people could share identical DNA strands, “the odds that two individuals will have the same 13-loci DNA profile is about one in a billion.” Department of Energy, Human Genome Project Information: DNA Forensics, at http://www.ornl.gov/sci/techresources/Human_Genome/elsi/forensics.shtml.

\(^{6}\) See DNA-Sample Collection and Biological Evidence Preservation in the Federal Jurisdiction, 73 Fed. Reg. 74932, 74933 (Dec. 10, 2008) (to be codified at 28 C.F.R. pt. 28) (“DNA profiles, which embody information concerning 13 ‘core loci,’ amount to ‘genetic fingerprints’ that can be used to identify an individual uniquely”).

\(^{7}\) Under federal statute and analogous state laws, officials collect DNA from “tissue, fluid, or other bodily sample.” 42 U.S.C. §14135a(c)(1). To facilitate especially “reliable” DNA analysis, FBI guidelines direct federal law enforcement officials to rely on blood samples. See United States v. Kincade, 379 F.3d 813, 817 (9th Cir. 2004) (en banc).

\(^{8}\) DNA-Sample Collection and Biological Evidence Preservation in the Federal Jurisdiction, 73 Fed. Reg. at 74933-34.

\(^{9}\) The Combined DNA Index System includes a “hierarchy” of DNA-profile databases, including a National DNA Index System, which facilitates sharing of DNA profiles between participating law enforcement agencies throughout the country; a State DNA Index System, through which DNA profiles are shared throughout a state; and a Local DNA Index System, from which DNA profiles originate before being added to the higher-level indexing systems. Within these systems, profiles are categorized into offender profiles, arrestee profiles, and other categories. For a more detailed description of the system, see http://www.fbi.gov/hq/lab/html/codis1.htm.

\(^{10}\) United States v. Amerson, 483 F.3d 73, 76 (2d Cir. 2007) (quoting H.R. Rep. No. 106-900 (2000)).

junk DNA has the potential to “evolve into exons, which are the building blocks for protein-coding genes.” Other scientists have similarly argued that there might be “gems among the junk” in DNA. Hence, a remaining question is whether use of junk DNA will continue to offer superficial identifying information or whether it will reveal more detailed medical or biological characteristics.

Statutory Framework

The categories of individuals from whom law enforcement officials may require DNA samples has expanded in recent years. The federal government and most states authorize compulsory collection of DNA samples from individuals convicted for specified criminal offenses, including all felonies in most jurisdictions and extending to misdemeanors, such as failure to register as a sex offender or crimes for which a sentence greater than six months applies, in some jurisdictions. In addition, a few statutes now authorize compulsory collection from people whom the government has arrested or detained but not convicted. The DNA Analysis Backlog Elimination Act 2000, codified as amended in Title 42 of the United States Code, authorizes compulsory collection from individuals in federal custody, including those detained or arrested, and from individuals on release, parole, or probation in the federal criminal justice system. Under the federal law, if an individual refuses to cooperate, relevant officials “may use or authorize the use of such means as are reasonably necessary to detain, restrain, and collect a DNA sample.” State laws vary, but nearly all states authorize compulsory DNA collection from people convicted for specified crimes, and a small but growing number of states also authorize compulsory collection from arrestees.

Expansion of Statutory Authorities for DNA Collection and Analysis

At the federal level, statutory authority for compulsory DNA collection has expanded relatively rapidly. During the 1990s, a trio of federal laws created the logistical framework for DNA collection, storage, and analysis. The DNA Identification Act of 1994 provided funding to law enforcement agencies for DNA collection and created the FBI’s Combined DNA Index System to facilitate the sharing of DNA information among law enforcement agencies. Next, the Antiterrorism and Effective Death Penalty Act of 1996 authorized grants to states for developing

---

16 Id. at §14135a(a)(4)(A).
and upgrading DNA collection procedures,\textsuperscript{19} and the Crime Identification Technology Act of 1998 authorized additional funding for DNA analysis programs.\textsuperscript{20} The resulting framework centers on the Combined DNA Index System; more than 170 law enforcement agencies throughout the country participate in the system.\textsuperscript{21}

In recent years, federal and state laws have expanded law enforcement authority for collecting DNA in at least two ways. First, laws have increased the range of offenses which trigger authority for collecting and analyzing DNA. In the federal context, the DNA Analysis Backlog Elimination Act of 2000 limited compulsory extraction of DNA to people who had been convicted of a “qualifying federal offense.”\textsuperscript{22} Under the original act, “qualifying federal offenses” included limited but selected felonies, such as murder, kidnapping, and sexual exploitation.\textsuperscript{23} After September 11, 2001, the USA PATRIOT Act expanded the “qualifying federal offense” definition to include terrorism-related crimes.\textsuperscript{24} In 2004, the Justice for All Act further extended the definition to reach all crimes of violence, all sexual abuse crimes, and all felonies.\textsuperscript{25} Similarly, almost all states now authorize collection of DNA from people convicted of any felony.\textsuperscript{26}

