

Don't change that channel: DTV woes still abound

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(AP) -- Think the digital TV transition is over? Not quite. Many viewers have found that they can't pick up certain stations after the switch, even with the right TVs or converter boxes. The stations are still trying to figure out ways to help them tune in.

The main problem is that when the last major stations turned off their analog TV on June 12 to broadcast entirely in digital, some of them moved their [digital signals](#) from the UHF frequency band (channels 14 to 69) to VHF (channels 2 to 13). To most viewers, these channels are just different numbers on the remote. But as signals in the airwaves, they have very different characteristics.

VHF hadn't been used much for digital signals, and there were indications that there would be problems with the switch, partly because viewers had inadequate indoor antennas. Still, the switch went ahead.

Since then, at least 20 VHF stations have asked the [Federal Communications Commission](#) to move their digital signals back to UHF, and more would like to do so. However, the government has sold off some of the UHF band to cell phone carriers, leaving less space for TV channels. Another portion is planned to be used for emergency services, which was another reason for the [digital TV](#) transition.

Philadelphia's ABC affiliate, WPVI, switched its digital signal to channel 6 on June 12, and got thousands of calls per day from viewers who couldn't find the station on their sets any more.

Within a week, WPVI got emergency permission from the FCC to quadruple its transmission power. It could do that because the closest station that also uses channel 6, in Binghamton, N.Y., also wanted to increase its power, which meant it wouldn't be overwhelmed by the stronger signal from Philly. But in other cases, increasing power is a complicated proposition involving several stations. More than 50 VHF stations have applied to increase their signal power.

The power increase helped WVPI punch through to a lot of viewers, but the station still gets calls every day. Hank Volpe, director of engineering at WVPI, says he understands the loss of the station's UHF slot, "but I would have loved to have a UHF channel to play with."

Mark Colombo, a TV enthusiast and electrical engineering student who maintains an online database of the country's TV stations, said "everyone who had any sense" knew that broadcasting digitally on channel 6 or lower would yield terrible reception. Those channels are susceptible to interference from household electronics, spark plugs in passing cars and distant thunderstorms.

What was more surprising was that channels 7 to 13 also had problems, though there had been clues it would happen there, too. WVUE in New Orleans, a Fox station, turned off its analog signal last December, before most other stations, and moved its digital signal to channel 8. The reaction was immediate.

"We fielded thousands of phone calls," said Al Domescik, WVUE's director of engineering. "We did everything we could. We talked to people on the phone. We sent technicians out to people's houses. We brought antennas to people's houses. We just kept beating our heads against the wall for months."

In June, the station started simulcasting on UHF, which mollified most

viewers.

WVUE's experience was repeated more than six months later, when Chicago's ABC station, WLS, tried to move its digital signal to channel 7. It says it got nearly 7,000 calls from viewers about reception problems in the week after the transition. Nearly half of the homes visited by the FCC in WLS's service area in late June had inadequate indoor reception.

WLS tried doubling its output power, but it wasn't enough. Now the FCC is letting it move to UHF channel 44.

TV consultant Peter Putman said a lot of reception problems for digital VHF channels can be attributed to the fact that VHF antennas need to be large. The long rods on an outdoor antenna are for VHF reception, and it's difficult to make a compact indoor antenna with good VHF performance.

TV watchers with indoor antennas had the same problem with VHF stations when they were analog, but often suffered through it. They would get a poor, snowy picture and decent sound, and considered that good enough. But because digital is an "all-or-nothing" technology, the weak signal they get on digital isn't enough to produce a picture at all.

Some TV viewers simply have the wrong antennas. For years, "HDTV" antennas were sold that brought in only UHF. Andy Couch, a Web developer in Austin, Texas, installed one in his attic and was happy with it until this summer, when the local Fox station, KTBC, disappeared from his set. It had moved its digital signal from UHF to VHF.

"Now I have to get a VHF antenna for just one channel? No thanks," he said.

Another problem is that FM radio stations can interfere with VHF TV

channels.

Volpe at WPVI in Philadelphia said FM interference is easily dealt with by installing an "FM filter" or "FM trap" on antennas. [Analog TV](#) manufacturers incorporated such filters in their sets. However, digital TVs and [converter boxes](#) lack these filters, since they do nothing to improve digital reception in UHF, where digital signals mainly had been until this year's transition.

FCC spokeswoman Janice Wise noted that relatively few stations out of the more than 1,800 in the country have reported reception problems after the transition, and said the agency is working closely with them to resolve their issues.

"People are figuring there's someone out there to blame for this," Volpe said. "Well, there's nobody to blame."

But the nature of the DTV transition - with nearly all major-city stations turning off on the same day as mandated by Congress - didn't make it easier to identify and deal with reception issues. Colombo, the TV enthusiast, points out that in Wilmington, N.C., where the FCC encouraged TV stations to shut down last September as a test for the big day, all the digital TV stations used UHF. The area also lacks large hills that can block signals.

"It was basically the ideal market," he said. "You could not ask for an easier market to deal with than Wilmington."

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