

United States Court of Appeals
For the Eighth Circuit

No. 18-2367

United States of America

Plaintiff - Appellee

v.

Chad Hall

Defendant - Appellant

Appeal from United States District Court
for the Northern District of Iowa - Waterloo

Submitted: May 17, 2019

Filed: June 14, 2019

[Unpublished]

Before SMITH, Chief Judge, WOLLMAN and KOBES, Circuit Judges.

PER CURIAM.

Chad Hall's supervised release was revoked after sweat patches tested positive for methamphetamine three times within 30 days. The district court¹ sentenced him

¹The Honorable Linda R. Reade, United States District Judge for the Northern District of Iowa.

to one year in prison for violating a supervised release condition prohibiting drug use. Hall appeals his revocation, arguing his violations were not supported by a preponderance of the evidence. We disagree and affirm the district court.

I. *Background*

In 2012, Hall pleaded guilty to conspiracy to distribute 100 grams or more of heroin. The district court sentenced him to 50 months' imprisonment and 4 years' supervised release. In February 2014, Hall's sentence was reduced to 40 months' imprisonment, with the term of supervised release remaining unchanged. Hall began supervised release on April 10, 2015. Hall's release conditions prohibited drug use.

On October 20, 2016, the district court revoked Hall's supervised release after he violated his terms of release and sentenced him to three months' imprisonment and three years' supervised release. Hall's second term of supervised release began on January 13, 2017. On March 20, 2018, Hall's probation officer ("the officer") visited him at his residence. The officer noticed a change in Hall's appearance and asked him if he had been using drugs. Hall denied any drug use, but remaining suspicious, the officer ordered him to submit a urine sample. The sample preliminarily tested positive for amphetamine, cocaine, and opiates. Later, Hall admitted to drug use but told the officer that he was unsure what drugs he had used, though he thought he had used cocaine. Based on this violation, the district court did not revoke Hall's supervised release but modified Hall's conditions of release on March 30 to include three weekends in jail.

Hall was also required to begin wearing sweat patches to test for drug use. Hall's sweat patches were changed weekly. On April 9, 2018, the officer learned that the patch worn by Hall from March 24–March 30 ("Patch A") tested positive for amphetamine, methamphetamine, and cocaine. Hall denied using any drugs since March 19. Later, Hall admitted to also using "bath salt" on March 20 but denied any subsequent use. However, on April 16, the officer learned that Hall's patch from

March 30–April 6 (“Patch B”) also tested positive for amphetamine and methamphetamine. Hall’s April 6–April 13 patch (“Patch C”) tested positive for those substances as well. The patches tested positive in decreasing concentrations.

On June 18, 2018, the district court held a supervised release revocation hearing. The hearing focused on determining whether the patches tested positive due to new drug use since March 19 or 20 or whether the results reflected residual drugs from March 19 or 20 usage. The district court heard testimony from Dr. Leo Kadehjian, a toxicologist. Dr. Kadehjian concluded that Patch A reflected use of a large dose of methamphetamine after March 19 or 20. Dr. Kadehjian could not determine conclusively whether Patch B reflected new usage or residual drugs from the usage detected in Patch A. Additionally, he concluded that Patch C reflected use of a new, smaller dose of methamphetamine. Dr. Kadehjian explained that

in the case of methamphetamine . . . all of the drug comes out in the first one or two days in the sweat patch, and the concentrations don’t increase beyond that. And so one can judge that if you have sequential positive sweat patches, the sequential positive results likely represent renewed use of drug.

Revocation Hr’g. Tr. at 13, *United States v. Chad Hall*, No. 6:11-CR-02046-LRR-KEM-3 (N.D. Iowa, June 18, 2018), ECF No. 428.

