HELLO, EVERYONE, AND WELCOME.
I'M KYS DANIELS YOUR MODERATOR FOR "SURVIVING FIELD STRESS FOR FIRST RESPONDERS" WE'RE BROADCASTING FROM THE CENTERS FOR DISEASE CONTROL AND PREVENTION IN ATLANTA, GEORGIA.
THIS PROGRAM IS SPONSORED BY THE NATIONAL CENTER FOR ENVIRONMENTAL HEALTH/AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY, ENVIRONMENTAL PROTECTION AGENCY AND THE PUBLIC HEALTH TRAINING NETWORK.

THIS PRESENTATION PROVIDES AN OVERVIEW OF THE PHYSICAL, EMOTIONAL, AND MENTAL STRESSORS FIRST RESPONDERS FACE WHEN CALLED TO TECHNOLOGICAL OR MANMADE DISASTERS AND HAZMAT INCIDENTS.

DURING THE PROGRAM, YOU WILL RECEIVE TIPS AND INSTRUCTION ON TECHNIQUES FOR COPING WITH STRESS IN THESE SITUATIONS.

OUR GOAL IS TO HELP FIRST RESPONDERS UNDERSTAND THE STRESSORS INVOLVED IN HUMAN REACTION TO DISASTERS.

THIS CAN HELP YOU BETTER PROTECT YOURSELF AND THE PUBLIC FROM THE STRESSES OF 21ST CENTURY DISASTERS.

TODAY'S PROGRAM IS TWO HOURS LONG.

INCLUDED IN OUR PRESENTATION IS A LIVE, INTERACTIVE QUESTION AND ANSWER PERIOD WHERE YOU'LL HAVE THE OPPORTUNITY TO ASK A QUESTION OR MAKE A COMMENT.

I'LL GIVE YOU THE INFORMATION, ON HOW TO CONTACT US, MOMENTARILY.

WE HAVE SCHEDULED A TEN-MINUTE BREAK.

YOU CAN ALSO USE THAT TIME, IF YOU'D LIKE, TO SEND IN YOUR QUESTIONS AND COMMENTS.

AND NOW, I'D LIKE TO TELL YOU A FEW MORE DETAILS ABOUT THE PROGRAM.

IT WILL CONSIST OF FOUR SEGMENTS.

THE FIRST DEALS WITH THE QUESTION, "WHAT IS STRESS?"

WE WILL PROVIDE YOU WITH A BRIEF INTRODUCTION TO PSYCHOLOGICAL STRESS AND ITS EFFECTS.

NEXT, WE WILL COVER SOME CAUSES OF FIRST RESPONDER STRESS.

THEN, OUR PANEL WILL GIVE YOU INFORMATION, AND TIPS, ON HOW TO MANAGE FIRST RESPONDER STRESS.

AND FINALLY, WE WILL DISCUSS WAYS WE CAN HELP THE GENERAL PUBLIC DEAL WITH THEIR DISASTER RELATED STRESS.

NOW, I'D LIKE TO TELL YOU ABOUT THE SIX OBJECTIVES OF OUR PROGRAM.

UPON THE SUCCESSFUL COMPLETION, OF OUR PRESENTATION, YOU WILL BE ABLE TO --

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NUMBER ONE, DESCRIBE PSYCHOLOGICAL STRESS.

TWO, EXPLAIN THE COMMON CAUSES OF STRESS.

THREE, DESCRIBE THE PHYSICAL HEALTH EFFECTS OF EXCESSIVE STRESS.

FOUR, DESCRIBE THE CAUSES OF STRESS IN FIRST RESPONDERS DURING A DISASTER RESPONSE.

FIVE, IDENTIFY METHODS TO COPE WITH FIELD-RELATED STRESS.

AND SIX, IDENTIFY STRATEGIES FOR ASSISTING MEMBERS OF THE PUBLIC, ADULTS AND CHILDREN, WITH THEIR DISASTER-RELATED STRESS IN YOUR ROLE AS FIRST RESPONDER.

ACCOMPANYING THIS COURSE IS A MANUAL TITLED, "SURVIVING FIELD STRESS FOR FIRST RESPONDERS", WHICH CONTAINS INFORMATION ABOUT THE TOPICS THAT ARE COVERED IN THIS PROGRAM, AS WELL AS RESOURCES AND REFERENCES YOU CAN USE FOR FURTHER READING.

YOU WILL BE ABLE TO FIND IT, STARTING THE FIRST WEEK OF MAY, ON OUR PROGRAM WEBSITE AT--

WWW.PHPPO.CDC.GOV/WEBCAST/STRESS-05.

IF YOU WOULD LIKE TO RECEIVE CONTINUING EDUCATION CREDIT YOU MUST REGISTER WITH THE CDC/ATSDR TRAINING AND CONTINUING EDUCATION ONLINE SYSTEM AT --

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WWW.PHPPO.CDC.GOV/PHTN.

ONLINE.

ONCE YOU HAVE REGISTERED, YOU MUST COMPLETE AN EVALUATION FOR THE ACTIVITY.

TO BEGIN OUR PRESENTATION, LET'S MEET THE MEMBERS OF OUR PANEL.
WE'RE FORTUNATE TO HAVE THESE PROFESSIONALS WITH US BECAUSE THEY REPRESENT A DEPTH OF REAL-LIFE EXPERIENCE, TRAINING AND KNOWLEDGE.

SO A LOT TO LOOK FORWARD TO TODAY.
FIRST, WE HAVE DR. PAMELA TUCKER, A PSYCHIATRIST FROM THE DIVISION OF TOXICOLOGY AND ENVIRONMENTAL MEDICINE, CDC/ATSDR.
HER SPECIALTY IS THE PSYCHOLOGICAL EFFECTS OF HAZARDOUS SUBSTANCES.
SHE ALSO WORKS WITH EPA'S PEER SUPPORT AND CRITICAL STRESS INCIDENT MANAGEMENT TEAM.
JOINING DR. TUCKER IS SCOTT WRIGHT, WHO IS AN EMERGENCY RESPONSE COORDINATOR, FOR THE DIVISION OF TOXICOLOGY AND ENVIRONMENTAL MEDICINE HERE AT CDC/ATSDR.
SCOTT IS RESPONSIBLE FOR IDENTIFYING, ASSESSING, AND MITIGATING HEALTH ISSUES RAISED DURING HAZARDOUS MATERIALS, OR HAZMAT INCIDENTS.

THE NEXT MEMBER OF OUR PANEL IS JIM MACDONALD, WHO IS AN ON-SCENE COORDINATOR WITH THE EMERGENCY RESPONSE BRANCH EPA, REGION 7.
JIM HAS WORKED AT RESPONSES SUCH AS THE DIOXIN CLEANUP IN TIMES BEACH, THE MIDWEST FLOODS OF '93, THE CAPITOL HILL ANTHRAX RESPONSE AND THE COLUMBIA SHUTTLE RESPONSE.
AND LAST, BUT CERTAINLY NOT LEAST, IS CHAD DONLEY, A FIREFIGHTER ENGINEER WHO WORKS WITH THE CITY OF MARIETTA, GEORGIA, FIRE DEPARTMENT.
AN IMPORTANT PART OF HIS JOB INVOLVES RESPONDING TO EMERGENCIES THROUGHOUT ATLANTA'S INTERSTATE CORRIDORS AND ITS URBAN ENVIRONMENT.