Second, the 109\textsuperscript{th} Congress authorized the Attorney General, in his discretion, to require compulsory DNA collection from people who have been detained or arrested but not convicted on criminal charges.\textsuperscript{27} Specifically, the DNA Fingerprinting Act of 2005 authorized collection “from individuals who are arrested or from non-U.S. persons who are detained under the authority of the United States.”\textsuperscript{28} The U.S. Department of Justice implemented this authorization in December 2008; beginning January 9, 2009, its rule requires U.S. agencies to collect DNA samples from “individuals who are arrested, facing charges, or convicted, and from non-United States persons who are detained under authority of the United States.”\textsuperscript{29} Some states have likewise enacted laws authorizing collection of arrestees’ DNA.\textsuperscript{30}

Whereas the increase in the range of triggering offenses appears to be a natural outcome of DNA’s success as a forensic tool, the expansion to collection from arrestees appears to be a more legally significant step. Overall, it seems Congress’ goal for the expansion to arrestees was to facilitate crime prevention through “the creation of a comprehensive, robust database that will

\begin{itemize}
\item See http://www.fbi.gov/hq/lab/codis/clickmap.htm.
\item 42 U.S.C. §14135a(a)(1)(B).
\item 42 U.S.C. §14135a(a)(1).
\item DNA-Sample Collection and Biological Evidence Preservation in the Federal Jurisdiction, 73 Fed. Reg. at 74,932, 74,935.
\item See, e.g., Kan. Stat. Ann. §21-2511(e)(2) (authorizing DNA collection from individuals arrested for any felony or certain other crimes); N.M. Stat. §29-16-6(B) (authorizing collection of DNA samples from individuals arrested for specific violent felonies); Va. Code Ann. §19.2-310.2:1 (requiring collection of DNA samples from “arrested for the commission or attempted commission of a violent felony”).
\end{itemize}
make it possible to catch serial rapists and murderers before they commit more crimes.”31 In background material for its implementing rule, the Justice Department explains that collection from arrestees will facilitate more effective law enforcement for at least two reasons: (1) it will aid in crime prevention by ensuring that the government need not wait until a crime has been committed before creating an individual’s DNA profile; and (2) it will allow federal authorities to create DNA profiles for aliens detained in the United States, who might not otherwise undergo judicial proceedings in U.S. courts.32

Expungement Provisions

Although Congress expanded statutory authority for DNA collection, it has also provided some protection for arrestees when arrest does not result in conviction. In particular, federal law mandates expungement of DNA samples upon an arrestee’s showing of discharge or acquittal: the FBI and relevant state agencies “shall promptly expunge” DNA information “from the index” upon receipt of “a final court order establishing that such charge has been dismissed or has resulted in an acquittal or that no charge was filed within the applicable time period.”33 Officials must also expunge DNA data for convicts in cases where a conviction is overturned.34 These provisions apply to DNA collected by state and local law enforcement officers, in addition to DNA collected in the federal justice or detention systems.

Fourth Amendment Overview

The Fourth Amendment to the U.S. Constitution provides a right “of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures.”35 Two fundamental questions arise in every Fourth Amendment challenge. First, does the challenged action constitute a search or seizure by federal or local government and thus trigger the Fourth Amendment right?36 Second, if so, is the search or seizure “reasonable”?37

Search or Seizure

Different tests trigger the Fourth Amendment right depending on whether a litigant challenges government conduct as a seizure or as a search. Seizures involve interference with property rights; a seizure of property occurs when government action “meaningfully interferes” with possessory interests or freedom of movement.37

---

32 DNA-Sample Collection and Biological Evidence Preservation in the Federal Jurisdiction, 73 Fed. Reg. at 74,934.
33 42 U.S.C. §14132(d).
34 Id. However, no provision requires expungement of DNA upon a convict’s completion of his or her sentence.
35 U.S. Const. amend. IV.
36 Courts have applied the Fourth Amendment to state and local government actions since 1961, when, in Mapp v. Ohio, the Supreme Court interpreted the Fourteenth Amendment as having incorporated the Fourth Amendment to the states. 367 U.S. 643, 655 (1961).
In contrast, searches interfere with personal privacy. Government action constitutes a search when it intrudes upon a person’s “reasonable expectation of privacy.” A reasonable expectation of privacy requires both that an “individual manifested a subjective expectation of privacy in the searched object” and that “society is willing to recognize that expectation as reasonable.” In general, people have no reasonable expectation of privacy for physical characteristics they “knowingly expos[e] to the public.” In evaluating whether people “knowingly expose” identifying characteristics, the Supreme Court has sometimes distinguished the drawing of blood and other internal fluids from the taking of fingerprints: whereas the Court has at times signaled that people lack a reasonable expectation of privacy in their fingerprints, it has held that extraction of blood, urine, and other fluids implicates an intrusion upon a reasonable expectation of privacy, presumably because the former category is “knowingly exposed” to the public while the latter category generally is not.

Under modern Supreme Court precedent, a further complicating factor is that reasonable expectation of privacy depends not only on the type of evidence gathered, but also on the status of the person from whom it is gathered. The inquiry is not simply a yes-or-no determination, but appears to include a continuum of privacy expectations. For example, in United States v. Knights, the Court held that the “condition” of probation “significantly diminished” a probationer’s reasonable expectation of privacy. This diminished privacy expectation did not completely negate the probationer’s Fourth Amendment right; however, it affected the outcome under the Court’s Fourth Amendment balancing test.

