Maybe a supreme being is saving you from rattlesnake venom, but it's easier to lie. Last week on FX's country-themed crime drama *Justified*, religious fervor was met with the stinging bite of reality.

Confused by the drop-off in his drug profits, Boyd Crowder—criminal turned convict turned preacher turned criminal—discovers that a new backwoods church has been turning the local folk away from sin, and therefore his oxycontin.

The new church features an over-zealous snake handler by the name of Billy. Based on a literal interpretation of the Bible verse Mark 16:17-18 which reads, "In my name ... they will pick up snakes with their hands," Billy holds rattlesnakes in full view of his congregation, claiming that God protects him from the (sometimes) deadly venom. It turns out this particular preacher has a clever racket: descend on a town, cut into drug profits by "saving" citizens, and eventually get paid off by the local criminals. Boyd is never one to get shaken down, so he decides to send in some thugs to make Billy "see the light."

His thugs unwittingly stumble upon a pit full of snakes, enough to make Indiana Jones cringe. One is repeatedly and viciously bitten by the rattlers, and has to be quickly transported to a willing doctor. As the thug convulsed and shivered and spat from the toxins, the doctor explains that anyone bitten so many times should have died hours ago. And this piques Boyd's skepticism—perhaps the preacher isn't tempting fate at all. God doesn't need to save you from a snake with no venom.

"Many men walk in darkness, but those who step into the light should be transparent."

When Boyd makes his way back to the church, he has a plan that rivals the Million Dollar Challenge. He confronts Billy in the middle of a sermon, weathers a number of contentious claims of association with the devil, and lays a metal toolbox at Billy's feet. In that box, Boyd explains, is a rattlesnake from a rock crevice near his home. Boyd figured out why his thug didn't die that night: the snakes that bit him had little to no venom. Billy's sister had been milking the snakes before each service, without Billy's knowledge, and Billy had been claiming to be saved from that which he needed no saving.

When his sister folded, preacher Billy had no choice but to face the truth. He had been in effect fooling his flock. After watching him break, Boyd picks up the box and begins to exit the church. But unable to stomach his sister's deception, Billy decides to prove to Boyd that God indeed works through him. While his sister protests and Boyd cautions him not to act out of self-glorification, Billy reaches into the box and holds the rattlesnake up to the congregation gathered there. To the surprise of everyone but Boyd, the snake twists its head around and sinks venomous fangs into Billy's wrist . With a mix of disbelief and nausea appearing on his face, Billy passes out. Boyd turns his back on the preacher and walks out into the Harlan, Kentucky sun.

Milking a Performance

The story of the snake preacher was a wonderful bit of skepticism on primetime TV. Boyd deduces a non-supernatural explanation for a resistance to snake venom, tells the preacher to put his money where his mouth is, and succeeds in staring down superstition. And the story could end there, but a question remains. Does Boyd's scientific deduction hold? Can regularly milking a snake diminish its deadliness?

In the forested hills of Tennessee, snake handling as a religious practice has been somewhat of a cult since 1909. And since then, about 100 preachers have died by snakebite. In fact, Harlan County, the locale where *Justified* takes place, does indeed have a history of snake handling. The photo below, from the Harlan Pentecostal Church of God in 1956, shows the practice, and the arm that the preacher likely lost to a venomous bite.

Rattlesnake are venomous to be sure, but typically their bites are not fatal if treated promptly. If you are bitten and receive antivenom within two hours, there is a 99% chance that you will recover, given that only around five people in the US die each year out of 8,000 bitten.

But the rattlesnake's bite is definitely not something to mess with, with the common symptoms being severe pain, vomiting, nausea, hemorrhaging, and heart failure. So could you reduce the chances of being incapacitated by milking the snake beforehand? Did Boyd really find the preacher a fraud?

Milking a rattlesnake is easy enough, if you can manage to grab and keep hold of the head trying to bite you. A common milking technique is to force the animal's mouth open with a glass plate and to squeeze the venom glands right behind the eyes. The deadly toxin oozes down the plate, perhaps to be gathered and injected into a horse to create antivenom from its antibodies.

[illegible] Blog [illegible] here [illegible] and you can