CHAD HAS ALSO PARTICIPATED IN THE CLEANUP OF MANY HAZMAT SPILLS.
WELCOME TO ALL OF YOU.
FIRST RESPONDERS TO A TRAUMATIC EVENT WORK UNDER, AS YOU WOULD IMAGINE, SOME INCREDIBLY STRESSFUL CONDITIONS.
WE'LL BEGIN BY HEARING FIRSTHAND ABOUT THE DIFFICULTIES AS WELL AS SOME OF THE REWARDS OF BEING A RESPONDER.
AND CHAD, CAN YOU SHARE FIRST OF ALL SOME OF YOUR EXPERIENCES?
>> SURE, I'D LOVE TO.
LIKE MOST EMS PROVIDERS, WE'VE ALL HAD ENOUGH EXPOSURE TO HUMAN SUFFERING TO LAST A LIFETIME.
OUR WORK INVOLVES LONG HOURS AND UNPREDICTABLE WORK DEMANDS.
AND YOU HAVE TO WORRY ABOUT EXPOSURE TO UNKNOWN RISKS AT THE SCENE LIKE UNIDENTIFIED CHEMICALS AT THE SITE.
WE WORRY ABOUT WHETHER WE ARE ADEQUATELY PREPARED FOR THE SITUATION AND CARRY THE BURDEN OF BEING THE EXPERT AND HAVING TO KNOW EVERYTHING WE NEED.
WE ALSO HAVE THE FEAR OF MAKING LIFE-THREATENING MISTAKES FOR PEOPLE WE SERVE AND EVEN OURSELVES.
AT TIMES, THERE IS A LACK OF RESOURCES AND THE RIGHT EQUIPMENT ON THE SCENE.
THOSE ARE SOME OF THE THINGS THAT CAN REALLY CAUSE STRESS.
BUT CERTAINLY MUST BE --
>> MUST BE SOME REWARDS INVOLVED.
>> SURE, THERE ARE.
>> WHAT ARE SOME OF THOSE REWARDS?
>> WELL, A STORY FRESH OFF WHEN I JUST BECAME A FIREFIGHTER, I WAS OUT AT A RESTAURANT WITH MY WIFE AND A GUY COMES UP TO ME AND SAYS, WELL, YOU'RE A FIREFRAN.
I'M GOING, YEAH.
WELL, DO YOU REMEMBER ME?
I'M GOING, NO.
HE SAYS, WELL, THANKSGIVING MORNING YOU WERE AT OUR HOUSE AND OUR LITTLE GIRL HAD A STOMACH ACH AND YOU SAID IT COULD BE POSSIBLY
APPENDICITIS.
THEY RUSHED HER TO THE HOSPITAL, AND IT RUPTURED RIGHT WHEN SHE GOT TO THE HOSPITAL.
>> OH, WOW.
>> AND I'M GOING, OKAY, I GUESS I REMEMBER THAT ONE.
AND MY WIFE WAS RELIEVED.
SHE GOES DOES THAT HAPPEN TO YOU ALL THE TIME?
I'M GOING, WHAT, SAVING PEOPLE OR HAVING PEOPLE THANK YOU FOR IT?
BECAUSE WE DO SAVE PEOPLE ON CALLS BECAUSE THAT'S -- WE'RE EMS PROVIDERS.
>> THAT'S WHAT YOU'RE CALLED TO DO.
AND AGAIN, THAT STRESS THAT'S RELATED TO THAT JOB.
>> ALL RIGHT.
NOW LET'S BEGIN THE FIRST SEGMENT OF THE PROGRAM.
AND WE WILL ANSWER THE QUESTION, "WHAT IS STRESS?"
THIS SEGMENT OF THE PROGRAM WILL PROVIDE A BRIEF INTRODUCTION TO PSYCHOLOGICAL STRESS AND ITS EFFECTS.
THE EDUCATIONAL OBJECTIVES ARE TO DESCRIBE PSYCHOLOGICAL STRESS, EXPLAIN THE COMMON CAUSES OF STRESS, AND DESCRIBE THE PHYSICAL HEALTH EFFECTS OF EXCESSIVE STRESS.
DR. TUCKER, COULD YOU BEGIN BY DISCUSSING THE COMPLEXITY OF PSYCHOLOGICAL STRESS?
>> THANK YOU.
CERTAINLY.
SINCE PSYCHOLOGICAL STRESS IS A COMPLEX CONCEPT, I WILL BE GIVING YOU A BRIEF OVERVIEW.
THERE ARE MANY DIFFERENT WAYS TO DEFINE STRESS.
BUT FOR ME THIS ONE IS THE BEST.
PSYCHOLOGICAL STRESS IS A NORMAL REACTION TO A THREAT OR TO A DISTURBING CHANGE IN THE ENVIRONMENT.
THERE ARE THINGS THAT CAUSE PSYCHOLOGICAL STRESS.
THE THINGS THAT CAUSE IT ARE THINGS LIKE OTHER PEOPLE, OUR OWN THOUGHTS AND EMOTIONS, OR PHYSICAL CHANGES IN THE ENVIRONMENT SUCH AS HEAT AND COLD.
WE ALL NEED SOME STRESS, OR CHANGE, TO KEEP US ALIVE, INTERESTED, AND GROWING.
THERE IS A SPECTRUM OF INTENSITY TO STRESS.
AT THE LOW END IS NO STRESS, OR BOREDOM.
DISTRESS IS WHAT WE FEEL WHEN IT'S GETTING MUCH HIGHER ON THE STRESS SCALE AND WE CAN'T COPE WITH OR RESPOND TO A CHANGE.
AT THE VERY FAR END OF THE SPECTRUM IS A HIGH-INTENSITY STRESS CALLED TRAUMATIC STRESS.
TRAUMATIC STRESS MAY OCCUR IN PEOPLE AFTER AN EXTREME EVENT LIKE A VIOLENT ASSAULT.
TRAUMATIC INCIDENTS CAN RESULT IN PHYSICAL INJURY, AND THEY CAN ALSO PRECIPITATE OR AGGRAVATE PSYCHOLOGICAL DISORDERS.
ALSO, LEVELS OF STRESS VARY BETWEEN DIFFERENT INDIVIDUALS.
WHAT CAUSES STRESS FOR ONE PERSON MAY NOT EVEN BOTHER ANOTHER.
THIS VARIABILITY IS EXPLAINED BY THE FACT THAT WHEN PEOPLE NOTICE A CHANGE IN THE ENVIRONMENT, ONE PERSON MAY PERCEIVE IT AS A THREAT AND SOME NOT.
THE THOUGHT, "IS THIS A THREAT OR NOT?"
DETERMINES WHETHER OR NOT STRESS OCCURS.
THE SECOND THOUGHT, "WHAT CAN I DO ABOUT IT?" DETERMINES HOW MUCH STRESS IS FELT.
PSYCHOLOGICAL STRESS PRODUCES BOTH PSYCHOLOGICAL AND PHYSICAL RESPONSES.
THE PERCEPTION OF THREAT CULMINATES IN THE BODY'S STRESS RESPONSE, OR AS IT'S KNOWN, THE FIGHT/FLIGHT OR FREEZE REACTION.
ALL ANIMALS HAVE THIS MECHANISM WHICH IS TIED TO SURVIVAL
IN BRIEF, THE STRESS RESPONSE IS A PRE-PROGRAMMED SET OF BODILY CHANGES WHICH AROUSE AND STRENGTHEN THE BODY SO WE CAN DEAL WITH THREATS. IT'S THE MASSIVE "AAHH" YOU FEEL WHEN YOU GET BAD NEWS. THE WAY PSYCHOLOGICAL STRESS WORKS IS BY SETTING OFF A CASCADE RESULTING IN CHANGES IN NEUROTRANSMITTER LEVELS IN THE BRAIN LEADING TO RELEASES OF CHEMICALS BY THE BODY LIKE EPINEPHRINE AND CORTISOL. TOGETHER, ALL THESE CHEMICALS SET OFF MANY PHYSICAL CHANGES IN THE BODY. FOR INSTANCE, ON HEARING AN ALARM, A FIRST RESPONDER ON A CALL COULD EXPERIENCE INCREASED HEART RATE AND RAPID BREATHING. ALSO, BLOOD IS BEING REDIRECTED AWAY FROM HIS STOMACH TO HIS LUNG -- LEG AND ARM MUSCLES. THE EFFECTS OF THE STRESS RESPONSE COULD CAUSE INDIGESTION AND A POUNDING HEART, BUT ALSO BRING ABOUT A GENERAL INCREASE IN PHYSICAL ENERGY AND STRENGTH, INCREASED MENTAL ALERTNESS, AND SHARPER SENSES. IN THE ABSENCE OF A CONTINUED THREAT, THE BODY RELAXES AND GOES BACK TO ITS NORMAL STATE OF TENSION. SMALL DOSES OF DAILY STRESS ARE NOT UNHEALTHY AT ALL. STRESS IS PART OF LIFE, AND OUR BODIES ARE ADAPTED TO IT. OF COURSE, SOMETIMES ESPECIALLY FOR FIRST RESPONDERS, THE DOWN TIME FOR RECOVERY MAY NOT COME AND THE ON/OFF SWITCH FOR THE STRESS RESPONSE CAN GET STUCK IN THE "ON" POSITION. THIS BRINGS UP THE FACT THAT THE FIRST RESPONDER FACES A BLEND OF BOTH SHORT AND LONG-TERM STRESS. IN THE CLASSIC DEFINITION A SHORT-TERM, OR ACUTE, STRESS IS WHAT HAPPENS WHEN WE MUST RESPOND IMMEDIATELY TO A THREATENING SITUATION LIKE A NEAR MISS IN TRAFFIC. OR FOR THE FIRST RESPONDER, THERE ARE SHORT-TERM DANGERS FACED IN THE FIELD DURING A CALL LIKE AN EXPLODING BUMPER ON A MOTOR VEHICLE ACCIDENT OR TRYING TO DEAL WITH A HOT, ANGRY RESIDENT TRYING TO GET BACK INTO THEIR NEIGHBORHOOD DURING A FIRE. ON SCENE, THE STRESS AND THE RESPONSE ARE CLOSELY LINKED IN TIME. HOWEVER, AS PEOPLE WE ALL FACE LONG-TERM, OR CUMULATIVE STRESS. THIS TYPE OF STRESS IS STRESS THAT OCCURS OVER A LONG PERIOD OF TIME AND IS A RESULT OF SITUATIONS THAT DO NOT PRESENT AN EASY OR QUICK SOLUTION LIKE THE EVERYDAY EVENTS OF MODERN LIFE -- THINGS LIKE OVERDUE BILLS, AN UNDEPENDABLE CAR, OR TROUBLES AT HOME. ALSO, YOU CAN HAVE VERY INTENSE LONG-TERM STRESS CALLED ADVERSY. THIS IS THINGS LIKE ILLNESSES OR DEATHS IN THE FAMILY. WHAT FIRST RESPONDERS HAVE TOLD ME, IS THAT WHAT WEARS THEM OUT IS BEING UNDER A LOT OF STRESS FOR A LONG PERIOD OF TIME. AND THEY'RE RIGHT BECAUSE CARRYING A HEAVY BURDEN OF LONG-TERM STRESS TENDS TO HAVE WORSE EFFECTS ON HEALTH THAN JUST THE OCCASIONAL SHORT BURST OF STRESS. NOW, LET'S LOOK AT HOW STRESS AFFECTS OUR PHYSICAL HEALTH. THE FIRST THING WE NEED TO DO IS TALK ABOUT THE IMMEDIATE BODILY CHANGES THAT OCCUR WHEN WE FEEL THREATENED. THE STRESS RESPONSE CAN LEAD TO SOME PHYSICAL SYMPTOMS THAT CAN MAKE LIFE UNPLEASANT FOR FIRST RESPONDERS SUCH AS NAUSEA AND TROUBLE DIGESTING THAT BIG MEAL YOU MAY HAVE EATEN BEFORE THE CALL, A RACING HEART WITH PALPITATIONS, PROFUSE SWEATING, RAPID BREATHING, DIZZINESS, MUSCLE TREMORS, AND SENSORY CHANGES. OBJECTS CAN SEEM UNUSUALLY CLEAR NEARBY OR, CONVERSELY, OBJECTS CAN SEEM UNREAL OR DIM. DURING THE STRESS RESPONSE, THE LEVELS OF CERTAIN NERVE TRANSMITTERS SHIFT IN THE BRAIN. THIS CAN LEAD TO PSYCHOLOGICAL AND EMOTIONAL CHANGES UNDER STRESS SUCH AS FEAR, ANXIETY, ANGER.
YOU CAN BECOME TENSE.
YOU CAN BECOME INCREASINGLY IRRITABLE OR JITTERY AND JUMPY OR
OTHERS FEEL SORROW AND ANGUISH UNDER STRESS.
PLUS WHEN THERE'S EXTREME STRESS YOU CAN FEEL LIKE YOU'RE LOSING
CONTROL, WORRY ABOUT BEING CRITICIZED, OR FEEL LIKE YOU'RE GOING MAD.
SERIOUSLY, UNDER EXTREME STRESS, FEAR LEADS TO INDELIBLE MEMORIES
BEING LAID DOWN.
YOU DON'T FORGET WHAT FEAR TEACHES YOU.
THESE FEAR-LADEN MEMORIES ARE THE FLASHBACKS OF PTSD.
DURING THE AROUSED STATE OF THE STRESS RESPONSE, THE INCREASED
PSYCHOLOGICAL TENSION, PHYSICAL ENERGY, AND INCREASED MUSCULAR
STRENGTH CAN LEAD TO SOME CHANGED BEHAVIORS SUCH AS PACING TO
RELIEVE TENSION, IMPULSIVENESS, FEELING KEYED UP AND ARGUING WITH
PEOPLE, HAVING DIFFICULTY SPEAKING, ALL THE WAY TO INCOHERENT.
SOME PEOPLE BECOME CLUMSY AND HAVE IMPAIRED COORDINATION, OR SOME
PEOPLE BECOME VERY PHYSICALLY RESTLESS.
YOU CAN ALSO SUFFER FROM HYPERVENTILATION.
AND THE SIGNS OF HYPERVENTILATION SUCH AS SHORTNESS OF BREATH
AND DIZZINESS MIMIC THOSE OF MORE SERIOUS DISORDERS SUCH AS
CARDIAC, RESPIRATORY, OR NEUROLOGICAL PROBLEMS.
IN RARE instances, THE MOST EXTREME REACTION IS TO FREEZE UP.
FREEZE REACTIONS TEND TO OCCUR MORE OFTEN AMONG YOUNG CHILDREN.
BUT THEY CAN OCCUR IN ADULTS, ESPECIALLY DURING COMBAT.
LET'S LOOK AT WHAT HAPPENS TO THE MIND UNDER STRESS.
MENTAL SHIFTS OCCUR UNDER STRESS.
YOUR SENSES BECOME MUCH SHARPER WHEN YOU'RE STRESSED OUT.
AND ALSO UNDER STRESS YOU'LL FIND YOU CAN BECOME FORGETFUL.
IT BECOMES MUCH HARDER TO CONCENTRATE.
YOUR THINKING MAY SLOW DOWN AND YOU'LL PROBABLY EXPERIENCE
DIFFICULTY IN THINKING REALLY LONG, ANALYTICAL THOUGHTS.
YOU CAN GET CONFUSED, AND YOU MAY HAVE TROUBLE MAKING DECISIONS.
ADDITIONALLY, FEAR-RELATED CHANGES CAN CAUSE EVERYDAY FACTS TO
SLIP AWAY.
YOU CAN BECOME MORE VIGILANT AND DISTRACTIBLE.
AND THERE TENDS TO BE A LOSS OF OBJECTIVITY AND PERSPECTIVE.
ALSO UNDER STRESS PEOPLE TEND TO USE MORE EMOTIONAL GUT THINKING
RATHER THAN RATIONAL, LOGICAL THOUGHT.
THEREFORE, WHEN PEOPLE ARE ACUTELY STRESSED OUT THEY TEND TO ACT
AUTOMATICALLY BASED ON PAST MEMORIES.
THIS IS GOOD FOR IF YOU'VE BEEN WELL TRAINED YOU WILL DEFAULT TO
WHAT YOU'VE BEEN TRAINED TO DO.
NOW, LET'S SWITCH GEARS AND TALK ABOUT HOW TO TURN OFF THE STRESS
RESPONSE AND RETURN TO A CALM STATE.
DR. HERBERT BENSON NAMED THIS CALMING PHYSICAL REACTION THE
RELAXATION RESPONSE.
IT IS OUR "OFF SWITCH."
DURING THE RELAXATION RESPONSE AS WE RECOVER FROM THE STRESS OF
THE DAY, OUR BLOOD PRESSURE GOES DOWN, OUR HEART WILL SLOW TO A
NORMAL RATE, WE'LL STOP BREATHING SO FAST, AND WE WILL CALM DOWN
EMOTIONALLY.
THE RELAXATION RESPONSE IS WHY A NORMAL LOAD OF DAILY STRESS DOES
NOT AFFECT OUR HEALTH, FOR IT HELPS US TO RECOVER.
BUT, PEOPLE WHO SUFFER FROM CHRONIC STRESS THAT IS NOT RELIEVED
BY PERIODS OF RELAXATION ARE MORE AT RISK FOR NEGATIVE EFFECTS ON
THEIR HEALTH THAN SOMEONE WHO SUFFERS AN ISOLATED EPISODE OF EVEN
INTENSE STRESS AND HAS TIME TO RECOVER.
CHRONIC STRESS IS A KNOWN RISK AND CONTRIBUTING FACTOR TO MANY
PHYSICAL DISEASES.
WHY IS THIS?
LONG-TERM STRESS RESULTS IN CHRONIC, DAY-TO-DAY ACTIVATION OF THE
STRESS RESPONSE.
OVER TIME THIS CHRONIC AROUSAL OF THE BODY KNOCKS THE BODY'S SYSTEMS OUT OF BALANCE.
HOWEREVER, USUALLY STRESS BY ITSELF, IS NOT ENOUGH TO CAUSE DISEASE.
LET'S LOOK AT AN EXAMPLE.
AN ACUTE STRESSOR LIKE AN ARGUMENT CAN TRIGGER A HEART ATTACK IN SOMEONE WHO'S PREDISPOSED TO HEART DISEASE.
BUT RESEARCHERS BELIEVE THAT'S IT'S THE CHRONIC EVERYDAY STRESS OVER THE YEARS THAT LED TO THE CORONARY ARTERY BLOCKAGES.
STRESS-RELATED CHEMICALS, SUCH AS EPINEPHRINE, WHICH IS LIKE ADRENALINE, CAN ALSO IRRITATE THE TISSUES THAT CARRY THE HEART'S ELECTRICAL ACTIVITY AND CAN CAUSE IRREGULAR HEARTBEATS IN PEOPLE WITH UNDERLYING HEART DISEASE.
ALTHOUGH HYPERTENSION HAS OTHER RISK FACTORS, CHRONIC STRESS IS ONE AND CAN CONTRIBUTE TO HYPERTENSION IN PEOPLE WHO HAVE THE RIGHT GENETIC PREDISPOSITION.
THE RISK OF INFECTION IS HIGHER WHEN A PERSON IS SUFFERING FROM CHRONIC STRESS BECAUSE THE STRESS-RELATED INCREASE OF THE CORTISOL HORMONE SUPPRESSES THEIR IMMUNE SYSTEM.
IF YOU SUFFER FROM AUTOIMMUNE DISORDERS, LIKE RHEUMATOID ARTHRITIS, IT WILL TEND TO FLARE UP DURING STRESSFUL PERIODS.
FINALLY, THE GASTROINTESTINAL SYSTEM IS NOT IMMUNE TO THE EFFECTS OF CHRONIC STRESS EITHER AND A DISORDER CALLED IRRITABLE BOWEL SYNDROME IS RELATED TO PSYCHOLOGICAL STRESS.
CUMULATIVE STRESS IS WHAT HAPPENS TO FIRST RESPONDERS WHO MUST TAKE EMERGENCY CALLS DAY IN AND DAY OUT.
THEY DON'T NECESSARILY ALWAYS HAVE TIME TO RECOVER, AND ACCORDING TO WHAT I HEAR THEY CAN LOSE THEIR ON/OFF SWITCH ALTOGETHER THROUGH CHRONIC STRESS AND PHYSICAL FATIGUE.
SO WHAT CAN THE FIRST RESPONDER DO?
HOW DO THEY CONTROL STRESS?
KNOW FIRST, WE ARE NOT HELPLESS AGAINST THE EFFECTS OF STRESS.
THERE ARE WAYS TO TURN OFF THE STRESS RESPONSE AND TURN ON THE CALMING RELAXATION RESPONSE.
WE WILL BE LEARNING WAYS TO TURN ON THE RELAXATION RESPONSE LATER IN THE PROGRAM.
SECOND, REMEMBER, WE ALL POSSESS INNATE STRESS BUFFERS.
THESE BUFFERS CAN PREVENT AHEAD OF TIME THE NEGATIVE EFFECTS OF STRESS.
RIGHT NOW WE'LL LEARN WAYS TO STRENGTHEN OUR INNATE PREVENTION FACTORS.
OUR NUMBER ONE STRESS BUFFER IS, COPING SKILLS.
COPING SKILLS ARE AUTOMATIC MENTAL WAYS IN WHICH WE DEAL WITH STRESS.
OUR COPING STYLES COLOR THE WAY WE THINK AND THEREFORE FEEL ABOUT A SITUATION.
HERE ARE THE THREE MAIN COPING STYLES.
SOME TYPES OF STYLES ARE GOING TO AUTOMATICALLY FIT A CERTAIN SITUATION BETTER THAN OTHERS.
THE FIRST COPING TYPE IS CALLED APPRAISAL FOCUSED COPING, MEANING PEOPLE WHO SEEK AND INTERPRET THE MEANING IN EVENTS.
AT BEST THIS COPING INVOLVES THE USE OF LOGICAL ANALYSIS AND MENTAL PREPARATION.
AT ITS WORST, THIS TYPE OF COPING CAN RESULT IN DENIAL OR, IF YOU'RE THINKING WRONG, NOT THINKING ABOUT THE THINGS YOU NEED TO.
THE SECOND TYPE OF COPING IS PROBLEM-FOCUSED COPING, FINDING PRACTICAL SOLUTIONS TO PROBLEMS.
AT BEST THIS TYPE OF COPING INVOLVES LOOKING FOR INFORMATION IN ORDER TO SOLVE PROBLEMS AND THEN TAKING ACTION.
THIS WAY DOESN'T WORK WELL, AND IN FACT MAY CAUSE FRUSTRATION IF APPLIED TO CHRONIC, NOT EASILY SOLVED PROBLEMS LIKE IN RELATIONSHIPS.
THE THIRD TYPE OF COPING IS EMOTION-FOCUSED COPING, MEANING TO
REGULATE YOUR EMOTION UNDER SITUATIONS.

At best, this works to control emotions under stress so you don't get into arguments.

At worst, it leads to resigned acceptance instead of trying to take action and change something that can't be changed. Everyone has their automatic coping style.

First responders tend to cope by seeking to understand situations, gaining mastery through individual action and by seeking meaning in situations.

It's important to know that keeping skills can be learned and they are taught by counselors and psychologists.

Therefore, if you think about it and you find you tend to use just one kind, you can learn others and therefore come up with a more flexible coping strategy.

The second innate stress buffer is psychological resilience.

Resilience is the universal human capacity to face, overcome and even be strengthened by experiences of adversity.

Resilience is related to hardiness to stress.

This is inborn.

How we respond to stress is partly rooted in our personalities.

There are people who have naturally hardy personalities.

They tend to engage the world in very positive ways.

They feel like they have the ability to influence the outcome of events.

And they tend to see crises and challenges as opportunities for growth.

It is currently believed that skills that lead to increased resilience can be taught.

And we have resources in our book about it.

The third stress buffer is social support.

On both an individual and group level, social support forms an important protection from stress for both adults and children.

There are many different studies that show social support actually reduces health risks and that being socially isolated is a risk factor for the development of some diseases.

There are many theories as to why social support is so important. Some say it is simply because people give practical, problem-solving assistance.

But yet they've done studies where they've actually factored out personal resources and interpersonal health and they've found that emotional support alone has a very moderating effect on stress and a positive effect on human health.

So be sure to seek out your friends during stressful times.

And don't forget to do that, because we tend to.

The fourth and final stress buffer is self-care strategies such as exercise and good diet and adequate sleep.

It's been found the physically harmful effects of chronic stress can be reduced by moderate exercise.

A balanced diet helps keep stress from becoming distress.

Our diet affects our blood chemistry, weight, energy levels and reserves. So remember, even though it seems simple, you can fight stress by doing such things as eating right, sleeping, and exercising.

Although obviously for the first responder you can only do this when you can.

>> Thank you, Pam.

Some excellent information that you've imparted to us.

Now we'll begin the second segment of our program, covering specific stressors that first responders may experience during and after a disaster response.

We will also examine special stressors that occur in different types of disasters such as technological disasters and terrorism.

This part of the program will involve a panel discussion with all
BY THE END OF THIS SEGMENT, YOU WILL BE ABLE TO DESCRIBE THE CAUSES OF STRESS IN FIRST RESPONDERS DURING A DISASTER RESPONSE. AND AGAIN, PAM, IF YOU COULD KIND OF GET US STARTED. >> OF COURSE.

ALL STRESS, WHETHER IT IS PHYSICAL LIKE HEAT OR PSYCHOLOGICAL LIKE EMOTION, ENTERS A COMMON BIOCHEMICAL PATHWAY IN THE BODY. THEREFORE, PHYSICAL AND MENTAL STRESSES INTERACT TO TAKE A TOLL ON A RESPONDER. EACH KIND OF STRESS, MENTAL AND PHYSICAL, ADDS ON TO THE OTHER, AND THIS RESULTS IN A THRESHOLD EFFECT WHEN YOU GET TO THE POINT WHERE THE PHYSICAL AND PSYCHOLOGICAL STRESSORS COMBINE TO DEGRADE RESPONDER ALERTNESS AND STRENGTH. OBVIOUSLY, THIS IMPACTS HEALTH AND SAFETY. LEARNING HOW TO DEAL WITH ALL RESPONDER STRESSORS WILL HELP RESPONDERS AND THEIR SUPERVISORS SAFELY MANAGE A RESPONSE. WE ARE GOING TO BRIEFLY TALK ABOUT ALL THE STRESSES, PHYSICAL, EMOTIONAL, AND MENTAL THAT FACE FIRST RESPONDERS OUT IN THE FIELD. THE KEY HERE IS TO THINK ABOUT ALL THE DIFFERENT TYPES OF STRESS AND DO A STRESS "AUDIT" ON YOURSELF. THIS TAKES INTO ACCOUNT ALL THE STRESSES THAT AFFECT YOU DURING A RESPONSE. ONCE YOU'RE AWARE OF THAT, THEN YOU CAN DEVELOP A STRATEGY TO REDUCE THE ONES THAT YOU CAN CONTROL. THIS IS AT LEAST ONE TIP TO BEGIN TO GET A HANDLE ON YOUR STRESS LOAD SO YOU DON'T GO OVER THAT CRITICAL THRESHOLD WHERE YOUR ABILITY TO FUNCTION STARTS TO FADE.