“Reasonableness” Inquiry When the Fourth Amendment Applies

When government action constitutes a search or seizure, “reasonableness” is the “touchstone” of constitutionality. However, courts apply different standards, in different circumstances, to

---

38 Some justices and experts have noted the circularity of the combination of this definition and the general Fourth Amendment “reasonableness” inquiry. See, e.g., Minnesota v. Carter, 525 U.S. 83, 97 (1998) (Scalia, J., concurring). However, such criticisms have not yet caused the Court to reconsider its test, except perhaps for the narrow category of interiors of homes, for which the Court has found a near-automatic reasonable expectation of privacy by virtue of privacy in the home having “roots deep in the common law.” See Kyllo v. United States, 533 U.S. 27, 34 (2001).

39 Kyllo, 533 U.S. at 33 (citing California v. Ciraolo, 476 U.S. 207, 211 (1986)).


41 See, e.g., Davis v. Mississippi, 394 U.S. 721, 727 (1969) (“Fingerprinting involves none of the probing into an individual’s private life and thoughts that marks an interrogation or search.”). Later, in Hayes v. Florida, the Supreme Court seemed to suggest that fingerprinting does constitute a search, 470 U.S. 811, 814 (1985) (referring to fingerprinting as less intrusive than other types of searches and seizures), a shift in keeping with the Court’s broader trend toward classifying more activity as constituting a search and leaving the heart of the constitutional analysis for the Fourth Amendment “reasonableness” inquiry. Thus, it appears that although the Court views the drawing of blood as a greater intrusion than fingerprinting, both activities now qualify as searches.

42 See, e.g., Skinner v. Ry. Labor Executives’ Ass’n, 489 U.S. 602, 616 (1989) (“We have long recognized that a ‘compelled intrusion[n] into the body for blood to be analyzed for alcohol content’ must be deemed a Fourth Amendment search” (quoting Schmerber v. California, 384 U.S. 757, 767-768 (1966)). This distinction contrasts with the Supreme Court’s rejection of a blood-versus-fingerprints distinction in the context of the confrontation clause to the Sixth Amendment of the U.S. Constitution, wherein the Court has held neither fingerprinting nor the taking of blood are barred because they are both “real and physical” rather than “testimonial” evidence. See Pennsylvania v. Muniz, 496 U.S. 582, 591 (1990).


44 Id.

45 Knights, 534 U.S. at 118.
determine whether searches and seizures are reasonable. The Court’s Fourth Amendment analysis falls into three general categories.

The first category involves traditional law enforcement activities, such as arrests or searching of homes. To be reasonable, these activities require “probable cause,” which must be formalized by a warrant unless a recognized warrant exception applies. Probable cause is “a fluid concept – turning on the assessment of probabilities in particular factual contexts – not readily, or even usefully, reduced to a neat set of legal rules,” yet it is considered the most stringent Fourth Amendment standard. In the context of issuing warrants, probable cause requires an issuing magistrate to make a “common sense” determination, based on specific evidence, whether there exists a “fair probability” that, for example, an area contains contraband.

The second category, introduced in the Supreme Court case *Terry v. Ohio*, involves situations in which a limited intrusion satisfies Fourth Amendment strictures with a reasonableness standard that is lower than probable cause. For example, in *Terry*, a police officer’s patting of the outside of a man’s clothing to search for weapons required more than “inchoate and unparticularized suspicion” but was justified by “specific reasonable inferences” that the man might have a weapon. In such situations, courts permit searches justified by “reasonable suspicion,” which is a particularized suspicion prompted by somewhat less specific evidence than probable cause requires.

The third category includes “exempted area,” “administrative,” “special needs,” and other “suspicionless” searches. Examples include routine inventory searches, border searches, roadblocks, and drug testing. In these circumstances, courts apply a “general approach to the Fourth Amendment” – also called the “general balancing,” “general reasonableness,” or “totality-of-the-circumstances” test – to determine reasonableness “by assessing, on the one hand, the degree to which [a search or seizure] intrudes upon an individual’s privacy and, on the other, the degree to which it is needed for the promotion of legitimate governmental interests.” Although the Supreme Court has expanded the scope of application for this test, the approach historically applied only when a search or seizure satisfied parameters for one of several narrow categories. In particular, it applied where a routine, administrative purpose justified regular searches; where a long-recognized exception existed, such as for border searches; or where a “special need, beyond the normal need for law enforcement, [made] the warrant and probable cause requirements impracticable.”

In the context of law enforcement’s collection of DNA from prisoners, parolees, and others subject to law enforcement supervision, questions remain regarding when a special need, distinct

---

46 See, e.g., *Atwater v. City of Lago Vista*, 532 U.S. 318, 354 (2001) (recognizing a warrant exception for arrest of an individual who commits a crime in an officer’s presence, as long as the arrest is supported by probable cause).
48 *Id.* at 238.
49 392 U.S. 1, 7 (1968).
50 *Id.* at 21-22, 27.
from law enforcement interests, must exist before a court may apply a general reasonableness standard. Although the special needs test arose in the context of drug testing, the Supreme Court has held that probation and other post-conviction punishment regimes qualified as special needs with purposes distinct from law enforcement. For example, in *Griffin v. Wisconsin*, the Court held that a “state’s operation of a probation system, like its operation of a school, government office or prison, or its supervision of a regulated industry ... presents ‘special needs’ beyond law enforcement.”54 As discussed below, later Supreme Court cases seemed to suggest that a defendant’s post-conviction status, alone, might justify a court’s direct application of a general reasonableness test to DNA collection, without any finding of a special need.

