

DNA Evidence

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Blood Evidence

- **Where Blood Found.** See Internet poster [Margoo's](#) transcript of screen capture of January 15, 1997 DNA report posted at [Starting Over-JonBenet](#) and [Webbsleuths](#). Internet poster [Mikie](#) has filled in some of the blanks in this screen capture. According to this report, blood was found on:
 1. JBR's body (which was wiped down, leaving little trace)
 2. JBR's night shirt (samples #5A & #5B);
 3. JBR's panties (sample #7). In the autopsy [report](#) it is stated: "The underwear is urine stained and in the inner aspect of the crotch are several red areas of staining measuring up to 0.5 inch in maximum dimension." Thus, the exact number of blood spots is not known, but at least two of the spots tested to date have found commingled foreign DNA (see below).
 4. the white blanket covering JBR (sample #16A)
 5. the nightgown found next to JBR (samples #17A & #17C).
- **All Blood Evidence is from JBR.** DNA testing appears to indicate all blood evidence belongs to JBR. There is "intermingled" DNA with JBR's bloodspots on the panties, but investigators believe the "foreign" DNA may be saliva and no one has reported it to be blood.
- **Foreign DNA Degraded.** The intermingled DNA has been reported as "degraded." Internet poster [Margoo](#) has posted a good explanation of what this actually means.
- [-searchinGirl's DNA Table](#)
- [-searchinGirl's DNA Table #2](#)
- [Bode Lab Reports](#) as published at Paula Woodward's website [We Have your Daughter](#)
- [John and Patsy and JonBenet and Burke](#), a Table showing the chromosomes of the children in relation to their parents.

Evidence Not Found

1. **No Semen on Body, Panties or Clothing.** Vaginal, oral and anal swabs were obtained from JBR's body, but "according to examinations conducted by the Colorado Bureau of Investigation, no semen was located on the body, panties, or clothing of JonBenet Ramsey ([Byfield 1997:4](#)).
2. **No Seminal Fluid.** "No seminal fluid has been discovered either" ([Nagel 1997](#))
3. **No Semen on Thighs.** "Since the autopsy, the police had thought there was semen on [JonBenet's](#) upper thighs. Then, on January 15, the CBI came back with the analysis. The substance thought to be semen was in fact smeared blood. There was no semen. [JonBenet's](#) body had been wiped clean, leaving a residue that was visible under the fluorescent light at the autopsy" (Schiller 1999:132, according to Internet poster [Mikie](#)).
- **Oral Assault May Not Leave DNA** In another Boulder [case](#) involving the sexual assault of a 14-year-old, "the 14-year-old told police that the man sexually assaulted her with his hand and orally but was interrupted by her mother. Although saliva contains DNA and the victim was swabbed soon after the assault, no foreign DNA was recovered from her body." Thus, even though saliva was not found on her body, this does not entirely rule out the possibility of oral assault.

DNA Evidence

Overview

- [The Daily Camera](#) news coverage of the forensic evidence is [here](#).
- **On-line Discussion.** See [Technical Discussions of DNA](#) at [Webbsleuths](#) forum chat.

DNA Testing Timeline

- **DNA Samples Collected in 1997.** All the original samples of DNA collected from family and close friends were collected in early 1997, starting in mid-January.
- **New Technology 1999.** [In 1999](#), the "FBI released a new technology called *Short Tandem Repeat* to profile DNA. It uses 13 markers to raise the probability that a randomly selected individual would match it is one in 1 quintillion."
- **2001 Testing.** "The new testing is allowed after a legal battle in Colorado's courts, and [JonBenet's](#) underwear is analyzed again resulting in between one and two markers out of 13 being defined."
- **2003 Testing.** A "second blood spot on [JonBenet's](#) underwear tested resulting in between nine and 10 markers on the spot to be defined."
- **Submission to CODIS.** "That genetic fingerprint meets the threshold to be placed into a national database, Combined DNA Indexing System or CODIS, which holds DNA profiles of those convicted in most states of certain crimes."