LET'S START BY TALKING ABOUT THE PHYSICAL STRESSORS THAT HAPPEN DURING A RESPONSE. SCOTT-L YOU DESCRIBE SOME OF THE PHYSICAL CHALLENGES YOU'VE ENCOUNTERED?

>> SURE, PAM.

HAVING LIVED AND WORKED RESPECTIVELY, BOTH IN THE SOUTHWEST U.S. AND CURRENTLY IN THE SOUTHEAST UNITED STATES, THIS BRINGS HOME A SPECIFIC STRESS-INDUCED SITUATION. THAT IS, WEARING PERSONAL PROTECTIVE EQUIPMENT, OR PPE, IN A HOT OR HUMID ENVIRONMENT. WHAT MANY PEOPLE DO NOT REALIZE IS THAT AT TEMPERATURES OVER JUST 80 DEGREES FAHRENHEIT.

IF YOU ARE IN CHEMICAL PROTECTIVE CLOTHING (CPC) SUCH AS TYVEK, EITHER COATED OR UNCOATED, YOUR BODY WILL QUICKLY OVERHEAT UNDER THAT GARMENT.

ADD TO THAT YOUR RESPIRATORY PROTECTIVE EQUIPMENT, SUCH AS AN AIR PURIFYING RESPIRATOR OR A 35-POUND AIR PACK, AND YOUR WORK HABITS AT THE INCIDENT ARE SEVERELY CURTAILED.

BY THIS, I MEAN SHORTER WORK PERIODS OR STARTING WORK EARLIER AND THE LOGISTICS OF STAYING PROPERLY HYDRATED.

>> YES, SCOTT, I AGREE.

HEAT CAN BE A MASSIVE STRESS ON SOME RESPONSES. ESPECIALLY WITH THE PPE. WORKING IN A HOT ENVIRONMENT, ESPECIALLY IN PERSONAL PROTECTIVE EQUIPMENT, OR PPE, CAN PUT RESPONDERS AT RISK FOR HEAT-RELATED DISORDERS.

THEREFORE, ALL RESPONDERS SHOULD BE FAMILIAR WITH THE SIGNS AND SYMPTOMS OF HEAT EXHAUSTION AND HEAT STROKE, WHICH IS THE MOST SERIOUS OF THE HEAT-RELATED ILLNESSES. SYMPTOMS OF HEAT EXHAUSTION INCLUDE HEAVY SWEATING, MUSCLE CRAMPS, FATIGUE, WEAKNESS, PALINESS, COLD OR CLAMMY SKIN, PEOPLE GET DIZZY AND HEADACHE, AND TOWARD THE END OF IT YOU CAN EVEN HAVE VOMITING, NAUSEA, AND FAINTING.

IF IT'S NOT RECOGNIZED ON SITE, AND IT SHOULD BE BY A HEALTH AND
SAFETY OFFICER, AND IT'S NOT TREATED, HEAT EXHAUSTION CAN PROGRESS TO THE MORE SERIOUS HEATSTROKE. HEATSTROKE INCLUDES THE INABILITY TO COOL DOWN BECAUSE YOU STOP SWEATING, RESULTING IN DANGEROUSLY HIGH BODY TEMPERATURES -- AN ORAL TEMPERATURE MORE THAN 103 DEGREES. OTHER SYMPTOMS INCLUDE RED, HOT, DRY SKIN, A RAPID PULSE, YOU GET A VERY BAD THROBBING HEADACHE, AGAIN, DIZZINESS AND NAUSEA, AND YOU GET MENTAL CHANGES STARTING WITH CONFUSION AND PROGRESSING ON INTO DISORIENTATION AND EVEN COMA. THE ONSET OF HEAT EXHAUSTION AND ESPECIALLY HEAT-STROKE ARE MEDICAL EMERGENCIES. ANOTHER MEDICAL EMERGENCY IS HEAT SYNCOPE OR FAINTING THAT LASTS LONGER THAN ONE MINUTE FROM THE HEAT, WITH SIGNS OF MENTAL CHANGES. THIS ALSO NEEDS INTERVENTION. THESE SIGNS AND SYMPTOMS ARE IMPORTANT TO KNOW WHILE YOU'RE OUT IN THE FIELD BECAUSE MENTAL CHANGES SUCH AS DISORIENTATION AND CONFUSION IN A RESPONDER IS NOT NECESSARILY A SIGN OF PSYCHOLOGICAL DISTRESS IF THEY'RE OUT IN PPE BUT IT MAY BE A SIGN OF PHYSICAL DISTRESS.

JIM, WILL YOU TELL US HOW WEATHER AFFECTS A RESPONSE?

>> SURE, PAM, I'D BE GLAD TO.

SOMETIMES THERE'S BAD WEATHER AT SITES, SPECIFICALLY COLD. WHEN IT'S COLD DURING A RESPONSE, YOU ARE FORCED TO WEAR WARMER, BULKIER CLOTHES AND HAVE SHORT WORK PERIODS SO YOU CAN COME IN AND WARM UP.

WATER FREEZES DURING DECON, EQUIPMENT WON'T START OR IT MALFUNCTIONS, THE WHOLE PROCESS SLOWS DOWN.

>> YEAH, JIM, I KNOW FROM PERSONAL EXPERIENCE IT'S REALLY AMAZING HOW QUICKLY COLD AIR AND WATER CAN COMBINE TO KNOCK DOWN EVEN YOUNG AND STURDY RESPONDERS.

HYPOTHERMIA MAY OCCUR DURING COLD WEATHER DUE TO A COMBINATION OF RISK FACTORS THAT INCLUDE AIR OR WATER TEMPERATURE OR BOTH, WIND, DURATION OF EXPOSURE, CLOTHING, AND THE AGE AND HEALTH OF THE PERSON. REMEMBER, HYPOTHERMIA DEVELOPS SLOWLY AND SUBLTLY. SOME OF ITS WARNING SIGNS, THOUGH, INCLUDE AT FIRST UNCONTROLLABLE SHIVERING AND THEN MENTAL DULLNESS. THEN IN ITS LATER STAGES YOU STOP SHIVERING, YOU LOSE THE ABILITY TO WARM YOURSELF. YOU GET DROWSY.

YOU SUFFER SLURRED S LETHARGY, PUDDY FACE AND COOL SKIN. ANYONE SUSPECTED OF BEING HYPOTHERMIC NEEDS TO BE PULLED OFF THE RESPONSE AND CHECKED OUT MEDICALLY.

JIM, DO YOU HAVE ANYTHING TO ADD ABOUT WORKING IN EXTREME WEATHER CONDITIONS?

>> DURING HEAT OR COLD, WORKING ON-SITE REQUIRES DRINKING FLUIDS. AT TIMES, YOU EVEN NEED TO MEASURE THE AMOUNTS TAKEN IN. DURING THOSE SPECIAL WEATHER CONDITIONS, WE WORK ON A ROTATION BASIS, ONE HOUR OR 30-MINUTE SHIFTS, AND THEN COME IN AND START TAKING FLUIDS, WHETHER THIRSTY OR NOT.

SOMETIMES, IF YOU WAIT TO DRINK TILL YOU'RE THIRSTY, IT MAY BE TOO LATE.

>> THANKS, JIM.

HERE ARE SOME OTHER TIPS ABOUT HOW TO STAY HYDRATED.

IN ADDITION TO ENOUGH FLUID, YOU SHOULD AVOID TOO MUCH CAFFEINATED BEVERAGES BEFORE, DURING, AND AFTER A RESPONSE. I KNOW THIS IS DIFFICULT. BUT WHY?

WELL, BECAUSE DRINKS WITH CAFFEINE RESULT IN A DIURETIC EFFECT. YOU DRINK TOO MANY OF THEM AND MORE FLUID IS LOST IN URINE THAN IS TAKEN IN FROM WHAT YOU'RE DRINKING. THESE DRINKS DEPLETE BODY FLUID VOLUME IF THEY ARE THE ONLY ONES
CONSUMED BEFORE, DURING, OR AFTER A RESPONSE. YOU ALSO WANT TO THINK ABOUT THE BALANCE OF WHAT YOU'RE DRINKING AND MAINTAIN A PROPER ELECTROLYTE BALANCE. YOU SHOULD DRINK ONE HALF WATER AND ONE HALF SPORTS DRINK ON SITE DURING RESPONSES. DON'T DRINK JUST ONE OR THE OTHER.

REMEMBER, WHEN DEHYDRATION GETS SERIOUS, EXTREME FATIGUE IS A PROMINENT SYSTEM, AND IT ACTUALLY CAN LEAD TO EARLY SIGNS OF HEAT EXHAUSTION.

JIM, HOW MUCH SLEEP DO YOU GET WHEN YOU ARE OUT IN THE FIELD ON A RESPONSE? HOW MUCH SLEEP YOU GET ON A RESPONSE DEPENDS ON A NUMBER OF FACTORS. IT DEPENDS ON WHAT IS YOUR ROLE? IF IT'S A PROMINENT ROLE LIKE INCIDENT COMMANDER OR HEALTH AND SAFETY OFFICER, YOU'RE NOT GOING TO BE ABLE TO AT FIRST GET AWAY FOR A BREAK OR GET ANY SLEEP. ALSO, YOU'VE GOT TO THINK ABOUT HOW LONG THE RESPONSE MIGHT LAST. IF IT'S GOING TO BE A LONG RESPONSE, YOU NEED TO THINK OF THE LONG TERM AND NOT GET TOO FAR BEHIND ON YOUR SLEEP. IN A SHORT-TERM RESPONSE, YOU MAY STAY UP THE NIGHT.

ADEQUATE SLEEP IS A VERY IMPORTANT WAY OF COPING WITH STRESS. IT'S ONE WE DON'T THINK ABOUT. SLEEP IS PART OF THE BODY'S NATURAL RHYTHM. CIRCADIAN RHYTHMS ARE THE 24-HOUR CYCLES OF WAKE AND SLEEP THAT CONTROL YOUR HORMONE SECRETION AND EVEN YOUR NEUROTRANSMITTER FLUCTUATIONS. THEY ARE LINKED TO THE LIGHT-DARK CYCLES OF THE SUN. WHEN SLEEP IS DISRUPTED, THE BODY'S BALANCE IS DISTURBED AND MENTAL AND PHYSICAL EFFECTS OCCUR. PRACTICALLY, WHAT LACK OF SLEEP DOES TO PEOPLE HAS BEEN SHOWN IN RECENT STUDIES OF EMERGENCY ROOM PHYSICIANS. THEY DISCOVERED AFTER CHRONIC SESSIONS OF LONG HOURS SUCH AS 36 OR MORE DURING TRAINING PHYSICIANS LOST THEIR ABILITY TO LEARN NEW INFORMATION AND WERE SLOWER TO PERFORM PROCEDURES SUCH AS INTUBATION. HOWEVER, THEY STILL MADE GOOD DECISIONS, BUT IT WAS BASED ON WHAT THEY ALREADY KNEW AND WHAT THEY WERE ALREADY ABLE TO DO. IRONICALLY ENOUGH, WHAT THIS MEANS, LACK OF SLEEP FOR THE FIRST RESPONDER, IS THAT YOU MAY BE MAKING REASONABLY GOOD DECISIONS AFTER 24 HOURS ON CALL AND THIS IS BASED ON YOUR PAST KNOWLEDGE AND SKILLS. BUT IRONICALLY, YOU'RE MORE AT RISK WHEN YOU MAY BE DRIVING HOME FROM A RESPONSE BECAUSE OF YOUR PHYSICALLY SLOWER REACTION TIME AND POTENTIAL TO FALL ASLEEP AT THE WHEEL.

NOW THAT WE'VE TALKED ABOUT HEAT, COLD, AND OTHER PHYSICAL STRESSES, LET'S SHIFT OUR FOCUS TO TALKING ABOUT THE MENTAL STRESSES THAT IMPACT THE FIRST RESPONDER. HOW DOES INFORMATION CREATE STRESS IN THE FIELD? JIM, YOU WANT TO COMMENT FIRST?

THE LACK OF INFORMATION OR DATA THAT HAS NOT BEEN VERIFIED CAN LEAD TO POOR DECISIONS. ALSO, DURING A RESPONSE, DEMAND FOR INFORMATION IS HIGH, ALL THE WAY UP THE CHAIN OF COMMAND. ANOTHER PROBLEM IS THE PRESS WANTING INFORMATION PRIOR TO QUALITY CONTROL OR WANTING ACCESS TO AN UNSAFE SITE TO GET THEIR STORY.
EVERYBODY ON THE JOB IN THE EMS HAS DECISIONS THAT NEED TO BE MADE QUICKLY WHEN CURRENT INFORMATION JUST ISN'T PERFECT.

>> CHAD, WHAT HAS BEEN YOUR EXPERIENCE WITH SOME OF THOSE ORGANIZATIONAL DEMANDS WHILE YOU'RE ON THE RESPONSE?

>> THESE DAYS THE MAIN STRESS FOR US IS DURING THE FIELD CALL. WE ARE DOING MORE COMPLEX CALLS WITH FEWER RESOURCES AND PERSONNEL.

TO PULL UP TO AN APARTMENT FIRE WHERE THE FLAMES ARE SHOWING AND YOU HAVE AN OFFICER -- YOU ONLY HAVE YOU AND AN OFFICER ON THE ENGINE, THERE CAN BE 100 THINGS THAT NEED TO BE DONE, FOR EXAMPLE, RESCUING A SCREAMING PERSON FROM A TWO-STORY BUILDING WHILE KEEPING THE FLAMES BACK.

WITH ALL THIS AND VERY LITTLE SLEEP BECAUSE YOU HAVE SO MANY MORE CALLS, YOU WORRY ABOUT BEING THE LEAST BIT IMPAIRED.

AND WITH ALL THE SHEER VOLUME OF CALLS, I MEAN, IT'S LIKE THE NEXT CALL COULD BE ON THE INTERSTATE WHERE IT'S BOXES OF -- A MIXTURE OF CHEMICALS AND MULTIPLE VICTIMS.

>> SCOTT, DO YOU HAVE ANY COMMENTS REGARDING ORGANIZATIONAL DEMANDS?

>> YES.

TYPICALLY, ON OUR RESPONSES THE TECHNICAL AND/OR SCIENTIFIC ISSUES ARE THE EASIEST TO DEAL WITH.

ITS ORGANIZATION DEMANDS THAT TAKE TIME.

FROM A FEDERAL STANDPOINT, TRYING TO JUGGLE ALL THE VARIED CONCERNS THAT THE DIFFERENT PROGRAM AREAS AT CDC/ATSDR CAN BE INTERESTING.

 THESE DIFFERENT PROGRAM AREAS RUN THE SPECTRUM FROM COMMUNITY CONCERNS TO HEALTH PROFESSIONAL CONCERNS TO MEDIA TO CONGRESSIONAL INQUIRIES TO CONCERNS FROM PUBLIC HEALTH PERSONNEL LIKE EPIDEMIOLOGISTS.

WE HAVE TO KEEP THE POLITICIANS AND MEDIA UPDATED, AS WELL AS DEALING WITH CONCERNS FROM OUR SENIOR MANAGEMENT.

HANDLING ALL THESE CONCERNS CAN BE TIME CONSUMING AND TAKE THE RESPONDERS AWAY FROM THE MITIGATIVE EFFORT REQUIRED TO SOLVE THE INCIDENT THAT WE'RE OUT ON.

>> CERTAINLY A LOT TO THINK ABOUT, HUH, SCOTT?

>> YES, THERE IS.

>> PAM, ANY COMMENTS FROM YOU ON ORGANIZATIONAL DEMANDS?

>> JUST REAL QUICK, MOST EMERGENCY RESPONDERS ARE BEING TRAINED IN INCIDENT COMMAND SYSTEM, WHICH IS A STANDARDIZED EMERGENCY RESPONSE ORGANIZATION STRUCTURE.

HOWEVER, AS WE HEAR FROM JIM, ICS CAN HAVE ITS PROBLEMS.

>> POOR COMMUNICATION AND COORDINATION BETWEEN ALL RESPONSE PERSONNEL CAN BE VERY DANGEROUS.

WHAT I MEAN IS, IT RAISES THE STRESS.

WHEN THE DANGER GOES UP, THE STRESS GOES UP.

>> ONE THING THAT'S BEEN FOUND AS A USEFUL TOOL TO COPE WITH BOTH INFORMATION PROBLEMS AND ORGANIZATIONAL DEMANDS IS TO GIVE A SHORT PREBRIEFING TO ALL RESPONDERS BEFORE THEY GO ON SITE EVERY DAY.