**Diminishment of Convicts’ Privacy Expectations Under Supreme Court Precedent**

Since 2000, the Supreme Court has twice applied a general reasonableness test in Fourth Amendment cases involving people serving post-conviction punishments – specifically, in cases involving a probationer and a parolee – without first finding special needs justifying the government action. In both cases, the Court’s legal basis for directly applying the general balancing approach was the reduced expectation of privacy to which each defendant was entitled by virtue of his post-conviction status. In addition to providing a justification for rejection of the special needs test, this same diminishment of defendants’ privacy expectations also favored the government in the Court’s application of the general balancing test.

In *United States v. Knights*, a 2001 case, a California court had sentenced Mark Knights to probation for a drug offense.55 One condition of his probation was that his “person, property, place of residence,” etc., were subject to search “with or without a search warrant.”56 After finding some evidence that appeared to link him with a fire at a local telecommunications vault, a police detective searched Knights’ home without a warrant.57 Emphasizing the curtailment of privacy rights that correspond with probation and other post-conviction punishment regimes, the Court evaluated the search under the general balancing test, without first identifying an administrative purpose or special needs justification.58 In addition, Knights’ diminished expectation of privacy affected the outcome under the Court’s general Fourth Amendment balancing test. Noting that “Knights’ status as a probationer subject to a search condition informs both sides of that balance,” the Court easily upheld the officer’s search based on reasonable suspicion.59

In *Samson v. California*, a 2006 case, the Court extended *Knights* to uphold a search of a parolee’s pockets, for the first time directly applying the general reasonableness test to a search

---

54 Id. at 873-74.
56 Id.
57 Id. at 115.
58 Id. at 119-20. (noting that “just as other punishments for criminal convictions curtail an offender’s freedoms, a court granting probation may impose reasonable conditions that deprive the offender of some freedoms enjoyed by law-abiding citizens” and concluding that “the probation condition thus significantly diminished Knight’s reasonable expectation of privacy”).
59 Id. at 119, 121-22 (after discussing the interests on both sides of the general reasonableness test, holding “that the balance of these considerations requires no more than reasonable suspicion to conduct a search of petitioner’s house”).
justified only on the basis of the petitioner’s status as a parolee, rather than on any particularized suspicion. As in *Knights*, the *Samson* Court explicitly rejected arguments that a special needs analysis was required; instead, finding that the petitioner’s post-conviction status diminished his privacy rights, the Court again directly applied a “general Fourth Amendment approach.” In addition, as in *Knights*, the *Samson* court held that a parolee’s diminished privacy right affected the outcome of the general balancing test.

It is unclear what other categories of people might be subject to a reduced expectation of privacy by virtue of their status. For example, given that the Court’s language in *Knights* and *Samson* emphasized petitioners’ post-conviction status, it is not clear whether the Court would find a comparably diminished expectation of privacy for people arrested or detained but not convicted.

### Case Law on DNA Collection

Courts have uniformly held that compulsory DNA collection and analysis constitutes a search, and thus triggers Fourth Amendment rights. Although some courts have signaled that DNA collection or storage might also constitute a seizure, courts have generally not addressed that question.

However, nearly all courts that have reviewed laws authorizing compulsory DNA collection have upheld the laws against Fourth Amendment challenges. Although the U.S. Supreme Court has never accepted a DNA collection case, U.S. Courts of Appeals for the First, Second, Sixth, Seventh, Eighth, Ninth, Tenth, and Eleventh Circuits have upheld the 2004 version of the federal DNA collection law, which authorized collection and analysis of DNA from people convicted of any felony, certain sexual crimes, and crimes of violence. Likewise, federal courts of appeals

