IH HEROES
Tales from the IH Experience

2017 #1

THE HUMAN FACTOR

FEATURING:
REBECCA,
EPIDEMIOLOGIST
AND IH PROFESSIONAL
Rebecca

Hometown
Winter Park, Florida

Alma Maters
University of Central Florida (BS);
University of South Florida (MPH, PhD)

Certifications
Epidemiology, CIH, CIC

Specialties

Interests
community volunteer work, local theater, travel

Background
After serving in the U.S. Army for four years after high school, Rebecca took advantage of the educational opportunities offered to achieve a college degree. Working for a software developer that specialized in health information technology, she made her first forays into epidemiology. She soon found that she had a knack for data research and a passion for public health, receiving her master's and doctoral degrees in short order.

An active leader within the AIHA Local Section, Rebecca taught future professionals for several years at UCF before leaving academic life. She is now with a private consulting firm that works in partnership with the U.S. Department of Health and Human Services on a long-term health technology initiative.
IH HEROES PRESENTS:

THE HUMAN FACTOR

After the tsunami struck the island, help quickly poured in from the international community.

The first responders saved lives and united the missing with their families.

But what the news channels rarely highlight is the difficult work that lies ahead in the aftermath.

That's where the IH Heroes come in.
Once the situation is under control...

We need to make sure people stay safe.

When the call comes, I don’t hesitate to respond...

It’s why I do what I do.

Because it means keeping families safe.
My name is Rebecca. I’m an industrial hygienist. In short, I work in IH.

Most people have no idea what that means, and that’s okay. It’s what I do that’s important, not my job title.

First thing after touch down was the same as always: report to Staff HQ.

I’m so glad your company could spare you for a few weeks.

How could I turn down a call for help from my favorite mentor, Doctor Hamilton?

Please, it’s Alex.
I'd love to catch up with my former star student, but the situation requires your immediate attention - and skillset.

Of sorts, yes.

Right, in the mission briefing you mentioned the possibility of an outbreak?

Tell me more. Is it threatening the refugees?

Not yet.

"There's a skin rash that's spreading, but so far it's only showed up on my staff."

"I'll transfer the full report and files to your tablet."
They didn’t have the time, manpower, or expertise to sort this out; the camp was already overrun with priorities.

I had my work cut out for me.

I toured the camp for a bit, getting the lay of the land before diving into the problem.

You look like you’re having fun!

My name is Rebecca; nice to... Uhm, feet you!

Hi! I’m Ifie.

These people have lost so much... and yet this little girl found some joy in the midst of the chaos.

Time to get cracking!

Do you like my new boots?
There are five steps to a proper assessment investigation.

First, anticipate. With the files Alex transferred, I looked into the manpower, methods, and materials being used.

Second, recognize. I documented everything I did to establish a baseline for my investigation.

Third, evaluate. I’ll apply scientific concepts to measure the biological, chemical, and physical hazards so I can establish an exposure profile.

Volunteer workers had the rash on various parts of their bodies. There was no set pattern.
After a full day, I had checked out all of the tools, food, clothing, and other equipment the staff accessed.

I even shadowed the doctors and aid workers; nothing jumped out as potential vectors for the rash.

What concerned me most was the potential this rash had for mutation; the refugee population was at risk.

I’d never reach steps four and five of my investigation if a key factor was still unaccounted for.

Camp conditions could turn this rash into something deadly if I couldn’t find the cause.
At the end of two days, I still had nothing to show for my efforts.

Nothing at all.

I had to be missing something so simple...

Miss Rebecca?

It's Ifie. I think she's sick.

Sometimes, the solution is just outside of our proverbial box...

What's the matter with her?
SHE GOT THIS RASH YESTERDAY... IT LOOKS REALLY NASTY. SHE BARELY SLEPT LAST NIGHT.

"SHE WAS SO PLAYFUL TWO DAYS AGO AND NOW SHE ISN'T FEELING WELL AT ALL. IS SHE GOING TO BE OKAY?"

YES, SHE WILL! IN FACT, THEY'RE ALL GOING TO BE OKAY. THANK YOU!

AHA!

YOU'VE JUST SHOWN ME WHAT I NEEDED TO SEE!

"OUR GLOVES?"
Specifically, these gloves. They're from Protect-O, right?

Well, yes...

I'd heard they were developing a new protective latex using nanotechnology... but last I knew it was still in testing.

Well, not anymore.

Really? What do you mean by that?
Alex explained how a month ago they were critically low on basic medical supplies at the staging base, including gloves and common medicines.

He had several contacts at Protect-O and heard they were just about ready to put these gloves on the market.

He reached out to some people he knew over there...

...and they sent over a batch of them as a donation.

We've been using them for about a month...

...and the rashes started soon afterwards.

Oh.
But how is that possible? They did extensive product testing. They're known for being sticklers with quality control.

Finally I got to the fourth step of my investigation: Control. Apply knowledge of approaches that might allow for elimination of a particular hazard.

Those three factors are causing a severe reaction in those who have skin sensitivities, such as non-native aid volunteers.

Initial tests show it's treatable with some antibiotics and cortisone cream.

I don't think anyone thought of the combination of extreme tropical conditions, salt water, and human sweat.

That's... going to be a problem.

We don't have enough to treat the entire staff - and I can't spare anyone to go get some.

The next airlift isn't for two weeks.

I know where we can find some!
The fifth and last step: Confirm. Determine the overexposure and establish a process for correction and future prevention.

This meant taking immediate action.

During my mission briefing, I noticed there was a medical warehouse located in the hills on the other end of the island.

Getting maps and a truck was easy enough.

Problem was, the main bridge to the town was destroyed; the only alternative was a badly maintained jungle road through the washed-out valley.

It was one of the scariest road trips I’ve ever taken.
The locals were more than happy to help the relief effort in the lowlands.

The camp let them know I was coming. They were ready with supplies when I arrived at daybreak.

I also received additional supplies for the camp and field hospital, thanks to the generous and concerned locals.

All loaded up!

...And I bought a few things myself.
The trip was exhausting, but I knew deep down it was worth every bump and grind.

I got all of it back to the camp, safe and sound.

Rebecca, this is outstanding!

I don’t know what we would’ve done without your help.

We’ll put these to good use right away!

Good health can bring great joy to anyone.

Old and young.
BEING AN 'INDUSTRIAL HYGIENIST' ISN'T ABOUT REGULATIONS, DATA, AND TESTING.

THese are for you, ifie.

LITTLE GIRLS SHOULD SPLASH IN PUDDLES IF THEY WANT...

...so here are some proper tools for you to do that!

'IH' IS ABOUT THE HEALTH, SAFETY, AND WELL-BEING OF A FAMILY. THE HUMAN FAMILY.

IT'S MORE THAN MY JOB.

I AM IH.
Rebecca

“The Human Factor”
Script: Ben H. Rome
Artwork: Klaus Scherwinski
Colors: Josh Burcham and Klaus Scherwinski
Lettering: Gunther Klippel
Layout design: Simeon Cogswell
Special thanks to Tom Armstrong, James Couch, and Chris Rennix for their expertise; Thursa La, Sue Marchese, Laurie Muthosch, and Jenn Newell for development ideas.
For more information about IH Heroes, visit www.ihheroes.org

Character design
Join an IH Hero as she unravels a mystery plaguing a small island recently hit by massive flooding. Can her problem-solving skills save the day?

Learn more about these quiet workplace heroes and check out their latest adventures in AIHA’s award-winning graphic series at IHHeroes.org.