THE PREBRIEFING SHOULD INCLUDE INFORMATION ABOUT ON-SITE CONDITIONS, ANY SPECIFIC SAFETY WARNINGS, AND ASSIGNING OF JOB DUTIES AND ISSUANCE OF WORKING EQUIPMENT.

A LITTLE INFORMATION AND CLARIFICATION OF THE ROLE OF THE RESPONDER WILL GO A LONG WAY IN REDUCING ON-SITE JOB STRESS.

 IT'S ALSO BEEN SUGGESTED IT'S GOOD TO HAVE A SHORT DEBRIEFING AT THE END OF THE SHIFT.

IT DOESN'T NEED TO BE FORMAL, BUT IT HELPS TO TALK TO SOMEONE ELSE ABOUT WHAT HAPPENED ON SITE AND SEE IF THERE ARE ANY COMMON EXPERIENCES THAT HAPPENED DURING THE INCIDENT.

>> ALL OF THIS OF COURSE VERY INTERESTING.

BUT WHAT HAPPENS WHEN IT'S --
WHEN IT CHANGES FROM A DISASTER RESPONSE, OR WHEN IT IS, RATHER THAN JUST A SIMPLE ROUTINE EMERGENCY CALL?
>> WELL, KYSA, DISASTERS ARE NOT JUST BIG EMERGENCY CALLS. THEY'RE REALLY DIFFERENT, NEW SITUATIONS, AND DISASTERS PRESENT UNEXPECTED STRESSES, WHICH EMERGENCY RESPONDERS MAY NOT ANTICIPATE.

DISASTER RESEARCH OVER THE PAST THREE DECADES HAS REVEALED PROBLEMS THAT CAN TURN THE MOST CAREFUL DISASTER PLAN UPSIDE DOWN AND MAKE THE REAL DISASTER NOTHING LIKE THE DRILL. BEING AWARE OF THESE POTENTIAL PROBLEMS ENABLES RESPONDERS TO PLAN AHEAD OF TIME TO MEET THEM.

EACH TYPE OF DISASTER, WHETHER NATURAL, TECHNOLOGICAL, OR TERRORIST, INVOLVES ITS OWN UNIQUE HAZARDS AND STRESSES. ACCORDING TO DISASTER PLANNING EXPERTS SUCH AS CDC'S DR. ERIK AUF DER HEIDE, SOME FEATURES THAT MAKE A DISASTER RESPONSE DIFFERENT FROM A ROUTINE EMERGENCY CALL ARE, ONE, YOU GET A LOT OF BYSTANDER RESCUES AND THEREFORE TRANSPORTING CASUALTIES BY PRIVATE CARS TO THE NEAREST HOSPITAL INSTEAD OF PREDESIGNATED TRIAGE AREAS. THEREFORE, THESE PLANNED-ON TRIAGE AREAS SIT IDLE WHILE NEARBY HOSPITALS BY THE DISASTER TEND TO BE OVERWHELMED. YOU ALSO SEE AN INPOURING OF MASSIVE AMOUNTS OF UNNECESSARY RELIEF SUPPLIES RIGHT AFTER THE DISASTER.

JIM, CAN YOU THINK OF ANY OTHER LESSONS LEARNED DURING DISASTERS?
>> YES, PAM, I CAN. THE INCIDENT MANAGEMENT TEAM SPENDS THE FIRST FEW DAYS ATTEMPTING TO ORGANIZE CHAOS. POLICE FORCE AND FIREFIGHTERS MAY NOT BE ABLE TO COMMUNICATE BECAUSE THEY USE DIFFERENT FREQUENCIES. IN A MULTICOUNTY OR MULTIAGENCY RESPONSE, DIFFERENT JURISDICTIONS MAY HAVE INCOMPATIBLE EQUIPMENT. ANOTHER THING IS YOU GET MORE AGENCIES INVOLVED, THERE'S A NEED FOR MORE COORDINATION, AND DECISIONS ARE MADE BY A UNIFIED COMMAND STRUCTURE RATHER THAN A SINGLE INCIDENT COMMAND STRUCTURE. WHEN VOLUNTEERS AND AMATEUR RESPONDERS COME TO A SCENE, YOU TURN OVER COORDINATING ALL THESE VOLUNTEERS TO THE LIAISON OFFICER IN THE INCIDENT COMMAND SYSTEM, ESPECIALLY IN HAZMAT INCIDENTS. THE VOLUNTEERS MAY NOT HAVE ENOUGH TRAINING TO RESPOND AND YOU DON'T WANT TO PUT VOLUNTEERS AT RISK. FOR INSTANCE, DURING AN OIL SPILL YOU MAY EVEN NEED TRAINING FOR THESE VOLUNTEERS AND PERSONAL PROTECTIVE EQUIPMENT TO WASH OFF OILED DUCKS.

SCOTT AND CHAD, DO YOU HAVE ANYTHING YOU WANT TO ADD?
>> YEAH, JIM. AN EXAMPLE OF EQUIPMENT FAILURE FOR ONE. EQUIPMENT WHICH WORKS FINE IN THE OFFICE BUT WHICH FAILS IN THE FIELD. AND BY THIS I MEAN THIS CAN BE ANYTHING FROM A COMPUTER TO TELECOMMUNICATIONS EQUIPMENT. THE FAILURE OF THE BASIC NECESSITIES SUCH AS CELL PHONES AND LAPTOPS LEADS TO THE ADDED STRESS OF KEEPING UP WITH THOSE COMMUNICATION NEEDS WITH BOTH THE PERSONNEL AND INCIDENT COMMAND STRUCTURE AS WELL AS THE INFORMATION FOLKS BACK AT HEADQUARTERS WHO MUST BE CONTINUALLY FED. THE TIME WHICH MUST BE DEDICATED TO FINDING ALTERNATIVE METHODS OR UTILIZING ARCHAIC OR OLD EQUIPMENT CAN BE OVERWHELMING AND WASTEFUL. >> AND IF ALL OF THAT ISN'T ENOUGH, WORRYING ABOUT THE PROTECTIVE EQUIPMENT AND THE LARGE HAZMAT INCIDENT WASN'T ENOUGH, LOCAL RESPONDERS ARE ALSO CONCERNED ABOUT HAVING THE RIGHT LEVEL OF
PROTECTION IN THE FIELD.

Another concern is knowing that health effects from hazmat incidents will not show up until much later and it cannot be connected to a particular call.

>> Insufficient PPE can happen during a response that becomes bigger or different than you thought initially. For example, during the "Columbia" shuttle episode, we came across a hydrazine ball, and the contractors at the time did not have the PPE. These types of situations happen. That's when you need the logistical support that soon follows.

>> Very interesting responses from all of you. Now, let's talk about the some of the new hazards associated with different types of 21st century disasters. And Pam, we turn to you for that first.

>> Well, thank you.

What we call hazmat incidents are formally classified in academia as technological or manmade disasters.

A technological disaster is one that is caused by human acts or technological failure.

The term technological disaster is fairly new. It comes from the '70s. This type of disaster includes plane crashes, building collapses, chemical spills, and the intentional release of chemical or biological materials by terrorists.

Technological disasters can leave widespread contamination, and if they do they pose unique stresses for their victims. And these stresses, they believe may be harder to adapt to than the stress from a natural disaster.

The stresses from a technological disaster may include fear of being exposed to unseen chemicals or radiation. Or if an exposure has occurred, as Chad mentioned, worry and uncertainty about future health effects.

>> What's it like responding to a chemical disaster?

>> When working a hazmat incident, you follow a standard protocol to --

Identify the contaminant, contain it, mitigate the substances. Of course, it may take some time to identify the substance because of time to sample and decontam personnel.

People want to know, "What is it?" So much of the pressure in these situations comes from everyone wanting something done in a new and unknown situation.

>> Chad, how much training in hazmat do firefighters actually get?

>> Well, we've all had training for this. We all know there is bad stuff out there for sure. And to stay out of it until you know what it is. And that's easy. You just stay out.

What gets missed is, how it's right there, in the next MVA or in the next fire mop up. Or being asked to walk into 10,000 gallons of spilling unleaded gas, to make a dike. Where it's safe because the boss says you're past the upper flammable limit here on the ground, and so regardless of how much training you have if the boss says go you still have your stress.

>> Now Jim, what happens during a response to a biological hazard, like for instance, the anthrax attack that you happened to be involved in?

>> In the anthrax response, we felt pretty secure about the respiratory/skin protection and the medical people told us about
The symptoms we can expect.
What was stressful?
Well, the decon could be stressful.
And, if you were put on antibiotics for it, the Cipro or the doxycycline, well, that gave me diarrhea and that was stressful.
Another big stressor was the containment and cleanup of anthrax was different than chemicals, and there were a lot of people suggesting a lot of different cleanup options.
>> Kept you in the restroom, huh?
Chad, what experience do firefighters have with biohazards?
>> Well, Kysa, during the last big one, the last big go-around we had, we were picking up powder from everyone that called about it, and it got real old to have everybody thinking that the bad guys were going to use their anthrax against them for no real particular reason.
I have had to pick up large amounts of possible anthrax. It's hard to keep up the standards with so much volume.

We would go inside, double bag the powder and turn it over to the police. For a while, it was a common occurrence, like once or twice a shift. It's hard to react like they did in D.C.
The bottom line is we knew we were the canaries.
>> We all remember those anthrax scares, don't we?
Now let's wrap up our discussion of specific disaster related stressors with the newest type of 21st century disaster -- terrorism.
Jim, how does terrorism affect your stress level?
>> I suppose there are differences between how we react to natural hazards, technological disasters and terrorism.
We can accept a tornado or hurricane. They are localized in their effects.
Let's face it, we don't get many hurricanes in the Midwest.
But, when you find out it's a terrorist attack, then you start to worry about secondary, tertiary attacks on other people and other places. The stress starts to expand to everybody.
It's different.
It's a war.
You are fighting people, not a natural situation or a technical accident.
>> I agree.
And it's been found terrorist attacks result in the greatest of all psychological casualties, than do even natural or technological disasters.
According to a famous psychiatrist Robert Jay Lifton, deliberate cruelty and violence by others toward you is actually the most damaging type of stress.
Briefly, some other differences between terrorism and normal routine responses include during terrorism there's a longer response. The response to 9/11 lasted for many months.
It was found also the normal bunker equipment used by firefighters and emergency responders was not suited to the long shifts and the odd conditions of Ground Zero.
You also get multisite events in terrorism.
We all remember that there were more than one site to the attacks during 9/11 and the anthrax attacks.
And that brings in multiple jurisdictions and multiple agencies as well as many different types of responders.
You also get of course violence associated with terrorist attacks but not only the attack itself.
In addition to the multiple casualties and the targeting of innocents, you also can get the possible deliberate secondary
TARGETING OF RESPONDERS TO THE EVENT OR YOU CAN GET INADVERTENT INJURIES AS A RESULT OF THE SITE. THIS RESULTED -- AN EXAMPLE OF THIS IS THE RESPIRATORY INJURIES THAT OCCURRED AT GROUND ZERO BECAUSE OF THE DIFFICULTY WITH THE PPE FOR THE RESPONDERS.

>> HOW BIG A PROBLEM IS VIOLENCE ON JUST REGULAR NON-TERRORISM RESPONSES?

>> ON METHAMPHETAMINE DRUG RESPONSES, YOU DO HAVE TO WORRY ABOUT FACTORS SUCH AS BOOBY TRAPS, SHARPS/NEEDLES, IDENTIFICATION OF THE CHEMICAL, CLEANUP AND DISPOSAL OF CHEMICALS, AND UNCOOPERATIVE AND UNPREDICTABLE PEOPLE ON THE SCENE.

>> AND THE STRESSES OF A BOMB SCARE OR WHEN WE HAD A POLICE REPORT THAT WE WERE GOING TO BE TARGETED WITH A FAKE EMS CALL, YOU NEVER KNOW.

DO YOU HAVE ANY THOUGHTS ON THIS, PAM?

>> WELL, I DO.

ASIDE FROM THE FACT FOR INCREASED SECURITY WHEN YOU'RE DEALING WITH A KNOWN THREAT, WHEN YOU'RE DEALING WITH A VIOLENT SITUATION THERE'S ACTUALLY RISK FACTORS YOU CAN LOOK FOR IN THE PEOPLE FACING YOU THAT CLUE YOU IN TO THE FACT THAT VIOLENCE MIGHT OCCUR. THESE THINGS ARE SUCH THINGS AS DELIRIUM OR PSYCHOLOGICAL PROBLEMS THE PERSON IS FACING LIKE DRUG USE OR PSYCHOSIS. AND IN ADDITION RISK FACTORS IN THE PERSON FACING YOU. THIS CAN INCLUDE PEOPLE PERCEIVING THAT YOU DISRESPECT THEM OR A VERY NOISY ENVIRONMENT OR ACTUALLY GETTING IN SOMEBODY'S PERSONAL SPACE OR FACE.

AND THIS DIFFERS BY CULTURE.

YOU'LL FIND MORE TIPS FOR HOW TO RECOGNIZE POTENTIALLY VIOLENT SITUATIONS AND HANDLE IT IN OUR TRAINING MANUAL.

>> AND NOW LET'S EXAMINE EMOTIONAL STRESSORS ASSOCIATED WITH FIELD RESPONSES AND DISASTER WORK.

LET'S TALK ABOUT HOW BEING A RESPONDER, FOR EXAMPLE, AFFECTS THE FAMILY. JIM?

>> WELL, KYSA, YOU KNOW THAT EVERYONE JUGGLES WORK AND FAMILY. BEING A RESPONDER CAN ADD A DIFFERENT LAYER OF STRESS TO THE FAMILY, HOWEVER.

IN A DANGEROUS RESPONSE, THE FAMILY HAS TO WAIT TO HEAR ABOUT A RESPONDER'S SAFETY.

AND, WHEN YOU RETURN AFTER BEING AWAY, YOU MAY BE ASKED TO BE THE DISCIPLINARIAN RATHER THAN JUST THE GOOD GUY.

THEN THERE'S A LIST OF CHORES TO DO.

THERE'S NO DOWN TIME TO RECOVER FROM THE RESPONSE, BECAUSE YOU HAVE TO PICK UP ON THE FAMILY LIFE.

YOU WORRY THAT YOU MAY NOT BE GIVING ENOUGH TIME TO THE FAMILY AND GIVING TOO MUCH TO THE JOB.

ONE WAY TO HANDLE IT IS TO TALK ABOUT IT BEFOREHAND AND TRY TO PLAN FOR THINGS.

CHAD, DO YOU HAVE ANYTHING TO ADD?

>> I'VE LEARNED TO HAVE A REAL BUFFER ZONE IN THIS AREA.

HAVING EXTRA MONEY, HAVING EXTRA FRIENDS, EXTRA TIME OFF.

THE LOSS OF MY DAUGHTER WHILE I WAS ON DUTY JUST ONE TERRITORY OVER FROM MY STATION.

THAT WAS AN EVENT THAT EXPOSED ALL OF MY STRESSES AND CREATED EVEN MORE.

I'VE FOUND OVER TIME MY STRESS ALARM, AND IT RINGS REAL LOUD AND CLEAR, AND IT'S TIME TO CUT BACK ON STRESS WHEN IT RINGS.

I ALWAYS USED TO THINK THAT STRESS IS OKAY AND EVEN FUN.

NOW I CAN FEEL THE REAL CAUSTIC NATURE OF IT.

LIKE WHAT'S BEEN SAID EARLIER, ALL OF LIFE'S STRESSES ARE ADDITIVE, CUMULATIVE AND WE ALL HAVE OUR THRESHOLDS.
3 OUT OF 10 FIREFIGHTERS WILL SUFFER FROM POST-TRAUMATIC STRESS DISORDER.

YET I'VE LEARNED TO TAKE STOCK IN THE DAY AND ENJOY TODAY.

YOU DON'T STRESS WITH YOUR FAMILY ABOUT THE TRASH BEING TAKEN OUT OR -- YOU SAVE YOUR STRESS BUFFER FOR THE REALLY BIG STUFF.

>> YEAH, CHAD, YOU KNOW, FAMILY, FRIENDS, AND LOVED ONES REALLY ARE VITAL FOR EVERYONE.

IT'S IMPORTANT FOR MANAGERS OF FIRST RESPONDERS TO KNOW THAT RESPONDERS WHEN THEY GO TO SITES WILL NEED TO CALL HOME FREQUENTLY TO GIVE AND RECEIVE EMOTIONAL SUPPORT.

KEEPING IN TOUCH WITH FAMILY IS A VERY IMPORTANT SOURCE OF STRESS RELIEF.

>> PAM, I CAN ONLY IMAGINE THAT ANOTHER GREAT SOURCE OF STRESS ON THE SCENE IS HAVING TO DEAL WITH SICK AND INJURED PEOPLE.

TELL US ABOUT THAT.

>> YES, KYSA.