---

61 *Id.* at 848. In parts, the *Knights* opinion appeared to suggest that conditions explicitly imposed upon the probationer, rather than the probationer’s status itself, created the diminished privacy expectation. However, in a footnote, the Court signaled its support for the rationale, later adopted in *Samson*, that post-conviction status itself diminishes a probationer’s or a parolee’s expectation of privacy. Specifically, the *Knights* Court cited the Wisconsin Supreme Court’s holding in *Griffin* that “probation diminishes a probationer’s reasonable expectation of privacy – so that a probation officer may, consistent with the Fourth Amendment, search a probationer’s home without a warrant, and with only ‘reasonable grounds’ (not probable cause) to believe that contraband is present.” *Knights*, 534 U.S. at 118 n.3 (citing *Griffin*, 483 U.S. at 872.).
63 *See, e.g.*, United States v. Amerson, 483 F.3d 73, 77 (2d Cir. 2007) (“It is settled law that DNA indexing statutes, because they authorize both a physical intrusion to obtain a tissue sample and a chemical analysis to obtain private physiological information about a person, are subject to the strictures of the Fourth Amendment.”).
64 *See, e.g.*, United States v. Kincade, 345 F.3d 1095, 1100 n.13 (9th Cir. 2003) (“Although the taking of blood may properly be characterized as a Fourth Amendment seizure, because it interferes with [the appellant’s] ‘possessory interest in his bodily fluids,’ for present purposes we consider only the search, and note that the ‘privacy expectations protected by this [the seizure] are adequately taken into account by our conclusion that such intrusions are searches’”) (quoting *Skinner v. Ry. Labor Executives Ass’n*, 489 U.S. 602, 617 n.4 (1989)).
65 One exception is the panel decision of the U.S. Court of Appeals for the Ninth Circuit in *United States v. Kincade*, which was later overturned in an en banc decision. 345 F.3d 1095 (9th Cir. 2003), vac’d and rehearing en banc granted, 354 F.3d 1000 (9th Cir. 2003).
66 United States v. Weikert, 504 F.3d 1 (1st Cir. 2007); United States v. Amerson, 483 F.3d 73 (2d Cir. 2007); Wilson v. Collins, 517 F.3d 421 (6th Cir. 2006); United States v. Hook, 471 F.3d 766 (7th Cir. 2006); United States v. Kraklio, 451 F.3d 922 (8th Cir. 2006); United States v. Kriesel, 508 F.3d 941 (9th Cir. 2007); United States v. Banks, 490 F.3d 1178 (10th Cir. 2007); United States v. Castillo-Lagos, 147 Fed. App’x. 71 (11th Cir. 2005).
have upheld numerous state DNA collection laws.\(^67\) Although at least one state court has upheld compelled extraction of DNA from arrestees,\(^68\) federal courts have generally not yet reviewed the 2006 amendment or the practice of collecting DNA from arrestees.\(^69\)

Courts have relied on different legal tests in upholding DNA collection laws.\(^70\) While most courts have directly applied a general reasonableness approach, some courts have first evaluated government actions under the special needs test.\(^71\) The majority of the federal courts of appeals have interpreted \textit{Samson} as affirmatively requiring courts to apply the general reasonableness test, without a special needs prerequisite, at least as applied to prisoners or other individuals with post-conviction status. For example, in \textit{Wilson v. Collins}, the Court of Appeals for the Sixth Circuit interpreted \textit{Samson} as requiring direct application of the general balancing test in a case involving a prisoner.\(^72\) Likewise, in \textit{United States v. Weikert}, a case involving compulsory collection of DNA from a man on supervised release, the Court of Appeals for the First Circuit held that, under \textit{Samson}, it was required to apply a general reasonableness test, rather than a special needs test, in DNA collections cases.\(^73\)

\(^67\) Padgett v. Donald, 401 F.3d 1273 (11th Cir. 2005) (upholding the Georgia statute); Green v. Berge, 354 F.3d 675 (7th Cir. 2004) (upholding the Wisconsin statute); Shaffer v. Saffle, 148 F.3d 1180 (10th Cir. 1998) (upholding the Oklahoma statute); Schlicher v. Peters, 103 F.3d 940 (10th Cir. 1996) (upholding the Kansas statute); Boling v. Romer, 101 F.3d 1336 (10th Cir. 1996) (upholding the Colorado statute); Jones v. Murray, 962 F.2d 302 (4th Cir. 1992) (upholding the Virginia statute).

\(^68\) Anderson v. Virginia, 650 S.E.2d 702, 706 (Vir. 2006) (upholding Virginia’s statute authorizing DNA collection from arrestees). In \textit{Anderson}, the Virginia Supreme Court analogized collection of DNA samples to the routine taking of fingerprints, emphasizing that collecting such samples necessitated only a minimal privacy intrusion. \textit{Id.} It rejected the defendant’s assertion that the special needs test applied; instead, in one sentence, it concluded that the “same rationale” tipped the general balancing test in the government’s favor as applied to collection of DNA from convicted felons. \textit{Id.} (“In the case of convicted felons who are in custody of the Commonwealth ... the minor intrusion caused by the taking of a [DNA] sample is outweighed by Virginia’s interest ... in determining inmates’ ‘identification characteristics’” (quoting Jones v. Murray, 962 F.2d 302, 307 (Va. 1992)).

\(^69\) Although some federal courts issued opinions after the 2006 amendment that authorized collection from arrestees, federal courts have yet to review a Fourth Amendment challenge to such authority. As discussed above, the U.S. Department of Justice has issued a proposed rule but has not yet implemented the 2006 amendment, and state laws extending DNA collection authority to arrestees are relatively new. In \textit{United States v. Kriesel}, a 2007 decision, the U.S. Court of Appeals for the Ninth Circuit emphasized that its holding did not extend to collection from arrestees. 508 F.3d 941, 948-49 (9th Cir. 2007). (“We emphasize that our ruling today does not cover DNA collection from arrestees or non-citizens detained in the custody of the United States, who are required to submit to DNA collection by the 2006 version of the DNA Act”).

\(^70\) See United States v. Kraklio, 451 F.3d 922, 924 (8th Cir. 2006) (“The only disagreement among the circuits is what analytical approach to use in upholding the [DNA collection] statutes.”).

