



Figure 1.

Now it was the Mexican officials' job to find a solution. Officials searched for a way that people could return to their normal lives while still being able to control the spread of the virus. Since airports are a major link between any country and the rest of the world, officials concentrated their efforts here. Now the task at hand was finding a way to non-invasively and safely screen thousands of air passengers daily with minimal disruption.

Infrared: a valuable temperature screening tool

Officials at the Benito Juarez Airport in Mexico City turned to Fluke infrared (IR) thermal imagers to help in the screening process. While thermal imagers are designed for uses ranging from industrial maintenance to building inspection, they provided a means for screening large numbers of people from a distance, quickly and easily. And since utilizing IR for temperature screening required little training, the technology was easy to integrate into existing security measures. In addition, the

variety of applications IR can be used in meant that the thermal imagers would not go un-used after the H1N1 pandemic tapered off.

All objects emit infrared energy, even the human body. Non-contact, infrared thermal imagers measure the amount of IR energy emitted from skin and produce color images on a display based on the temperatures read while also providing an actual temperature reading.

Individuals with fevers often have elevated skin temperatures. Thermal imagers can easily detect a person with higher than normal skin temperature. A color alarm is set to a specified temperature and anything detected above that threshold will appear thermally on the camera display (See Figure 2). This signals security personnel that additional examination is needed.

The infrared triage system

Since thermal imagers cannot indicate for certain whether a person has a fever or not, and



Figure 2. By using the color alarm feature, only the areas that exceed the 38 °C (100.4 °F) temperature threshold appear thermally.

because thorough examination of every individual would be far too disruptive, a triage system or filter using Fluke thermal imagers allowed security personnel to narrow their search.

Infrared screening checkpoints were setup at both airport entries and exits, often at immigration and other security checkpoints. As travelers passed by the thermal imagers, security personnel monitored their thermal signatures (Figure 1).