SOME OF THE MOST DIFFICULT THINGS ABOUT WORKING WITH VICTIMS OF A DISASTER, THAT INTERVIEWS WITH FIREFIGHTERS HAVE REVEALED, ARE FEELINGS OF NOT BEING ABLE TO HELP ENOUGH, OF BEING OVERWHELMED IN A MASS CASUALTY INCIDENT IF THE NUMBER OF THE INJURED AT THE SCENE OR THE MAGNITUDE OF THE INJURY.

AND THEN YOU HAVE THE FEAR OF THE UNKNOWN, AND ALSO THERE'S THE HUMAN PAIN OF IDENTIFYING WITH VICTIMS AND THEIR SUFFERING.

CHAD, COULD YOU PLEASE GIVE US YOUR PERSPECTIVE ON THIS?

>> ONE OF MY WAYS OF COPING WHEN TAKING CARE OF PATIENTS IS TO KNOW THAT IF I'M HERE DOING MY JOB, TAKING CARE OF THE PATIENT THE BEST I CAN, SOMEONE ELSE IS DOING THEIR BEST FOR MY FAMILY IF IT NEEDED TO HAPPEN.

AND SOME OF MY FAMILY -- SO MY FAMILY WILL GET THE BEST CARE THEY CAN FROM THAT SOMEONE.

>> AND UNDOUBTEDLY ONE OF THE MOST DIFFICULT TASKS THAT FIRST RESPONDERS FACE IS THAT OF RECOVERING HUMAN REMAINS AFTER A DISASTER.

THIS IS AN EXPERIENCE THAT POLICE, FIRE, EMT, AND MILITARY PERSONNEL ARE OCCASIONALLY FACED WITH DURING ROUTINE DUTIES, BUT IT CAN BE MUCH MORE STRESSFUL IN A MASS CASUALTY INCIDENT LIKE 9/11.

PAM, WHAT CAN YOU TELL US ABOUT THIS?

>> THIS IS A DIFFICULT TOPIC.

AND ACTUALLY, SOME OF THE MOST SPECIFIC STRESSORS ASSOCIATED WITH BODY HANDLING INVOLVE THE SENSES.

YOU GET SENSORY OVERLOAD SUCH AS THE SMELLS AND THE SIGHT OF THE DEAD.

YOU HAVE UNEXPECTED EXPERIENCES AT SIGHTS.

AND IT'S ALSO BEEN FOUND TO BE VERY DIFFICULT TO HANDLE THE BODIES OF CHILDREN AND PREGNANT WOMEN.

AND ACTUALLY, WHAT LEADS TO THE PAIN, THEY BELIEVE, IS FEELINGS OF PERSONAL INVOLVEMENT WITH THE DEAD, LOOKING AT SOMEONE AND HAVING THEM REMIND YOU OF SOMEONE YOU KNOW, LIKE "I HAVE A CHILD THAT AGE" OR "HE LOOKS LIKE MY BROTHER."

IT HAS BEEN FOUND THAT YOUNGER PEOPLE WITH NO EXPERIENCE OF DEATH ARE MORE AT RISK AT STRESS DURING THIS EXPERIENCE THAN PEOPLE WHO ARE OLDER AND EXPERIENCED AND VOLUNTEERING FOR THIS WORK PROTECT RESPONDERS FROM STRESS REACTIONS.

>> YOU KNOW, PAM, HAVING BEEN A COMBAT MEDIC DURING VIETNAM HAS HELPED ME IN DEALING WITH MASS CASUALTIES IN SEVERAL INSTANCES.

I WAS INVOLVED WITH THE MURRAH FEDERAL BUILDING BOMBING IN OKLAHOMA CITY, AS WELL AS THE COLUMBIA SHUTTLE DISASTER RESPONSE.

I DID A SITE ENTRY INTO THE MURRAH BUILDING ABOUT 96 HOURS POST EXPLOSION TO DO A HAZMAT SURVEY.

IT WAS TOUGH TO STAY FOCUSED ON THE SURVEY WHEN YOU HAD VICTIMS STILL IN PLACE AT THEIR WORK STATIONS, AS WELL AS THE SMELLS ASSOCIATED WITH THE INCIDENT.

AT THE COLUMBIA DISASTER, I WAS THE ONLY FEDERAL PUBLIC HEALTH OFFICIAL ON-SITE AFTER THE FIRST TEN DAYS.
ALTHOUGH THIS WAS NOT A TRUE MASS CASUALTY INCIDENT, THE NATION WAS EXPOSED TO THE LOSS OF ONE OF ITS TRUE NATIONAL TREASURES, ITS ASTRONAUTS.

FOR THE NEXT FIVE WEEKS, I HAD TO RESPOND TO ANY SUSPECTED RECOVERY OF HUMAN REMAINS OR ANY SUSPECTED HAZMAT ITEMS, SUCH AS HYDRAZINE OR AMMONIA TANKS.

I WAS ALSO RESPONSIBLE FOR RUNNING TO GROUND ANY REPORTED HAZMAT EXPOSURES FROM DEBRIS.

THIS MEANT DEALING WITH ALL THE "WALKING WELL" PEOPLE WHOReported to their private physicians or the local hospital.

>> ANOTHER EMOTIONALLY TRYING SITUATION FOR A FIRST RESPONDER IS WORKING WITH THE FAMILIES OF VICTIMS.

AND JIM, COMMENT ON THIS FOR US.

>> IT'S HARD TO VISIT WITH THE FAMILIES OF VICTIMS. BUT YOU HAVE TO DO IT.

IT GETS DIFFICULT WHEN YOU ARE VISITING WITH THE FAMILY AND YOU'RE TRYING TO STAY IN CONTROL AND IT BECOMES VERY EMOTIONAL.

>> AS A FIRST RESPONDER THIS IS A VERY DIFFICULT THING BECAUSE THERE WILL BE TIMES WHEN YOU MAY BE CALLED TO NOTIFY MEMBERS OF THE PUBLIC ABOUT THE DEATH OF ONE OF THEIR FAMILY.

DEATH NOTIFICATION CAN BE A VERY DIFFICULT EXPERIENCE ESPECIALLY FOR THE FIRST-TIME OR UNPREPARED RESPONDER.

THERE ARE MANY PROFESSIONS SUCH AS PHYSICIANS, POLICE, AND CHAPLAINS WHO HAVE ACTUALLY DEVELOPED GUIDELINES AND TRAININGS FOR HOW TO DO DEATH NOTIFICATIONS AND THESE ARE HONEST, DIRECT, SENSITIVE, AND COMPASSIONATE.

IT'S VERY IMPORTANT TO LEARN ONE OF THESE TECHNIQUES BEFORE YOU'RE CALLED TO GO OUT ON A DEATH NOTIFICATION.

ALSO IT'S A GOOD IDEA TO PAIR AN INEXPERIENCED RESPONDER WITH A MORE EXPERIENCED RESPONDER WHEN YOU'RE DEALING WITH GRIEVING AND ANXIOUS FAMILY MEMBERS.

ALSO, OTHER FACTORS BESIDES THE BUDDY SYSTEM THAT PREVENT STRESSES THAT OCCUR IN ALL OF THESE DIFFICULT SITUATIONS, WHETHER IT'S DEALING WITH FAMILY OR DEALING WITH INJURED PEOPLE IS KNOWING THAT SOCIAL SUPPORT OF THE MEMBERS OF THE GROUP OF RESPONDERS FOR EACH OTHER REALLY DOES STRENGTHEN EACH PERSON.

ALSO, HAVING FAITH IN YOUR LEADERSHIP CAN HELP A GROUP THROUGH A DIFFICULT TIME.

GETTING AS MUCH PRE-EVENT TRAINING AS YOU CAN IN HANDLING DIFFICULT SITUATIONS WITH VICTIMS AND FAMILIES CALLED HUMAN SITUATIONS TRAINING MAKES IT EASIER FOR EACH PERSON TO RESPOND UNDER STRESS BECAUSE THEY KNOW WHAT TO DO.

IT'S ALSO IMPORTANT TO KNOW THAT YOU WILL MOURN FOR THESE PEOPLE AND YOU CAN PARTICIPATE IN RITUALS SUCH AS MEMORIALS FOR VICTIMS THAT SET ASIDE TIME AND SPACE TO DEAL WITH THE EMOTIONS AROUSED BY THE SUFFERING AND DEATH FROM A DISASTER.

PARTICIPATING IN MEMORIALS OR SETTING ASIDE TIME FOR YOURSELF HELPS TO PUT IN ORDER YOUR EMOTIONS AFTER THE DISRUPTION AND CHAOS OF ACCIDENTS AND TERRORISM.

THERE WILL BE MORE INFORMATION AND RESOURCES ON THESE SUBJECTS THAT IS FOUND IN OUR TRAINING MANUAL.

>> ALL RIGHT.

WE WANT TO END THIS SEGMENT WITH WHAT HAPPENS ONCE YOU'VE FINISHED AT THE RESPONSE SITE.

SCOTT, WHAT DO YOU FIND STRESSFUL ABOUT GOING BACK TO THE OFFICE AFTER BEING ON SITE, ON SCENE?

>> PROBABLY ONE OF THE MOST STRESSFUL THINGS IS THE SECOND-GUESSING OF DECISIONS MADE IN THE FIELD BY THE RESPONDERS. THIS OFTEN COMES FROM INDIVIDUALS WHO ARE NOT PRESENT AT THE INCIDENT OR INVOLVED IN THE INCIDENT OR THOSE WITH LIMITED OR NO
KNOWLEDGE OF THE TECHNICAL ISSUES SURROUNDING THE INCIDENT.
ALSO THEN THERE'S THE OBLIGATORY PAPERWORK.
YOU HAVE TO CREATE THAT PAPER TRAIL TO COVER THE WHOLE SCOPE OF THE INCIDENT.

>> JIM, DO YOU HAVE ANYTHING TO ADD?
>> THE SECOND-GUESSING OF DECISIONS MADE IN THE FIELD.
AND ALSO, HAVING TO JUSTIFY MY DECISIONS IN MY OWN MIND.
WHAT IF I WOULD HAVE DONE IT THIS WAY?
SOMETIMES, WE SECOND-GUESS OURSELVES.
WE WILL NOW BEGIN THE THIRD SEGMENT OF OUR PROGRAM, "MANAGING FIRST RESPONDER STRESS."
IN THIS SEGMENT WE WILL GIVE PRACTICAL TIPS AND POINTS ABOUT ON-SCENE STRESS AND HOW TO RECOVER PHYSICALLY AND EMOTIONALLY FROM A DISASTER RESPONSE.
UPON COMPLETION OF THIS SEGMENT, YOU WILL BE ABLE TO IDENTIFY SEVERAL METHODS TO COPE WITH FIELD RELATED STRESS.
HOW DO YOU ALL COPE WITH STRESS BOTH DURING AND AFTER A RESPONSE?

>> IN THE GOOD OLD DAYS, SOME OF THE BOYS FROM THE LOCAL HIGH SCHOOL GOT A JOB OF BEING A FIREMAN AND THEY COULD RELIEVE THEIR STRESS BY PLAYING BALL BETWEEN ALL THE CALLS.
TODAY, FIRST RESPONDERS HAVE TO DEAL WITH THINGS SUCH AS BLOOD EXPOSURES ON TRAUMA CALLS, ADMINISTERING DRUGS TO HEART ATTACK VICTIMS OR STEPPING IN FRONT OF AN EXPLODING BUMPER ON A MOTOR VEHICLE ACCIDENT.
TIMES HAVE CHANGED.
HOW DO I COPE ON SCENE?
I KNOW I'M DOING MY BEST WITH THE RESOURCES I HAVE AND REALIZE THIS IS THE MOST I "SHOULD" DO.
DURING DOWN TIME, ESPECIALLY WHILE TRAINING, I CONSIDER HOW TO REDO THE CALL AND REFLECT ON THE PAST AND TRY AND CONNECT IT WITH NEW TECHNIQUES DISCUSSED IN TRAINING.

>> DURING A RESPONSE, I MAKE AN EFFORT TO EAT AT LEAST ONE DECENT MEAL A DAY.
I TRY TO MAKE AN EFFORT ON ONE NIGHT TO BREAK AWAY EARLY TO GO SEE A MOVIE AND EAT POPCORN.
I ALSO TEND TO JOKE OR YUK IT UP A LOT ON SITE.
ONE WAY TO PREPARE AHEAD OF TIME IS TO STAY IN SHAPE PHYSICALLY.
ALSO TRY TO KEEP UP TO DATE WITH THE LATEST TECHNIQUES BY ATTENDING TRAINING.
BEFORE I GO ON SCENE, I TRY TO PREPARE MENTALLY AND PHYSICALLY FOR THE UNEXPECTED AT A RESPONSE.
ON THE WAY TO THE SCENE, I START PROCESSING PAST EXPERIENCES AND TRAINING THAT MAY RELATE TO THE INCIDENT.
I TRY TO USE RISK MANAGEMENT TECHNIQUES, AND THINK ABOUT POSSIBLE OBJECTIVES AND PRIORITIES, HEALTH AND SAFETY FACTORS.
THE PROCESS IS CHALLENGING, CREATING AN ADRENALINE RUSH.
BUT EVEN WITH ALL THE STRESSORS I LIKE IT.

>> ALL RIGHT.
PAM, TELL US ABOUT WHAT HAPPENS ON THE SCENE.