\(^71\) Contrast United States v. Weikert, 504 F.3d 1, 7 (1st Cir. Aug. 9, 2007); United States v. Banks, 490 F.3d 1178, 1183 (10th Cir. 2007); United States v. Kraklio, 451 F.3d 922, 924 (8th Cir. 2006); United States v. Castillo-Lagos, 147 Fed. App’x 71 (11th Cir. 2005) with United States v. Amerson, 483 F.3d 73, 78 (2d Cir. 2007); United States v. Hook, 471 F.3d 766, 772-74 (7th Cir. 2006). The Sixth Circuit has upheld the federal DNA collection law under both tests. United States v. Conley, 453 F.3d 674, 677-81 (6th Cir. 2006).

\(^72\) 517 F.3d 421, 426 (6th Cir. 2008).

\(^73\) 504 F.3d 1, 3 (1st Cir. 2007) (“We interpret the Supreme Court’s decision in \textit{Samson v. California} to require that we join the majority of the circuits in applying a ‘totality of the circumstances’ approach to the issues in this case, rather than the ‘special needs’ analysis used by the minority of circuits” (citations omitted)). Similarly, some state courts have interpreted \textit{Samson} as applicable in compulsory DNA collection cases. For example, despite continuing to apply the special needs test in DNA cases, the Supreme Court of New Jersey recognized that “the most recent United States Supreme Court decision in \textit{Samson} strongly suggests that the balancing test, which is an easier test for the State to satisfy, should apply to a Fourth Amendment analysis.” State v. O’Hagen, 189 N.J. 140, 158 (2007).
In contrast, some federal courts of appeals have held that Samson did not affect their use of the special needs test in suits challenging DNA collection statutes. For example, the Court of Appeals for the Second Circuit declined to apply Samson in United States v. Amerson, a case upholding compulsory DNA collection from two individuals on probation, one for larceny and one for wire fraud.74 The court interpreted Samson very narrowly, as applying only in contexts involving a “highly diminished” expectation of privacy.75 Similarly, although it directly applied the general reasonableness test in Wilson, the Sixth Circuit suggested in that case that Samson might not apply in a case involving a person who was not a prisoner.76

The reading of Samson as limited to cases involving a significantly diminished expectation of privacy appears to comport with the Supreme Court’s emphasis in Knights and Samson on the diminished privacy rights that stem from a petitioner’s post-conviction status. In Samson, the Court framed the question in the case as “whether a condition of release can so diminish or eliminate a released prisoner’s reasonable expectation of privacy that a suspicionless search by a law enforcement officer would not offend the Fourth Amendment.”77

So far, whether courts apply the special needs test before applying a general reasonableness test in DNA cases has had little or no practical import, because courts have consistently upheld DNA collection laws regardless of the standard they apply. Thus, courts have signaled that a change in analytic tools would not affect the ultimate determination of constitutionality in DNA collection cases involving convicted criminals.78 However, these courts have not yet addressed expanded legal authority for collecting arrestees’ DNA, nor have they addressed implications of potential discoveries regarding junk DNA’s biological purpose. As these new issues develop, the legal standard applied may be relevant to the outcome of future cases; in a closer case, the decision to apply the special needs test as an initial hurdle could become outcome determinative. In addition, courts that have previously applied special needs analyses in DNA cases might change their approach in cases involving arrestees, perhaps by adopting an interpretation of Samson as limited to circumstances involving highly diminished expectations of privacy.

**Issues the Courts are Likely to Consider**

Several issues are likely to complicate future cases involving DNA collection, analysis, and storage. In particular: (1) the proposed Department of Justice rule and new state laws which authorize collection from arrestees; (2) emerging science regarding biological purposes for junk DNA; and (3) the FBI’s long-term storage of DNA profiles. Each of these factors potentially increases the likelihood that expectation of privacy will outweigh governmental interests in future Fourth Amendment analyses. However, for all issues, it is possible that existing expungement

---

74 483 F.3d at 73, 79 (2d Cir. 2007).
75 Id. (“while after Samson it can no longer be said that ‘the Supreme Court has never applied a general balancing test to a suspicionless-search regime,’ nothing in Samson suggests that a general balancing test should replace special needs as the primary mode of analysis of suspicionless searches outside the context of the highly diminished expectation of privacy presented in Samson”) (quoting its previous opinion, Nicholas v. Goord, 430 F.3d 652, 666 (2d Cir. 2005)).
76 Wilson, 517 F.3d at 426 (noting that cases involving petitioners on supervised release had declined to follow Samson).
77 547 U.S. at 847.
78 See, e.g., Wilson, 517 F.3d at 427 n. 4 (“Even if we were to apply the more stringent special-needs test, there is no reason to believe the ultimate result would be different.”).
provisions, together with additional protections that Congress could add, might create sufficient safeguards such that DNA collection and analysis would withstand future Fourth Amendment challenges.

Expansion of DNA Collection Laws to Arrestees

People who have been arrested but not yet convicted on criminal charges are likely challengers in future DNA collection cases. Federal detention agencies and must now collect DNA samples from arrestees, and several states have also taken that step. This expansion of compulsory collection authority could alter the Fourth Amendment analysis for at least two reasons. First, courts may be less likely to disregard the special needs test in cases involving arrestees, because courts justify direct application of a general reasonableness test, in part, by focusing on the reduced expectation of privacy to which various convicted individuals are entitled under Supreme Court precedent. Second, the outcome of the general balancing test might differ in cases involving arrestees rather than convicts, because courts would be less likely to devalue the privacy-intrusion side of the balance on the basis of a defendant’s reduced expectation of privacy.