In reaching these conclusions, Dr. Kadehjian relied on his knowledge and experience as a toxicologist, as well as scientific studies. In particular, he relied on a “controlled dosing” study (“the Barnes study”). *Id.* Those conducting the Barnes study administered both high and low doses of methamphetamine to the subjects. The subjects wore sweat patches both during and after the dosing week. The Barnes study concluded that

[p]atches applied 2 weeks after the drug administration week had no measurable [methamphetamine] following the low doses, and only 1 positive result following the high doses. Using criteria proposed by the Substance Abuse Mental Health Services Administration [(SAMHSA)], 85.7% (low) and 62.5% (high) weekly sweat patches from the dosing week were positive for [methamphetamine], and all patches applied after the dosing week were negative.

Allan Barnes et al., *Excretion of Methamphetamine and Amphetamine in Human Sweat Following Controlled Oral Methamphetamine Administration*, Clin. Chem., 54(1), 172 (2008), <http://clinchem.aaccjnl.org/content/54/1/172>. According to the SAMHSA criteria, a sweat patch would only be considered “positive” for methamphetamine if testing detected both methamphetamine and amphetamine above a certain concentration.

After hearing the evidence, the district court concluded that all three patches qualified as positive tests. However, it also determined that Patches A and C reflected new drug usage but that Patch B could reflect either new drug usage or residual drugs from the usage detected in Patch A. Having found that Hall had committed a new violation of his supervised release—i.e., a violation separate from that addressed in the March 30 modification—the district court revoked Hall’s supervised release and sentenced him to one year in prison.

II. Discussion

“We review a district court’s decision to revoke supervised release for an abuse of discretion and the court’s underlying factual findings as to whether a violation occurred for clear error.” *United States v. Miller*, 557 F.3d 910, 914 (8th Cir. 2009) (internal quotation omitted). A district court must find a violation of a term of supervised release by a preponderance of the evidence. 18 U.S.C. § 3583(e)(3).

We have previously found “that sweat patch results are a generally reliable method of determining whether an offender has violated a condition of his or her probation.” *United States v. Meyer*, 483 F.3d 865, 869 (8th Cir. 2007). Nevertheless, district courts are to determine “on a case-by-case basis” whether a positive sweat patch is “a reliable indicator of drug usage.” *Id.*

Hall argues the district court erred in relying on Dr. Kadehjian’s testimony to establish his supervised release violations. His main argument is that Dr. Kadehjian misrepresented the Barnes study’s findings by testifying “that none of the participants in the [Barnes] Study had tested positive in sweat patches worn the second week after using methamphetamine.” Appellant’s Br. at 5. Hall claims that Dr. Kadehjian’s testimony “was incorrect, as [1 of 5] of the participants in the study who received a ‘high’ dose of methamphetamine . . . tested positive in the second week.” *Id.* He also argues Dr. Kadehjian improperly extrapolated from the Barnes study’s results because Hall consumed higher doses of methamphetamine than the study’s participants.

Hall’s criticism of Dr. Kadehjian’s testimony misreads the Barnes’s study. Although the study did find that one participant tested positive for methamphetamine in the second week, it also noted that no patches applied in the second week were positive according to the evaluative criteria employed by the study. Those criteria contemplated the possibility of a patch containing methamphetamine without actually testing “positive.” Indeed, in his testimony, Dr. Kadehjian emphasized the difference between “testing positive” and “detection.” Revocation Hr’g Tr. at 38. Hall’s second criticism of Dr. Kadehjian also fails. To be sure, the doses administered during the Barnes study were lower than the large dose Hall likely used on or prior to March 19 or 20. But, Dr. Kadehjian did not rely exclusively on the Barnes study. He also relied on other studies reporting on methamphetamine users consuming high doses at high concentrations. He also noted that the subjects in the Barnes study had reported using high doses of methamphetamine prior to participating in the study.

Having reviewed the record, we find no evidence that Dr. Kadehjian misrepresented or improperly relied upon the Barnes study. Therefore, the district court did not clearly err in relying on Dr. Kadehjian's testimony. In light of that testimony, and in light of the three positive sweat patches themselves, we find the district court did not abuse its discretion in revoking Hall's supervised release.

III. *Conclusion*

The judgment of the district court is affirmed.