Male DNA Under Fingernails

- **Findings.** "The coroner took nail clippings from [JonBenet](#). Male DNA was found under [JonBenet's](#) right hand fingernail that does not match that of any Ramsey. (SMF P 174; PSMF P 174.) Defendants also assert that male DNA was found under [JonBenet's](#) left hand fingernail, which also does not match that of any Ramsey. (SMF P 173.)" (Carnes 2003:22). This is consistent with Internet poster [Margoo's](#) screen capture showing a "mix" of DNA only 3 of the 13 DNA samples submitted: #7 Bloodstains from panties; #14L, #14M Right and Left hand fingernails from [JonBenet](#) Ramsey.
- **"Defensive Flesh."** Internet poster [Mame](#) has asserted that Lou Smit told her there was "defensive flesh" found under JBR's fingernails (his term). Internet poster [Evening2](#) disagrees and believes that "When Lou Smit referred to [JonBenet](#) 'getting a piece of her killer', he wasn't talking about flesh, just that "his" DNA was there, that's all."
- **On-line Discussion.** See [DNA Under Fingernails](#) at [Webbsleuths](#) forum chat.

Male DNA in Underwear (Panties)

Overview

- **On-line Discussion.** See [DNA Found in Panties](#) at [Webbsleuths](#) forum chat.

Findings

- **Male DNA Found.** "In addition, male DNA was found in [JonBenet's](#) underwear that does not match that of any Ramsey and has not yet been sourced. (SMF PP 175, 178; PSMF PP 175, 178.)" (Carnes 2003:22).
- **No Match Found to Date.** "The Boulder Police Department has yet to identify the male whose DNA was found at the crime scene. (SMF P 177; PSMF P 177.)" (Carnes 2003:22).
- **Saliva?** According to Internet poster [Margoo](#), Lin Wood [reported](#) in a chat session that the DNA in the underwear "probably" was saliva. Several news sources also have suggested the male DNA was from saliva, including [Denver Post](#), [People's Daily Online](#) and [Taipei Times](#)

Potential Source of DNA in Underwear

Factory Worker DNA

- **Evidence in Favor of Asian Factory Worker Source**

1. **Unnamed Investigators' View.** However, "Investigators in the [JonBenet](#) Ramsey case [believe](#) that male DNA recovered from the slain child's underwear may not be critical evidence at all, and instead could have been left at the time of the clothing's manufacture. In exploring that theory, investigators obtained unopened "control" samples of identical underwear manufactured at the same plant in Southeast Asia, tested them - and found human DNA in some of those new, unused panties."
2. **Tom Bennett's View.** Former Boulder DA investigator **Tom Bennett** stated in 2004: "The DNA on the underwear may be from the killer, but it may not be," Bennett said. "It's minute DNA, like from a cough or sneeze.... You can't just jump to conclusion it's positive proof that will trace back to the killer." [full article](#) (registration required); [quotation posted 12-10-2006 03:54 PM by Internet poster Candy](#)
3. **Michael Kane's View.** In November 2002, it was [reported](#) (AP report from Internet poster **Candy**): "There is always a possibility that it got there through human handling," former prosecutor **Michael Kane** told the News. "You have to ask yourself the possible ways that it got there: whether it was in the manufacture, the packaging or the distribution, or whether it was someone in the retail store who took it out to look at them," said Kane, who ran a 13-month grand jury investigation which yielded no indictments.
4. **DNA Expert Barry Scheck's View.** Likewise, attorney **Barry Scheck** has [asserted](#). "we don't know whether that's saliva or what, whether that's skin cells, you know, there was -- it could be DNA from the original manufacturer of the underwear."