>> THANK YOU, KYSA.
LET ME TALK BRIEFLY REVIEW ABOUT THE MENTAL CHANGES FROM THE STRESS RESPONSE THAT MAY OCCUR ON SCENE IN THE RESPONDER.
AS WE'VE MENTIONED BEFORE, IT'S IMPORTANT TO KNOW THESE IN ORDER TO RECOGNIZE HOW YOU PERSONALLY REACT TO STRESS.
NOT EVERYONE WILL HAVE THE SAME SIGNS AND SYMPTOMS OF STRESS IN THE FIELD.
FIRST, LET'S LOOK AT WHAT HAPPENS TO YOUR MIND DURING A FIELD RESPONSE. YOU MUST FIND THAT YOUR FOCUS OF ATTENTION NARROWS, THAT YOU LOSE YOUR ABILITY TO THINK LONG, COMPLICATED THOUGHTS, AND YOUR ABILITY TO LEARN ABOUT NEW SUBJECTS IS IMPAIRED.
YOU CAN'T CONCENTRATE SOMETIMES. YOU MAY HAVE TROUBLE HOLDING ON TO THE NEW INFORMATION COMING IN. AND SOME PEOPLE HAVE A TENDENCY TO NOTICE THEIR PATTERN OF THINKING BECOME RIGID. THIS IS BECAUSE OF THE PHYSIOLOGICAL CHANGES ASSOCIATED WITH A STRESS RESPONSE IN THE BRAIN. AS JIM MENTIONS, HOWEVER, THE DIFFICULTY OF THINKING UNDER STRESS MAKES IT IMPORTANT THAT FIRST RESPONDERS ARE WELL TRAINED BEFOREHAND BECAUSE IT'S EASIER TO PERFORM PRELEARNED BEHAVIORS UNDER STRESS THAN TO COME UP WITH NEW SOLUTIONS. AS A FIREFIGHTER, WE WORRY ABOUT THE CHANGES IN PERFORMANCE THAT CAN BE CAUSED BY ACCUMULATED STRESS OR BY ON THE SCENE STRESS. WHEN TECHNIQUES ARE NOT USED TO HELP DEAL WITH JOB RELATED STRESS, GENERAL JOB PERFORMANCE MAY DECLINE. NOW LET'S TALK ABOUT THE EMOTIONS ASSOCIATED WITH BEING ON-SCENE. COULD WE BEGIN WITH YOU, PAM? IN MY EXPERIENCE AS A PSYCHIATRIST, MANY MEMBERS OF THE PUBLIC ON THE SCENE DURING 9/11, I REMEMBER THE STORIES THAT THEY TOLD ME. THEY TALKED ABOUT THE EVENTS AT THE WORLD TRADE CENTER, THEY SAID, AS IF THEY WERE OCCURRING IN A MOVIE. I REMEMBER SOMEONE HAD JUST COME OUT OF THE SUBWAY WITH A KUN OF COFFEE JUST AS THE FIRST TOWER COLLAPSED AND THEY TALKED ABOUT RUNNING FROM THE ONCOMING CLOUD AND THE METAPHOR THEY USED WAS THEY SAID IT FELT LIKE TRYING TO OUTRACE THE GIANT BOULDER IN THE "TEMPLE OF DOOM" MOVIE. THEY TOLD ME THERE WAS A REAL QUALITY TO THEIR EXPERIENCE. CHAD, WHAT'S BEEN YOUR EXPERIENCE? MOVIES ARE REAL ENOUGH, BUT I'VE FOUND THE SMELL, THE TOUCH, THE LEFTOVER EMOTIONS A MILLION TIMES WORSE THAN THE PICTURES. SEEING SOMEONE CLOSE TO YOU SHAKING WITH FEAR, IT'S GOT ITS IMPACT ON YOU. THAT'S TRUE, THERE ARE A LOT OF INTENSE EMOTIONS AND THEY'RE NORMAL ON SCENE DURING AN EMERGENCY RESPONSE OR DISASTER. SOME OF THE COMMON EXPERIENCES THAT PEOPLE MAY FEEL ON A SCENE ARE INITIALLY WHEN YOU'RE HIT WITH SOMETHING LIKE THAT THERE'S AN INITIAL FEELING OF DISBELIEF OR DENIAL, THIS CAN'T REALLY BE HAPPENING. OR AT THE MOST EXTREME YOU MAY FEEL TERRIFIED OR FEARFUL. OTHERS EXPERIENCE SORROW, GRIEF BECAUSE YOU ARE WITNESSING CASUALTIES OR DEATH. SOMETIMES OTHER PEOPLE MAY FEEL NUMB DURING A DISASTER OR FEEL OVERWHELMED OR JUST FEEL DEEP EMOTIONAL PAIN OR ANGUISH. ALL OF THESE EMOTIONS ARE NORMAL AND THEY JUST COME FROM BEING HUMAN. YOU KNOW, CHAD, YOU BROUGHT UP A REALLY IMPORTANT OBSERVATION WHEN YOU TALKED ABOUT SEEING PEOPLE SHAKING ON SCENE. LET'S TALK BRIEFLY ABOUT WHAT HAPPENS PHYSICALLY WHEN YOU GET THE CALL TO GO ON SCENE OR WHEN YOU'RE IN THE FIRE HOUSE AND THE ALARM GOES OFF. THE CUE IS TRIGGERING THE STRESS RESPONSE WE'VE TALKED ABOUT SO MUCH, AND THAT'S A NORMAL PHYSICAL RESPONSE TO THAT ACUTE SIGNAL. THE PHYSICAL REACTION MUST BE CONSIDERED WHEN RESPONDING TO A DISASTER, AND LET'S GIVE SOME EXAMPLES. COMMON PHYSICAL REACTIONS INCLUDE INCREASED RESPIRATION, MILD SHORTNESS OF BREATH, OR EVEN PANTING. YOU CAN SEE HYPERVENTILATION AT A SCENE. AND REMEMBER THE SIGNS AND SYMPTOMS OF THAT CAN BE SERIOUS AND SIMILAR TO SOME SERIOUS MEDICAL PROBLEMS WE'VE TALKED ABOUT LIKE HEART PROBLEMS OR RESPIRATORY DISEASE. IN PRACTICAL TERMS YOU MAY NEED EXTRA RESPIRATOR TANKS PEOPLE TELL ME BECAUSE RESPONDERS MAY BLOW THROUGH AN AIR TANK QUICKER.
IN THE FIELD THAN THEY DO IN PRACTICE BECAUSE OF THIS INCREASED RESPIRATION.
YOU ALSO MAY SEE IMBALANCES IN G.I. FUNCTION AND PEOPLE CAN GET QUEASY, NAUSEATED, EVEN HAVE SOME DIARRHEA.
YOU'LL BETTER BE SURE TO HAVE ACCESS TO A BATHROOM AND A WASH-UP FACILITY.
INCREASED HEART RATE AND MILDLY ELEVATED BLOOD PRESSURE CAN FORCE YOU TO BE MORE VIGILANT REGARDING THINGS LIKE CHEST PAIN ESPECIALLY IF YOU'RE AN ELDER RESPONDER, BECAUSE THERE ARE REAL EFFECTS OF ACUTE STRESS ON THE HEART.
AND BACK TO YOU, CHAD.
YOU MAY SEE THOSE MUSCLE TWITCHES AND SHAKE LIMBS.
IT DOESN'T NECESSARILY MEAN FEAR.
IT COULD JUST BE A REACTION TO ADRENALINE RUNNING THROUGH SOMEBODY'S SYSTEM DURING STRESS.
SINCE WE ARE DISCUSSING ON-SCENE PHYSICAL EFFECTS, I WANT TO RESPOND TO THE PEOPLE WHO'VE ASKED ME IN THE PAST ABOUT WHAT ARE THE SIGNS AND SYMPTOMS THAT WOULD MAKE YOU THINK AS A SUPERVISOR THAT SOMEBODY NEEDS IMMEDIATE MEDICAL ATTENTION AND NEEDS TO BE PULLED OFF SCENE?
IN OTHER WORDS, WHEN DO YOU TAG SOMEBODY OFF AND SEND THEM TO THE DOCTOR?
WELL, SOME OF THE PHYSICAL SIGNS A RESPONDER'S IN TROUBLE WOULD BE SEVERE CHEST PAIN ACCOMPANIED WITH SHORTNESS OF BREATH OR SIGNS AND SYMPTOMS OF SHOCK SUCH AS RAPID LIGHT BREATHING, A QUICK PULSE, SHIVERING, FEELING CHILLS, GETTING NAUSEATED, HAVING MOIST, CLAMY SKIN OR SUFFERING FROM MENTAL CONFUSION OR SUDDENLY VERY DILATED PUPILS.
PSYCHOLOGICAL SIGNS THAT SOMEONE'S IN DEEP DIFFICULTY, AND THIS IS RARE, WOULD INCLUDE FREEZING UP AT THE SCENE OR BECOMING SO DAZED AS TO BE UNAWARE OF ONE'S SURROUNDINGS OR SEVERE PANIC ATTACKS.
OBVIOUSLY AS SUPERVISOR YOU'D WANT TO PULL SOMEONE OFF.
>> PAM, YOU'VE TALKED ABOUT SOME OF THE THINGS THAT ARE THE REACTIONS THAT WE SEE ON THE SCENE, BUT WHAT ARE SOME OF THE COPING MECHANISMS THAT WE CAN IMPLEMENT ON THE SCENE?
>> WELL, HERE ARE SOME GENERAL TIPS, AND THEN WE CAN ASK OUR FIRST RESPONDERS WHAT THEY DO TO COPE.
SOME OF THE GENERAL TIPS THAT ARE VERY WELL KNOWN BUT NEED TO BE REPEATED, HAVE EXPERIENCED PERSONNEL SUPERVISE THE INEXPERIENCED.
AS WE MENTIONED BEFORE, PROVIDE ON-SCENE BRIEFINGS FOR INCOMING PERSONNEL.
I KNOW YOU'VE HEARD IT BEFORE AND YOU MAYBE FEEL LIKE YOU CAN'T DO IT, BUT TRY TO LIMIT CAFFEINE AND SUGAR INTAKE.
I KNOW IT'S HARD, GIVEN THE JUNK FOOD AT SITES.
MAINTAIN TIME ORIENTATION.
AND BE SURE AS A SUPERVISOR YOU ENSURE ADEQUATE REST AND ROTATION OF PERSONNEL.
AND FINALLY AS AN ORGANIZATION BE SURE YOU'VE ESTABLISHED A SYSTEM FOR HANDLING RESPONDERS FACING EXTRAORDINARY STRESS LIKE A DEATH ON SITE OR AN INJURY.
CHAD, HOW DO YOU COPE DURING AN EMERGENCY RESPONSE?
>> WHEN YOU'RE GETTING UP AT 6:00 FOR WORK AND YOU'RE KEPT BUSY ALL DAY AND YOU HAVE A CALL PAST MIDNIGHT, YOU CAN FEEL YOUR MIND IMPAIRED.
>> THAT'S TRUE.
AND THE HUMAN BODY CAN ONLY OPERATE AT A HIGH LEVEL OF AROUSAL FOR SO LONG.
AFTER A CERTAIN PERIOD OF TIME ON A RESPONSE PEOPLE WILL JUST GET TIRED AND IT DOES TEND TO CAUSE THEM TO MAKE ERRORS AND START BEING A LITTLE MORE ACCIDENT-PRONE.
THAT'S WHY IT'S RECOMMENDED ON A DISASTER SITE THAT YOU HAVE A SHIFT NO LONGER THAN 12 HOURS JUST FOR SAFETY REASONS.
YOU'RE ALSO GOING TO NEED TO ROTATE TEAM MEMBERS SO THEY HAVE
TIME AWAY AND TIME OFF AWAY FROM A RESPONSE SITE.
DON'T ALLOW PEOPLE TO VOLUNTEER THEIR TIME TO A DISASTER RESPONSE WHEN OFF-SHIFT.
WHEN IT COMES TO BATTLING CHRONIC STRESS, SOMETIMES THOSE SHORT-TERM FIXES WE ALL RELY ON LIKE COFFEE CAN BACKFIRE.
CAFFEINE HAS EFFECTS THAT ARE SIMILAR TO THOSE OF THE ADRENALINE THAT YOUR BODY SECRETES DURING THAT FIGHT OR FLIGHT RESPONSE.
AND DRINKING TOO MUCH COFFEE ON SCENE HAS A TENDENCY TO LEAVE YOU TOO KEYED UP TO SLEEP.
EVEN WHEN YOU ARE PHYSICALLY EXHAUSTED AFTER GETTING HOME.
YOU CAN'T SLEEP BECAUSE YOU'VE HAD TOO MUCH COFFEE.
>> I'M CURIOUS, HOW DOES EVERYONE INDIVIDUALLY HERE RECOVER AFTER A RESPONSE?

>> AFTER A RESPONSE, I TRY TO VOLUNTEER AT ZOO ATLANTA AS SOON AS POSSIBLE.
I FIND THAT WORKING AT THE HORTICULTURE DEPARTMENT AT THE ZOO DOES A TREMENDOUS JOB OF DECOMPRESSING ME AFTER THE STRESS OF A RESPONSE.
I ALSO SPEND RELAXING TIME WITH MY WIFE AND DOGS.
>> I USUALLY TAKE ONE DAY IN SEVEN OFF TO REST, AND I SPEND LOADS OF TIME ON MY BOAT.
I DON'T TOLERATE UNPRODUCTIVE STRESSFUL RELATIONSHIPS, EITHER.
>> AFTER A RESPONSE, THERE MAY BE A HOT WASH BRIEFING FOR SOME OF THE OSC'S WHERE WE CAN JUST LET OFF SOME STEAM.
ONCE OFF-SITE, I CATCH UP ON MY SLEEP, AND ESCAPE FROM STRESS IN VARIOUS WAYS.
I LIKE MOTORCYCLING.
IT GIVES ME A SENSE OF POWER AND FREEDOM.
I LIKE PHYSICAL EXERCISE, TOO.
IT TAKES MY MIND OFF THINGS.
AFTER A RESPONSE, I TRY TO EAT A MORE BALANCED DIET TO MAKE UP FOR THE JUNK FOOD, DOUGHNUTS AND CANDY, EATEN DURING A RESPONSE.

>> LET ME GIVE YOU JUST A FEW BRIEF TIPS TO COPE AFTER A RESPONSE RECOVERY.
OBVIOUSLY, AS THESE PEOPLE HAVE ALREADY SAID, YOU WANT TO RETURN TO NORMAL EATING AND SLEEPING HABITS AS SOON AS YOU CAN.
THEN, WITHIN 24 TO 48 HOURS, AFTER YOU'VE GOTTEN SOME REST, EXERCISE TO KNOCK DOWN THAT CHRONIC STRESS.
BE SURE, HOWEVER, TO CHECK WITH YOUR DOCTOR BEFORE STARTING A NEW EXERCISE REGIMEN.
NOW I'M GOING TO GIVE SOME REAL UNPOPULAR ADVICE.
REFRAIN FROM USING ALCOHOL FOR A FEW DAYS DURING RECOVERY FROM FIELD DUTY.
WHY?
WELL, THE MAIN REASON IS THAT ALCOHOL SUPPRESSES REM SLEEP, AND THAT'S THE PHASE OF SLEEP THAT CONTAINS DREAMS.
DREAMS ARE CRUCIAL TO THE EMOTIONAL HEALING OF ANY KIND OF TRAUMATIC EXPERIENCE THAT YOU CAN ENCOUNTER DURING A FIELD OPERATION.
ALSO, ALCOHOL MAY DISINHIBIT YOUR BEHAVIOR, AND YOU CAN BECOME MORE IMPULSIVE, OR IF YOU'RE DEPRESSED IT ACTUALLY MAKES YOU MORE DEPRESSED.
ONE GOOD WAY TO COPE IS, AGAIN, TALK WITH A TRUSTED FRIEND OR FAMILY MEMBER ABOUT ANYTHING THAT BOTHERED YOU DURING THE RESPONSE IF YOU FEEL COMFORTABLE SHARING IT.
AND FOR A BIG RESPONSE THE ORGANIZATION YOU WORK FOR NEEDS TO CREATE A SET FORMAL WAY FOR WORKERS TO EXIT THE DISASTER SITE SO THERE'S AN END POINT TO THEIR DISASTER SERVICE.
I'VE BEEN TOLD IN THE RED CROSS THIS INVOLVES AN EXIT INTERVIEW.
FOR OTHER SERVICES IT MAY INVOLVE TIME LIKE JIM SAID FOR A HOT WASH DEBRIEFING AND YOU ALSO NEED FORMAL RECOGNITION FOR SERVICE.
>> THE PROBLEM I'VE SEEN IS MOST EMS PERSONNEL DON'T HAVE A BAROMETER TO TELL THEM WHEN THEY'RE POINT GUARDING OUT FROM STRESS.
IT JUST BUILDS QUIETLY.
OR SOMETIMES, THERE IS THAT ONE CALL THAT DEFIES THEIR CORE BELIEFS, LIKE A BODY PART WHERE A BODY PART SHOULDN'T BE.
>> WELL, THAT'S TRUE.
AND THAT'S WHY EVEN THOUGH THIS IS JUST A BEGINNING COURSE WE'RE HOPING IT WILL BEGIN TO ENCOURAGE RESPONDERS TO THINK OF WAYS TO BUILD THEIR OWN BAROMETERS AND TO LEARN CHRONICALLY ABOUT MANAGING STRESS.
>> THE CISD COURSE THAT I TOOK WAS VERY INTUITIVE.
THE CISD COURSE IS TO PSYCHOLOGICAL CARE WHAT EMS IS TO SURGERY. A MUST IN OUR BOX OF TOOLS.
>> EXCUSE ME, IS CISD THE ACRONYM FOR CRITICAL INCIDENT STRESS DEBRIEFING? PAM?
>> YES, IT IS.
AND CHAD, YOU'RE RIGHT WHEN YOU'RE TALKING ABOUT TAKING STRESS MANAGEMENT CISD COURSES.
EACH FIELD RESPONDER SHOULD LEARN ABOUT THE THINGS WE HAVE BEEN TALKING ABOUT HERE, ABOUT NORMAL REACTIONS TO THE STRESS OF BEING ON A RESPONSE AND WHAT STRESS RESPONSE IS LIKE AND ESPECIALLY WE NEED TO TALK ABOUT THINGS THAT HAVE BEEN FOUND TO HELP PEOPLE RECOVER FROM RESPONSES.
EVEN VERY SPECIFIC KNOWLEDGE LIKE SIGNS AN EMOTIONAL RECOVERY IS GOING WELL.
ALSO THEY NEED TO LEARN SIGNS THAT INDICATE WHEN HELP IS NEEDED. THAT'S WHAT WE'RE GOING TO DO NEXT IN THIS PROGRAM.
AFTER PARTICIPATING IN A DISASTER RESPONSE IT IS REALLY QUITE NORMAL TO EXPERIENCE MANY DIFFERENT EMOTIONAL REACTIONS FOR A PERIOD OF TIME AFTER THE END OF YOUR DISASTER SERVICE.
THIS IS THE PSYCHE'S WAY OF COMING TO TERMS WITH WHAT HAS BEEN EXPERIENCED AT THE SITE.
SOME COMMON EMOTIONAL RESPONSES ARE THINGS LIKE DAYS OF FEELING ANGRY OR SORROWFUL, AND IT'S VERY NORMAL TO HAVE DREAMS AND NIGHTMARES ABOUT THE DISASTER INCIDENT FOR DAYS AND WEEKS AFTERWARD.
YOU MAY AFTER DISASTER SERVICE HAVE TEMPORARY DIFFICULTY FALLING ASLEEP, OR YOU MAY HAVE DIFFICULTY STAYING AWAKE. YOU MAY BE TOO TIRED.
YOU MAY ALSO FIND YOURSELF BEING DISTRACTED, AND HAVING FREQUENT THOUGHTS ABOUT WHAT HAPPENED DURING THE DISASTER EVEN WHEN YOU'RE BACK AT WORK.
PLEASREM, ALL THESE EMOTIONAL CHANGES CAN CAUSE STRAINS IN FAMILY AND WORK RELATIONSHIPS DURING THE READJUSTMENT.
AGAIN, IT'S IMPORTANT TO REMEMBER THAT IT'S NORMAL, YOU MAY HAVE PROBLEMS FALLING OR STAYING ASLEEP, AND IT HELPS TO HAVE YOUR FAMILY LEARN ABOUT THE NORMAL REACTIONS YOU'RE HAVING TO BEING ON A DISASTER RESPONSE.
BECAUSE THAT WILL HELP EASE THE STRAIN WITH THEM.
BECAUSE IT HELPS THEM ADJUST AND KNOW WHAT TO EXPECT FROM YOU.
REMEMBER, THOUGH, EACH PERSON WILL COPE DIFFERENTLY.
SOME MAY WANT TO TALK A LOT ABOUT THE RESPONSE.
OTHERS DON'T WANT TO TALK ABOUT IT AT ALL.
SO FAR WHAT WE'VE TALKED ABOUT ARE THE NORMAL SYMPTOMS OF A POST-RESPONSE, YOU KNOW, RECOVERY.
THESE AREN'T SIGNS OF ANY KIND OF ABNORMAL REACTION.
AND ALL THE SYMPTOMS WE TALKED ABOUT BEFORE WILL PASS WITH TIME.
HAVING EMOTIONS WITH ABOUT A DISASTER IS NOT A SYMPTOM OF AN ILLNESS, AND THEY ARE JUST PART OF A NORMAL HEALING PROCESS.
AND RECOVERY TIME WILL DIFFER FOR EACH PERSON.
NOTHING IS SET IN STONE.
NOW LET'S SWITCH GEARS AND TALK.
HOW DO YOU KNOW IF HEALING AND RECOVERY ARE NOT OCCURRING AFTER A DISASTER SERVICE?
AND HOW DO YOU KNOW IF RECOVERY IS BLOCKED?
I HAVE BEEN ASKED BY PEOPLE WHO HAVE BEEN TO DISASTERS, HOW DO I KNOW SOMETHING IS WRONG WITH ONE OF MY BUDDIES AFTER A BAD CALL HERE ARE SOME DISTRESS SIGNS TO LOOK FOR.
THE NUMBER ONE INDICATOR IS A SER SIGNIFICANT OVER DAYS TO WEEKS OR EVEN MONTHS, PERSISTENT CHANGE IN A PERSON'S BEHAVIOR, PERSONALITY, OR HEALTH.
SOME OTHER SIGNS OF A BLOCKED RECOVERY ARE THE PERSON EXPERIENCES INTRUSIVE IMAGES AND MAY EVEN HAVE THINGS LIKE FLASHBACKS FROM PTSD, AND THESE LAST LONGER THAN TWO WEEKS AFTER AN INCIDENT.
CHAD, ARE THERE ANY SIGNS YOU'VE NOTICED IN YOUR EXPERIENCE?
>> ONE BIG CLUE THAT YOU NEED HELP IS WHEN YOU HAVE HAD A LONG SHIFT, FAST MIDNIGHT, AND YET YOU STILL CAN'T SLEEP THROUGH THE NIGHT AT HOME, OR YOU CAN'T SEEM TO FIND YOUR OWN DOWN BUTTON.
AND YOU SEEM TO BE LIVING ON ADRENALINE.
>> YES, CHAD, THAT'S RIGHT.
THOSE ARE CALLED LONG-TERM SLEEP DISTURBANCES, AND CAN INVOLVE DIFFICULTY FALLING ASLEEP OR PROBLEMS STAYING ASLEEP OR WAKING UP DURING THE NIGHT, OR YOU CAN WAKE UP VERY EARLY IN THE MORNING BEFORE THE ALARM AND NOT BE ABLE TO GET BACK TO SLEEP.
YOU CAN ALSO GET FEELINGS OF ISOLATION AND DEPRESSION AS A SIGN OF BLOCKED RECOVERY.
>> SOMETIMES, YOU DO FEEL ISOLATED.
MUCH OF THE PUBLIC DOES NOT HAVE THE TIME OR THE ENERGY TO UNDERSTAND AN ANSWER THAT COMES FROM THE HEART.
IT'S DIFFICULT TO SWITCH GEARS AND GIVE PEOPLE THE NEWS BITE ANSWERS ABOUT THE EXPERIMENTS -- EXPERIENCES.
YOU FEAR THAT AN ANSWER COULD CAUSE EMOTIONAL CONFLICT, LEADING TO MORE STRESS BECAUSE THE NEWS BITE ANSWER JUST ISN'T TRUE ENOUGH.
>> WELL, THANK YOU.
AND SOME OTHER DISTRESS SIGNS CAN BE IF SOMEONE WHO WASN'T PREVIOUSLY LIKE THIS SUFFERS SEVERE ANGER, IRRITABILITY OR HAS A RAGE ATTACK.
OR PEOPLE CAN SOMETIMES FEEL IF THERE'S A BLOCKED RECOVERY THAT THEIR LIFE, JOB, AND RELATIONSHIPS HAVE LOST MEANING BECAUSE OF WHAT THEY'VE EXPERIENCED DURING A DISASTER.
ONE OF THE MOST SEVERE DISTRESS SIGNS IS THE DEVELOPMENT OF SOMETHING CALLED ACUTE STRESS DISORDER.
ACUTE STRESS DISORDER IS A GROUP OF ANXIETY SYMPTOMS, AND IT CAN OCCUR RIGHT AFTER EXPOSURE TO A LIFE-THREATENING OR HORRIFYING EVENT.
THESE SYMPTOMS IN ACUTE STRESS DISORDER WILL OCCUR RIGHT AFTER THE TRAUMATIC EVENT, AND THEY CAN LAST ANYWHERE FROM TWO DAYS AFTER THE DISASTER TO UP TO FOUR WEEKS.
THESE ARE TRAUMATIC STRESS SYMPTOMS THAT WE TALKED ABOUT LATER, THAT FAR END OF THE SPECTRUM.
AND THESE ARE ASSOCIATED WITH ACUTE STRESS DISORDER.
WHEN YOU'RE TRAUMATICALLY STRESSED YOU FEEL EMOTIONALLY NUMB.
YOU FEEL LIKE YOU'RE IN A DAZE.
YOU CAN EXPERIENCE SOMETHING WE CALL DEREALIZATION.
AND THAT'S WHERE THE WORLD STOPS FEELING REAL TO YOU, SO THAT FAMILIAR THINGS MAY FEEL STRANGE WEIRD, OR EVEN IN EXTREME INSTANCES TWO-DIMENSIONAL.
PEOPLE EXPERIENCE DEPERSONALIZATION AS A RESULT OF TRAUMA, FEELING LIKE YOU'RE NO LONGER YOURSELF EMOTIONALLY AND YOU'RE A STRANGER TO YOURSELF.
AND FINALLY, PEOPLE CAN SUFFER TRAUMATIC AMNESIA, AND THAT'S NOT
BEING ABLE TO RECALL PART OF THE TRAUMATIC EVENT. SOMETIMES WHEN YOU GET HEAD TRAUMA YOU GET AMNESIA NORMALLY, BUT THIS IS EMOTIONAL AMNESIA.