For these reasons, any change in Fourth Amendment analyses involving arrestees may depend, in large part, on differences that the courts find to exist, if any, between an arrestee’s reasonable expectation of privacy and a convict’s reasonable expectation of privacy. Although it appears from Supreme Court dicta that at least a lesser reduction in privacy rights would apply to arrestees versus people with post-conviction status, courts have generally not addressed the specific issue. In Knights and Samson, the Supreme Court referred to parolees and probationers as being along a “continuum” of state-imposed punishments. Lower federal courts have interpreted these and other Supreme Court decisions as suggesting that prisoners’ privacy expectations are the most diminished; parolees have the next lowest diminishment in privacy expectations, followed by people on supervised release and probationers. Presumably, arrestees and detainees would have an even lower, if any, diminishment of their reasonable expectation of privacy under the Fourth Amendment.

The Supreme Court’s justifications for convicted individuals’ reduced privacy expectations emphasize the government’s authority to punish or otherwise restrict the freedom of people who have been fairly convicted. In Samson, the Court held that a parolee lacked “an expectation of privacy that society would recognize as legitimate,” because searches were a condition of parole, which was a “an established variation on imprisonment.” Thus, some federal courts of appeals have stated that the fact that DNA was collected from a probationer or parolee rather than a prisoner does not greatly affect the Fourth Amendment analysis. However, such statements compared fellow convicts. They do not address potential differences between convicts and people who have been arrested but not convicted. Arguably, arrestees are not on the “continuum of punishment,” and thus should have no analogous diminishment in privacy rights. On the other

80 Samson, 547 U.S. at 850 (quoting Knights, 534 U.S. at 119).
81 See, e.g., Wilson, 517 F.3d at 426-27 (“a parolee ... has less diminished privacy rights than a prisoner”).
82 See Samson, 547 U.S. at 852 (quoting Morrissey v. Brewer, 408 U.S. 471, 477 (1972)).
83 See, e.g., Banks v. United States, 490 F.3d 1178, 1184 (10th Cir. 2007) (holding that “the fact that the plaintiffs here are on parole, supervised release, or probation, whereas the offenders in our prior cases were prisoners” does not “materially change” the court’s Fourth Amendment analysis).
hand, one might argue that an arrestee’s or detainee’s position is similar to other individuals, such as people hoping to enter the country’s borders, for whom courts have found a reduced expectation of privacy not premised on an authority for punishment.

If arrestees have a normal or only minimally diminished reasonable expectation of privacy, several legal consequences are likely to occur in future DNA cases. First, courts would be more likely to find that Samson does not apply, and thus, that DNA collection must be supported by a special need distinct from the need for law enforcement. Furthermore, although the Supreme Court has found that a special need exists in the government’s operation of a probation system,84 for arrestees there is arguably no clearly analogous “system” separate from law enforcement. Thus, governments would need to prove that an alternative special need justification supports DNA collection. Second, the Fourth Amendment general reasonableness test would likely entail a closer contest between governments’ interest in preventing and prosecuting crimes, on one hand, and the intrusion of privacy resulting from gathering and analyzing a person’s blood or saliva, on the other hand.

However, despite the likelihood that the balancing test would present greater hurdles for the government in future cases, it is possible that statutory protections could sufficiently offset perceived intrusions on arrestees’ privacy to result in an outcome favoring the government. For example, existing expungement requirements under federal law, which require expungement of DNA records upon proof of acquittal or release, might offset the degree of intrusion on an individual’s privacy enough that the general balancing test would result in a finding for the government.

Furthermore, governments are likely to offer new arguments to persuade courts that DNA collection implicates only a minimal privacy intrusion. For example, in its rule, the U.S. Department of Justice emphasized an analogy between DNA collection and fingerprinting and even relied on existing fingerprinting procedures in determining the scope of DNA collection.85 It is unclear how effective such analogies will prove in judicial cases. At least one court has likened DNA collection to fingerprinting that occurs during “routine booking”86 in order to show that the privacy intrusion, especially given the status of the petitioner in the case as a probationer, was relatively small.87 However, as noted above, the Supreme Court has previously drawn distinctions between taking of fingerprints and drawing of blood, suggesting that blood extraction poses a greater intrusion than taking fingerprints. In addition, although the routine nature of government conduct has been a factor influencing courts’ decisions to apply a general reasonableness, rather than a probable cause or reasonable suspicion, standard (for instance, in routine roadblock cases),