- **Evidence Against Asian Factory Worker Source**

1. **Panty DNA Commingled with Blood.** On November 19, 2002, an AP [report](#) (AP report from Internet poster **Candy**) stated: "But [Ramsey attorney Lin] Wood said the theory is meritless. The DNA was found commingled with blood, he said."
2. **Possible Match with Fingernail DNA.** The same AP [report](#) stated noted "its genetic markers may match evidence taken from fingernails on both of [JonBenet's](#) hands. "There are common markers as to all three that would strongly suggest they are from the same source," he [**Lin Wood**] said." According to [CBS News](#): "The crime lab has two spots of [JonBenet's](#) blood found on the underwear she was wearing the night of the murder. Mixed in with that blood is the DNA of an unknown person. It has taken years to isolate, but forensic scientists in Colorado now have a complete DNA profile of the killer. They know the killer is a male. What they don't know is his name. Augustin and Gray are convinced that the DNA sample belongs to [JonBenet's](#) killer, *because of a small amount of matching DNA that also was found under the 6-year-old murder victim's fingernails* [Emphasis added]."
3. **Panty DNA Much More Than Trace Amount.** Moreover, in a November 30, 1996 [letter](#) to Westward, **Carol Martin** of Walnut Creek, CA, claims to have written and gotten a reply from the producer of 48 Hours to complain about their November 28 show involving **Michael Tracey** and **Lou Smit**. She asserted: "The most interesting thing the producer said was that while traces of DNA have been found in unopened packages of underwear, the foreign DNA in [JonBenet's](#) was ten to twelve times that amount."
4. **Trip DeMuth.** In a *48 Hours* interview aired on November 25, 2006, [Trip DeMuth](#) commented on the DNA evidence: "How likely is it that it would be anybody but the killer? I think it's highly unlikely that it would be anybody else but the killer," he says.

Caucasian DNA?

- **Evidence in Favor of Caucasian DNA**

1. **DNA Race Detection Now Possible.** A detailed discussion of whether race now can be accurately inferred from DNA evidence is [here](#).
2. **Widespread Media Reports.** It has been reported in newspapers across the globe that "Caucasian" DNA was found. If true, this would appear to rule out an Asian factory worker explanation.
3. **Lin Wood.** On November 19, 2002, an AP [report](#) (AP report from Internet poster **Candy**) quoted Ramsey attorney **Lin Wood** as saying "The DNA found in [JonBenet's](#) underwear is male and Caucasian."
4. **Guardian Unlimited.** "A drop of [JonBenet's](#) blood found in her underpants was mixed with the DNA of a Caucasian male" according to [Guardian Unlimited](#), June 25, 2006 (in a story strongly implying Ramsey guilt for the killing).
5. **Rocky Mountain News.** "Investigators recover a DNA sample of an unknown Caucasian male from [JonBenet's](#) underwear" according to [Rocky Mountain News](#), August 29, 2006.
6. **BBC.** "DNA from a white, Caucasian male was found mixed with [JonBenet's](#) blood in bloodspots on her clothing" according to the [BBC](#), August 29, 2006.

- **Evidence Against Caucasian DNA**

1. **No Official Leaks of DNA Race Test.** A new technique was [used](#) in 2004 to infer that the killer of Susannah Chase--a UC-Boulder student killed less than 1 year after JBR--was American Indian or Hispanic. It has not been reported whether police used the same technique to assess the DNA evidence in JBR's case; it would seem surprising that they had not, but conversely it would seem surprising that such a fact would not have been leaked by now given that this information was disclosed in the Chase case.
2. **No Mention in Karr Arrest Warrant.** However, the August 2006 [arrest warrant](#) (p. 82) in the **John Mark Karr** case did not state that the DNA was "Caucasian" - merely that it was male.
3. **Fox News Report.** On December 26, Carol McKinley of Fox News [reported](#) (quote and link provided by Internet poster **Candy**): "One piece of information which has been seen as a major clue, but which is wrong, is that the DNA which was in [JonBenet's](#) underwear came from a caucasian male. Truth is, it was never, ever tested for race. Because there's not enough, and it's tested, it will be used up. All we know is, it belongs to a male, we don't know what ethnicity it is." This was stated by [McKinley](#) during an exclusive [interview](#) with **Tom Wickman**, former BPD Detective and Grand Jury BPD representative, but it is not clear whether he was the source. Internet poster **Mame** has stated: "Tom Wickman has NO idea about the DNA! He left this case so many years ago...long before the newer DNA testing was done. How can he possibly comment on the state of the evidence, especially DNA, at this point? He can't." However, Internet poster [Jayelles](#) has argued: "Wickman was the "evidence man". I think he would know more about the evidence than Lin Wood or Michael Tracey. Mame tried to claim that he wasn't around the case for long, but according to Candy he worked on the case till 2002. He was also an investigator for the Grand Jury. In terms of case knowledge, Wickman is probably a better source than Lou Smit."