AND SOMETIMES, TOO THE TRAUMATIC EVENT IS EXPERIENCED BY CONSTANT UNSTOPPABLE THOUGHTS, IMAGES, DREAMS, OR A SENSE OF RELIVING IT. THE TRAUMATIZED PERSON WILL AVOID ANY REMINDER OF THE EVENT. THERE WILL BE SIGNS OF INCREASED AROUSAL, JUMPINESS OR BEING EASILY STARTED BY NOISE. TRAUMATIZED PEOPLE HAVE DIFFICULTY SLEEPING, THEY TEND TO BE TENSE, AND THEY HAVE POOR CONCENTRATION DURING THE DAY. THESE SYMPTOMS MAY CAUSE PROBLEMS AT WORK, AT HOME OR WITH FRIENDS.

IN ACUTE STRESS DISORDER, WHICH IS ONE TYPE OF TRAUMATIC STRESS, THESE SYMPTOMS WON'T RESOLVE WITHIN A MONTH AFTER THE DISASTER. AND IF THEY DON'T RESOLVE IT BECOMES A MORE SEVERE DISORDER WE ALL CALL POST-TRAUMATIC STRESS DISORDER, OR PTSD. SOME OTHER DISTRESS SIGNALS AFTER A DISASTER RESPONSE ARE IF SOMEONE INCREASES USE OF ALCOHOL IF THEY ABUSE PRESCRIPTION MEDICINES SUCH AS PAINKILLERS OR SLEEP MEDICINES OR THEY HAVE A SUDDEN CHANGE OF ATTITUDE AND DECIDE TO MAKE A SUDDEN CATASTROPHIC LIFE DECISION LIKE JUST ONE DAY QUITTING THEIR JOB OR GETTING A DIVORCE.

ALL OF THESE DISTRESS SIGNALS INDICATE A NEED TO SEE A PROFESSIONAL PHYSICIAN OR PSYCHOLOGIST FOR AN EVALUATION TO SEE IF A LONG-TERM PROBLEM IS DEVELOPING OR WHETHER YOU JUST NEED A SHORT-TERM REFERRAL TO A COUNSELOR TO WORK OUT YOUR SHORT-TERM STRESS TO RESOLVE THE DISASTER.

PLEASE KNOW NOBODY IS INVULNERABLE. STUDIES SHOWED THAT AFTER THE OKLAHOMA CITY BOMBING, 18% OF THE FIREFIGHTERS THERE SUFFERED POST-TRAUMATIC STRESS DISORDER. HOWEVER, THIS WAS COMPARED TO A 33% RATE OF PTSD IN THE CIVILIAN PEOPLE IN THE BUILDING.

RESPONDERS TEND TO BE AND ARE MORE RESILIENT THAN CIVILIANS, BUT EVERY HUMAN BEING HAS THEIR LIMIT AND WE ALL HAVE THAT THRESHOLD NO MATTER HOW HIGH.

REMEMBER, THE PSYCHOLOGICAL TRAUMA SUFFERED DURING A RESPONSE CAN LEAD NOT ONLY TO PTSD BUT TO THE FOLLOWING PSYCHOLOGICAL DISORDERS. AGAIN, THESE ARE RARE, BUT THEY CAN OCCUR.

PEOPLE CAN GET DEPRESSED AFTER A DISASTER, AND THIS LEADS TO LONG-TERM FEELINGS OF SORROW, SADNESS, PEOPLE LOSE THEIR APPETITE, SUFFER WEIGHT LOSS, HAVE THE SLEEP DISTURBANCES WE'VE TALKED ABOUT, AND THEY CAN FEEL GUILTY AND VERY WORTHLESS WITH DEPRESSION.

HE ANXIETY DISORDERS ARE DIFFERENT. YOU TEND TO SUFFER FROM PERSISTENT FEAR AND WORRY WITH AN ANXIETY DISORDER. YOU GET TENSE MUSCLES. YOU CAN TREMBLE, BE VERY RESTLESS. YOU GET WORN OUT FROM WORRYING. YOU GET PHYSICAL SYMPTOMS LOOK A RAPID HEARTBEAT, DIZZINESS, AND YOU CAN BE KEYED UP AND HAVE DIFFICULTY CONCENTRATING. AND AGAIN, YOU HAVE SLEEP DIFFICULTY.

SO SLEEP DIFFICULTIES CAN BE A SYMPTOM OF MANY THINGS. AND THEN FINALLY, LET'S GO BACK OVER AGAIN THE SYMPTOMS OF POST-TRAUMATIC STRESS DISORDER.

AGAIN, IT'S A FAIRLY RARE DISORDER, AND IT TENDS TO OCCUR IN PEOPLE WHO'VE BEEN EXPOSED TO VERY SEVERE TRAUMA THAT THREATENS THEIR LIFE OR IF THEY SEE SOMEONE ELSE'S LIFE THREATENED. AND IT'S REALLY OUTSIDE THE RANGE OF NORMAL EXPERIENCE.

FOR SOMEONE TO GET TRAUMATIC STRESS. AND USUALLY, THESE OCCUR IN THINGS LIKE DISASTERS OR COMBAT OR
BEING IN A PLANE CRASH OR IN A FIRE.
AND AGAIN, THE SYMPTOMS OF PTSD REVOLVE AROUND THE TRAUMATIC
STRESS WE TALKED ABOUT.
PEOPLE JUST CAN'T PUT IT OUT OF THEIR MIND.
THEY HAVE REPETITIVE THOUGHTS ABOUT THE EVENT.
THEY HAVE VIVID NIGHTMARES.
THEY HAVE THINGS CALLED FLASHBACKS, WHICH IS BEING AWAKE AND
HAVING A SUDDEN OVERWHELMING MEMORY OF THE EVENT.
BECAUSE OF THIS PEOPLE TRY TO AVOID THINKING ABOUT THE EVENT.
THEY AVOID REMINDERS OF THE EVENT.
THEY CAN GET, AGAIN, NUMB.
THEY HAVE SLEEPING PROBLEMS AND THEY HAVE THAT HEIGHTENED STARTLE REFLEX.
ALL THE DISORDERS WE'VE TALKED ABOUT FROM DEPRESSION TO PTSD ARE
VERY TREATABLE AND IF YOU HAVE ANY OF THESE SYMPTOMS YOU SHOULD
BE EVALUATED OR TREATED BY A PSYCHOLOGIST OR CLINICAL
PSYCHOLOGIST.
BUT THIS IS RARE FOLLOWING DISASTERS BUT DOES OCCUR.
LET'S STEP BACK AND LOOK AT THE FACTORS THAT HELP SUPPORT A
NORMAL RECOVERY PROCESS.
IN BOTH AN INDIVIDUAL AND A GROUP LEVEL SOCIAL SUPPORT IS AN
IMPORTANT PROTECTION FROM STRESS AND WE'VE TALKED ABOUT THIS
BEFORE, FOR BOTH ADULTS AND CHILDREN.
LONG-TERM RELATIONSHIPS, PARTICULARLY MARRIAGE, HAS BEEN FOUND TO
HAVE A POSITIVE EFFECTS ON MEN'S HEALTH BUT SORT OF A LITTLE BIT
OF A NEGATIVE EFFECT ON WOMEN'S HEALTH.
SIMPLY TALKING TO CLOSE FRIENDS OR CO-WORKERS AND RECEIVING THEIR
FEEDBACK IS A VERY POWERFUL FORM OF EMOTIONAL SUPPORT.
AND IT ALLOWS PEOPLE TO WORK THROUGH, YOU KNOW, FEELINGS
ASSOCIATED WITH A RESPONSE.
ESPECIALLY AMONG FELLOW RESPONDERS.
AND HELPS YOU MAKE SENSE OF THE EXPERIENCE.
SOCIAL SUPPORTS AIDS IN THE PROCESS OF PUTTING A TRAUMATIC
EXPERIENCE INTO A MORAL CONTEXT AND THEREFORE IT HELPS FADE IT SO
IT NO LONGER EXERTS AN OVERLY POWERFUL INFLUENCE ON YOUR LIFE.
IT'S INTERESTING.
MEN ARE MORE RESPONSIVE TO SOCIAL SUPPORT THAN WOMEN.
HOWEVER, WOMEN TEND TO SEEK SOCIAL SUPPORT OUT MORE THAN MEN DO.
AND SOCIAL SUPPORT IS NOT JUST HOW MANY PEOPLE YOU KNOW BUT HOW
DEEPLY AND CLOSELY YOU KNOW THEM AND HOW POSITIVE THOSE
FRIENDSHIPS ARE.
A VERY IMPORTANT COPING MECHANISM AFTER A DISASTER IS THAT PEOPLE
WHO'VE LIVED THROUGH A DISASTER OR TERRORIST ATTACK WILL HAVE AN
OVERWHELMING URGE TO TELL THE STORY OVER AND OVER AGAIN.
BY DOING THIS THEY'RE SORTING OUT THE SEQUENCE OF EVENTS WHICH AT
FIRST AFTER A DISASTER MAY BE A CONFUSED JUMBLE IN YOUR MIND.
BY SEEKING SUPPORT AND INPUT INTO YOUR STORY, THEY ALSO ARE
PUTTING MEANING INTO THE EXPERIENCE.
NOW, AGAIN, TO GET BACK TO THE QUESTION HOW DO YOU KNOW IF YOUR
BUDDY'S IN TROUBLE?
WELL, A PERSON WHO FINDS THE STORY OF THE EXPERIENCE TOO PAINFUL
TO TELL DAYS TO WEEKS LATER, WHO CREATES A DELIBERATE WALL OF
SILENCE AROUND AN EVENT, IS SENDING A SIGNAL THAT THEY'RE
OVERWHELMED BY IT.
ANOTHER SIGNAL OF A BLOCKED RECOVERY IS A PERSON'S DREAMS OF THE
EVENT DO NOT CHANGE OVER TIME BUT REMAIN EXACT REPETITIONS OF THE
EVENT AND THEY CONTINUE TO EVOKE PAINFUL EMOTIONS DAYS TO MONTHS
TO WEEKS DOWN THE ROAD.
ANOTHER HEALING THING IS TO PARTICIPATE IN MEMORIALS.
RITUALS LIKE CHURCH SERVICES AND MEMORIALS ALLOW THE POWERFUL
EMOTIONS ASSOCIATED WITH BEING IN A DISASTER OR IN THE RESPONSE TO BE DIRECTED IN A WAY THAT UNIFIES ALL THE SURVIVORS IN THE COMMUNITY TOGETHER.

RITUALS OR MEMORIALS RESTORE THE FABRIC OF EVERYDAY LIFE AND HELP US GET A SENSE OF PLACE AGAIN IN THE MORAL UNIVERSE.

AND ALSO, A PREARRANGED RESPONDER AND FAMILY SUPPORT NETWORK NEEDS TO BE IN PLACE FOR RESPONDERS BEFORE A BIG DISASTER RESPONSE.