84 Griffin, 483 U.S. at 873-84.
85 DNA-Sample Collection and Biological Evidence Preservation in the Federal Jurisdiction, 73 Fed. Reg. at 74,933-35. In addition, when dismissing comments that had raised concerns regarding the rule’s application to arrestees, the Department emphasized that the “extension generally brings DNA-sample collection into conformity with the practice regarding fingerprints,” suggesting that the two types of data collection should be treated similarly. Id. at 74,936.
86 In general, the “routine booking” rationale has been used in Fifth Amendment (self-incrimination clause) rather than in Fourth Amendment jurisprudence.
87 Amerson, 483 F.3d at 86 (“While we do not hold that a probationer has no expectation of privacy in his or her identity, we agree that, like all convicted felons, a probationer’s expectation of privacy in his or her identity is severely diminished ... ‘[g]iven the limits imposed on the collection, analysis, and use of DNA information by the statute, we see the intrusion on privacy effected by the statute as similar to the intrusion wrought by the maintenance of fingerprint records,’ which are collected as a part of everyday routine booking procedures ... DNA differs primarily from fingerprinting in its greater accuracy” (quoting Nicholas, 430 F.3d at 671)).
it would not eliminate the general reasonableness inquiry under the Fourth Amendment. Instead, the routine nature of DNA collection would, at best, serve as one factor influencing a court’s determination regarding the degree of privacy intrusion at issue. The extent to which such arguments would persuade courts in Fourth Amendment balancing inquiries remains to be seen.

**New Research on Junk DNA**

A second issue could alter courts’ determinations regarding the constitutionality of DNA analysis and storage. Because FBI analysts rely on junk DNA, thought not to reveal sensitive medical or biological information, courts have assumed that DNA analysis and storage involves only a minimal privacy intrusion. However, language in some opinions suggest that this assumption might change if scientists discover new uses for junk DNA. For example, the U.S. Court of Appeals for the First Circuit has suggested that “discovery of new uses for ‘junk DNA’ would require a reevaluation of the [Fourth Amendment] reasonableness balance.”

Proponents of expansive DNA collection argue that any privacy intrusion resulting from DNA storage or analysis is minimal at most. When he introduced the amendment that authorizes collection and analysis of DNA from arrestees in the federal system, Senator Kyl emphasized that storage of DNA samples would not intrude upon individuals’ privacy rights, stating that “the sample of DNA that is kept ... is what is called ‘junk DNA’ – it is impossible to determine anything medically sensitive from this DNA.” Fourth Amendment challenges might gain legal traction if researchers discover that junk DNA does in fact contain clues which reveal sensitive biological or medical information.

**Storage of DNA Profiles After Punishment Ends**

A final issue that might arise in future DNA cases is the constitutionality of storing convicts’ DNA profiles after their sentences have ended. Although federal law requires the FBI to expunge DNA profiles for people who receive acquittals or whose convictions are overturned, the expungement provisions do not address storage of DNA from people who have been convicted but have successfully completed their sentences. Rather, as the Ninth Circuit Court of Appeals noted in *United States v. Kriesel*, “once they have [a person’s] DNA, police at any level of government with a general criminal investigative interest ... can tap into that DNA without any consent, suspicion, or warrant, long after his period of supervised release ends.” Defendants have generally not raised this issue, but it might become a more prevalent argument since laws have expanded collection authority to reach people convicted for relatively minor charges.

Some courts have signaled that storage after sentences are completed could alter the Fourth Amendment analysis. For example, in an opinion upholding collection of DNA from a person on supervised release, the U.S. Court of Appeals for the First Circuit warned that its opinion had an “important limitation.” Namely, because the petitioner was “on supervised release and will remain so until 2009, [the court did] not resolve the question of whether it is also constitutional to

---

88 United States v. Stewart, 532 F.3d 32, 36 (1st Cir. 2008).
90 42 U.S.C. §14132(d).
91 508 F.3d 941, 952 (9th Cir. 2007).
retain the DNA profile in the database after he is no longer on supervised release."92 Such courts might be receptive to arguments regarding the long-term storage of DNA as an unconstitutional search, especially if a court views completing a sentence as restoring a person’s reasonable expectation of privacy. Alternatively, a court might view ongoing DNA storage as an unconstitutional seizure, especially if a court views people as having a possessory interest in their blood, as at least some courts appear to do. However, as previously noted, courts have typically resisted seizure analyses in DNA cases. Alternatively, the government might argue that a conviction permanently diminishes a person’s Fourth Amendment rights such that long-term DNA storage permissibly accompanies post-conviction status. It is unclear how courts would respond to such an argument.

Conclusion

Although nearly all courts that have addressed the issue have upheld compulsory DNA collection and analysis as constitutional under the Fourth Amendment, it would be premature to assume that all compulsory DNA collection laws would survive Fourth Amendment scrutiny. First, amid quickly expanding authority for DNA collection, constitutional analyses might change when judicial challengers include people merely arrested, rather than convicted, for criminal behavior. Second, in light of rapidly developing science regarding junk DNA, courts might find that DNA collection implicates greater privacy concerns than currently assumed. Finally, courts have not yet addressed the constitutionality of ongoing storage of DNA.

However, although these issues are likely to complicate future case law, statutory protections could ensure that courts would continue to uphold expansions of DNA collection authority as constitutional. For example, existing expungement provisions might aid the government in cases involving arrestees or detainees. In the future, additional protections, such as restrictions on the use of DNA in analysis or expungement of DNA profiles after sentence completion, might become necessary – if constitutionality of DNA collection practices under the Fourth Amendment is to be ensured.

Author Contact Information

Anna C. Henning
Legislative Attorney
ahenning@crs.loc.gov, 7-4067

92 Weikert, 504 F.3d at 2.