- **Was DNA Planted?**

1. **Yes.** Internet poster [Evening2](#) has speculated the DNA could have been planted.
2. Internet poster [Rainsong](#) has posted information about 2 other cases in which DNA was planted.
3. **No.** Internet poster [Dave](#) has observed: "Regarding planting of DNA: Back in the early days of DNA testing, labs wanted 10 cc of whole blood. So the "correct" amount of DNA to plant would be that contained in 10 cc of whole blood. Not only that, but planting 10 cc of foreign blood would attract attention, no question about it. This perpetrator was fairly thorough. I find it hard to believe that he would leave a very few very small spots that required future technology to assess. He could have easily left 10 cc of foreign whole blood at a point where he could conceivably have cut himself, for example at the broken window."

Touch DNA in Long Johns

- **On-line Discussion.** See [Touch DNA on Long Johns](#) at Webbsleuths forum chat.

Who Has Submitted DNA Blood Samples?

Family Members

- **John Ramsey** (see Internet poster [WhyNut's](#) screen captures posted at [Starting Over--JonBenet](#) (by Internet poster [Margoo](#)) and [Forums for Justice](#) (by Internet poster [WhyNut](#)); **this information confirmed in** [Daily Times-Cal](#)).
- **Patsy Ramsey** (see Internet poster [WhyNut's](#) screen captures posted at [Starting Over--JonBenet](#) (by Internet poster [Margoo](#)) and [Forums for Justice](#) (by Internet poster [WhyNut](#))).
- **John Andrew Ramsey** (see John Ramsey for sources).
- **Melinda Ramsey** (see John Ramsey for sources).
- **Burke Ramsey** (see John Ramsey for sources).
- **Jeff Ramsey** (see John Ramsey for sources).

Ramsey Friends & Neighbors

- **Joe Barnhill, Sr.]** (see Internet poster [Why_Nut's](#) [screen capture](#) and his [interpretation](#) of what it states; Internet poster [Margoo](#) provides an enlarged version and concurs with that interpretation.
- **Joe Barnhill, Jr.]** (see Joe Barnhill, Sr. for sources).
- **Jay Elowsky** (see Joe Barnhill, Sr. for sources).
- **Barbara Fernie** (see Joe Barnhill, Sr. for sources).
- **John Fernie** (see Joe Barnhill, Sr. for sources).
- **Glenn Stine** (see Joe Barnhill, Sr. for sources).
- **Fleet White** (see Joe Barnhill, Sr. for sources); based on the identities of the others, it is assumed this means Fleet White, Jr.)
- **Priscilla White]** (see Internet poster [Why_Nut's](#) [screen capture and interpretation](#); Internet poster [Margoo](#) provides an enlarged version and concurs with that interpretation.

People Who Worked for Ramseys

- **Linda Hoffman-Pugh** (see Priscilla White for sources).
- **Mervin Pugh** (see Priscilla White for sources).

Others

- [Gary Oliva](#) had a saliva sample taken.

Who Has Been Cleared by DNA?

- **60 People Cleared.** CBS News [reports](#) 60 persons have been "cleared" based on their DNA tests.
- **Ramsey Family Members.** The DNA does not match **John Ramsey**, **Burke Ramsey**, **John Andrew Ramsey**, **Melinda Ramsey**, **Patsy Ramsey** or **Jeff Ramsey**, the brother of John Ramsey (see Internet poster [Jayelles](#) post of 07-05-2004 02:29 PM). This is consistent with a statement by private detective Ollie Gray in a 48 Hours interview, in which he stated the DNA evidence eliminates the Ramseys. A transcript and (blurry) version of the DNA report are posted at [Webbsleuths](#).
- **Friends of Family.** Internet poster [Jayelles](#) has deduced that the DNA also has cleared, **Fleet White** and **Priscilla White**

- **Other Individuals.** Internet poster [Jayelles](#) has deduced that the DNA also has cleared **Mervin Pugh**, the Ramsey's handyman.

Who Has Not Been Cleared by DNA?

- According to Internet poster [Athena](#), according to PMPT "McReynolds and Barnhill's DNA could not be excluded" p182 (This appears to be a paraphrased reference to paperback version of Schiller).