THIS SUPPORT SYSTEM SHOULD BE DESIGNED WITH THE PARTICULAR DEPARTMENT IN MIND, AND YOU KNOW IN THE PAST FIREFIGHTERS, YOU KNOW, HAD A VERY INFORMAL PEER SUPPORT SYSTEM THAT WAS LIKE FAMILY.

AND IT SERVED VERY WELL.

BUT AS THEY FOUND OUT IN NEW YORK AFTER SEPTEMBER 11th, SUCH A LARGE-SCALE EVENT OVERBURDENED THE TRADITIONAL INFORMAL SOCIAL NETWORK.

AND WHAT THEY DID IN NEW YORK WAS THEY HIRED SOME CONSULTANTS WHO WROTE THE MCKINSEY REPORT, AND THEY REPORTED THAT YOU NEEDED AHEAD OF TIME TO SET UP THE SUPPORT NETWORK BY HAVING A PLANNING AND OVERSIGHT COMMITTEE FOR THE SUPPORT NETWORK AND MAKE IT UP OF DEPARTMENT PERSONNEL WHO ARE FAMILIAR WITH THE UNIT.

>> ALL RIGHT.

THANK YOU, PAM, FOR YOUR INFORMATION.

JIM, CAN YOU TELL US BRIEFLY ABOUT THE EPA PEER SUPPORT AND CISM TEAM THAT WAS SET UP FOR THE OSCs?

>> SURE.

EPA SET UP A NATIONWIDE CISM TEAM, ONE TEAM ENCOMPASSING ALL TEN REGIONS FOR EPA.

AND THEY BROUGHT TOGETHER TO BE A PART OF THIS TEAM THE MENTAL HEALTH PROFESSIONALS, AND THEN THE PEER OSC FOLKS LIKE MYSELF. THE OSCs LIKE MYSELF DO NOT HAVE THE MEDICAL TRAINING OR THE BACKGROUND, BUT WE DO KNOW THE PROBLEMS ASSOCIATED WITH THE OSC JOB AND THE STRESS.

SO ONE TEAM WAS COMBINED FROM ALL OVER THE REGIONS TO TAKE A LOOK AT THE STRESS SITUATIONS WITH THE OSCs.

AGAIN, THIS IS A FIRST AID TYPE OF ROLE FOR US AS OSCs, AND WE DEFINITELY ARE TAKING A LOOK AT THE OTHER OSCs IN OUR PROGRAM TO MAKE SURE THAT THEY UNDERSTAND IN TERMS OF AN AWARENESS STRESS AND HOW THE EFFECT MIGHT BE TO THEM AND THOSE FOLKS THAT WORK FOR THEM.

>> I GUESS WE SHOULD SAY OSC STANDS FOR ON-SITE COORDINATOR.

>> ON-SCENE COORDINATOR.

>> ON-SCENE COORDINATOR.

ALL RIGHT.

PAM?

>> OKAY.

FINALLY, LET'S JUST TALK A LITTLE BIT ABOUT TURNING ON THE RELAXATION RESPONSE THAT I PROMISED EARLIER IN THE BROADCAST.

ONE WAY TO TURN OFF THAT RELAXATION RESPONSE, OR TURN IT ON, IS TO TRAIN IN INDIVIDUAL STRESS MANAGEMENT.

THIS LETS YOU LEARN HOW TO CONTROL YOUR BODY’S STRESS RESPONSE. YOU CAN DO THIS BY LEARNING VARIOUS METHODS OF RELAXATION TRAINING. RELAXATION CAN BE ACHIEVED IN A WIDE VARIETY OF WAYS. YOU CAN LEARN MEDITATION. THERE ARE PSYCHOLOGICAL METHODS LIKE PROGRESSIVE RELAXATION OR YOU CAN TAKE THINGS LIKE BIOFEEDBACK TRAINING. ALL OF THESE RELAXATION METHODS TURN OFF THAT STRESS RESPONSE AND TURN THE BODY’S NATURAL COUNTERBALANCING RELAXATION RESPONSE ON, EVEN IF YOU DON'T HAVE A LOT OF DOWN TIME.

SO THEY ARE IN A FUNNY WAY GOOD QUICK WAYS OF RELAXING.

OTHER STRESS MANAGEMENT TECHNIQUES INCLUDE JOURNAL WRITING, EXERCISING LIKE WE’VE MENTIONED BEFORE, AND PROPER NUTRITION.
THANK YOU, PAM.

Now, as we move into Segment Four, we'll learn about the various ways to help the public during a disaster. Upon completion of Segment Four, you will be able to identify strategies for assisting members of the public with their disaster-related stress.

Chad, how often are you called upon to help people psychologically during emergencies?

Fire departments are asking more and more of us. We as an industry don't have a working knowledge of psychology for ourselves and our patients. From learning about CISM defusings to learning how to decompress ourselves, we need to know how and when to intervene psychologically. It's part of our new job description.

All right.

Thank you, Chad.

Now, we're going to turn to Pam for a discussion of how first responders can provide brief psychological help to the public during disasters.

Pam?

Thanks, KySA.

First, in order to help, it's good to know how people act during a disaster. Human behavior during emergencies and disasters depends on many things. First, what kind of disaster it is -- is it natural? Is it a technological disaster? Is it a terrorist attack? How intense or bad a disaster is it? How people will behave also depends on when you see them, during or after the disaster. Also, obviously, children react differently than adults. There may also be gender and cultural differences in how people respond to disaster.

Here are some generalizations that have been found to be true, about human behavior during disasters.

First, let's debunk the panic myth. You often read that people panic during disasters, panic being uncontrolled irrational behavior. In fact, during most disasters panic is rare and people cope well. Panic in people tends to occur only in crowded settings, with fires and where escape is difficult in a situation.

Second, most people during a disaster although they cope well will show emotion and stress and some may even get very upset. This is not blind irrational panic, though but simply heightened, you know, emotions.

In other words, it is normal to be stressed out during a disaster.

Third, how people react to an emergency depends a lot on their culture. But in general, most people will show a mix of physical and emotional symptoms of stress that we've been talking about today. And in some people some of the physical symptoms of stress, depending on what's happened to them, may be as severe as shock if they are just -- have learned of a death or a sudden injury.

Also, remember that during a disaster, the sudden shock can trigger heart attacks in susceptible individuals, and the stress in the aftermath can worsen medical symptoms, such as arthritis or irritable bowel syndrome.

Thank you, Pam.

So, in other words, most people will be showing signs of stress
DURING A DISASTER, BUT IT'S RARE TO SEE ACTUAL PANIC.
>> ABSOLUTELY.
THAT'S RIGHT.
MOST PEOPLE WILL BE SHOWING SIGNS OF STRESS DURING AND SHORTLY
AFTER THE DISASTER, AND BECAUSE OF THAT THEY NEED PRACTICAL
ASSISTANCE TO HELP THEM RELIEVE THEIR STRESS.
AND THEY ALSO NEED THAT EMOTIONAL SUPPORT WE'VE BEEN TALKING
ABOUT TO HELP THEM RECOVER.
SO REALLY THERE IS A TECHNIQUE THAT PEOPLE NEED DURING A
DISASTER, AND WHAT THEY NEED IS CALLED PSYCHOLOGICAL FIRST AID.
>> WELL, THEN, HOW DO YOU PERFORM PSYCHOLOGICAL FIRST AID FOR
ADULTS IF YOU ARE AN ON-SCENE RESPONDER?
>> FIRST AND FOREMOST, BE SURE THAT YOU AND THE SURVIVOR ARE
SAFE, AND THAT THE PERSON IS MEDICALLY STABLE BEFORE
ADMINISTERING TO THEIR PSYCHOLOGICAL NEEDS.
OBVIOUSLY, ADEQUATE MEDICAL TRIAGE IS ESSENTIAL, MAKING SURE A
PERSON'S SYMPTOMS ARE NOT MEDICAL BUT STRESS-RELATED.
THESE PRINCIPLES OF ON-SCENE PSYCHOLOGICAL FIRST AID WERE
DEVELOPED BY A REGISTERED NURSE NAMED DIANE MYERS.
JUST THREE WORDS TO REMEMBER --
PROTECT, DIRECT, AND CONNECT.
PROTECT -- THE FIRST STEP IS TO PROTECT THE SURVIVOR FROM FURTHER
EXPOSURE TO THE DISASTER SCENE.
FOR INSTANCE, PLACE A PHYSICAL BARRIER OR YOUR BODY SO THAT THE
SURVIVOR'S VIEW OF THE SCENE IS BLOCKED.
AND ALSO, RESPECT THE SURVIVOR'S DIGNITY BY PROVIDING COVERING
FOR THEM IF THEY NEED IT.
AND PROTECT THE SURVIVOR FROM INTRUSION BY THE MEDIA AND
ONLOOKERS.
BE WARM AND GENUINE.
THIS ATTITUDE SHOWS RESPECT FOR THE INDIVIDUAL, AND YOUR
PROTECTING PRESENCE WILL BEGIN TO HELP CALM AND REASSURE THE SURVIVOR.
>> CHAD, PLEASE TELL US ABOUT YOUR EXPERIENCES PROTECTING VICTIMS
DURING A DISASTER.
>> SURE.
I USE WHAT I'VE LEARNED FROM MY TRAINING WITH MY PATIENTS ON-CALL.
I KNOW WHAT FEAR FEELS LIKE, AND NOW, WHEN I SEE THAT ON A
PATIENT ON ANY CALL, I TRY TO USE WHAT I'VE LEARNED FROM THE CISD
TO GUIDE THEM.
I'LL TELL THEM THAT THEIR FEAR IS NORMAL AND TO BE EXPECTED AND
IT SHOULD GET BETTER WITH TIME.
AND, IF THEIR FEELINGS OVER TIME DON'T GET BETTER, THERE ARE
PEOPLE OUT THERE THAT CARE AND THAT WANT TO HELP.
AND WHEN THEY'RE READY, THEY JUST NEED TO ASK.
>> OKAY.
AND PAM, WE'VE TALKED ABOUT THE FIRST STEP OF PSYCHOLOGICAL FIRST AID.
WHAT ABOUT THE SECOND AND THE THIRD?
>> THE SECOND STEP IS DIRECT.
AND THIS IS COMMON SENSE.
YOU SHOULD DIRECT WALKING SURVIVORS AWAY FROM THE SITE OF
DESTRUCTION AND DANGER TO SAFETY.
ESPECIALLY, BE SURE TO DIRECT THEM AWAY FROM AREAS WITH SEVERELY
INJURED SURVIVORS OR THE DEAD.
ANOTHER PART OF DIRECTING SURVIVORS IS PROVIDING THEM CUES.
TELL THEM WHO YOU ARE, WHAT YOU DO, AND BRIEFLY WHAT HAS HAPPENED.
PROVIDING GOOD INFORMATION AT SITES HELPS CALM AND ORIENT
CONFUSED AND DAZED SURVIVORS.
BE SURE TO BE AS GENTLE AND SOOTHING AS POSSIBLE WITH PEOPLE IN
AN EMERGENCY.
VICTIMS CAN BE ON SENSORY OVERLOAD, SO PROVIDE SIMPLE CUES.
ALSO WHEN YOU'RE WORKING WITH A PERSON MEDICALLY TELL THEM WHAT YOU'RE DOING SUCH AS PREPARING THEM FOR TRANSPORT, GIVING THEM SOME MEDICATION OR TRANSFERRING THEM TO ANOTHER SITE OR CAREGIVER.

PROVIDE GENUINE, GOOD INFORMATION. HOWEVER, IF POSSIBLE IT'S BETTER TO AVOID PROVIDING VERY BAD NEWS LIKE DEATH NOTIFICATION ON A SCENE.

THE THIRD STEP IS CONNECT. THIS MEANS HAVING SOMEONE WITH THE SURVIVORS THROUGHOUT THE RESCUE EFFORT.

HAVING SOMEONE AROUND PROVIDES COMFORT. WHenever possible, reconnect survivors with their family and friends if that's possible and evacuate them together. But also it's important to get people to a safe, secure off-site place and leave it up to the folks there to connect them to appropriate resources and referrals.

>> IS IT POSSIBLE TO PERFORM PSYCHOLOGICAL FIRST AID WITH CHILDREN? AND, IF SO, HOW IS IT DIFFERENT FROM WORKING WITH ADULTS?

>> IT IS POSSIBLE TO DO PSYCHOLOGICAL FIRST AID WITH KIDS, AND IT IS DIFFERENT FROM DOING IT WITH ADULTS.

YOU HAVE TO WORK DIFFERENTLY WITH CHILDREN.

LET'S BRIEFLY REVIEW HOW TO PROVIDE PSYCHOLOGICAL SUPPORT ON SCENE FOR A CHILD.

FIRST AND FOREMOST, BE SURE THAT YOU AND THE CHILd ARE SAFE, AND THE CHILD IS MEDICALLY STABLE BEFORE ADMINISTERING TO THEIR PSYCHOLOGICAL NEEDS.

AGAIN, THINK OF TRIAGE. BE SURE THAT ALL THEIR MEDICAL PROBLEMS HAVE BEEN DEALT WITH.

THE STEPS IN PSYCHOLOGICAL FIRST AID WITH CHILDREN ARE THE SAME AS IN ADULTS -- PROTECT, DIRECT, CONNECT -- THOUGH HOW YOU WORK WITH CHILDREN IS DIFFERENT.

FOR EXAMPLE, DURING THE FIRST STEP, PROTECT, FOR THE RESPONDER ON THE FRONT LINE PROTECTING CHILDREN MEANS PHYSICALLY REMOVING THEM FROM THAT HAZARDOUS SCENE AS SOON AS SAFELY POSSIBLE.

VERY YOUNG CHILDREN, AGES 1 TO 6, MAY SUFFER FROM THAT FREEZE REACTION BECAUSE OF THEIR MENTAL AGITATION AND THE FACT THAT THEY MAY BE OVERWHELMED.

KIDS CAN ALSO TEND TO HIDE IN VERY DANGEROUS SITUATIONS, THE VERY LITTLE ONES.

THEY MAY BE INCAPABLE OF THINKING VERY CLEARLY OR HELPING THEMSELVES.

THEY MAY NOT BE ABLE TO TALK, AND THEY MAY BE VERY CONFUSED ABOUT WHAT HAS HAPPENED.

ALSO, AS SOON AS POSSIBLE, PROTECT THE CHILD FROM REMINDERS OF THE DISASTER SCENE, THOSE SMELLS, SIGHTS, AND NOISE THAT BOTHER ADULTS VERY MUCH BOTHER CHILDREN.

AND ALSO, PROTECT THEM FROM CONTACT WITH ONLOOKERS AND THE MEDIA.

REUNITE THE CHILDREN WITH THEIR PARENTS AS SOON AS POSSIBLE.

THE SECOND STEP IS DIRECT.

YOU DO THIS BY TELLING THE CHILD WHO YOU ARE, AND WHAT YOU DO. "I'M A POLICEMAN, FIREFIGHTER, DOCTOR."

AND HOW YOU WILL BE HELPING THEM.

PROVIDE KIND BUT FIRM DIRECTIONS TO THE CHILD.

REMEMBER, THEY'LL BE CONFUSED AND THEY'LL NEED MORE SUPERVISION THAN AN ADULT.

AND BE SURE THAT YOU GIVE VERY GENTLE, SIMPLE, AND CONCRETE DIRECTIONS SUCH AS "PLEASE GO AND SIT OVER THERE."

KEEP IT SHORT.

ALSO PROVIDE SIMPLE UPDATES OF WHAT'S HAPPENING TO THE CHILDREN SO THEY CAN BEGIN TO UNDERSTAND THE SITUATION.
THIS MAY HELP CALM THEM.
THEN, FINALLY AND MOST IMPORTANT, CONNECT.
WHENEVER POSSIBLE, EVACUATE THE CHILD WITH THEIR PARENTS OR LEGAL
GUARDIANS.
IF THAT IS NOT POSSIBLE, MOVE THE CHILD TO THE AGENCY THAT HAS
THE LEGAL RESPONSIBILITY FOR CARE OF MINOR CHILDREN AT A DISASTER.
>> AND SOMETIMES THE FIRST RESPONDER IS ALSO A DISASTER VICTIM.
SO IN ADDITION TO RESPONDING TO AN EMERGENCY, YOU HAVE TO TAKE
CARE OF FRIENDS AND FAMILY WHO MAY BE DISASTER VICTIMS.
PAM, COULD YOU PLEASE END THIS SEGMENT WITH A BRIEF EXPLANATION
ON HOW TO CARE FOR YOUR FAMILY AND FRIENDS IF THEY HAVE BEEN
INVOLVED IN A DISASTER?
>> OF COURSE.
THANK YOU.
I'D BE GLAD TO.
HERE ARE SOME VERY GENERAL TIPS IN HOW TO HELP FRIENDS AND FAMILY
RECOVER FROM A DISASTER.
FIRST OF ALL, IT REALLY HELPS JUST TO BE THERE FOR THEM.
LISTEN.
BE AWARE ALSO, I THINK AS FIRST RESPONDERS WE THINK WE HAVE TO
HAVE ANSWERS.
BE AWARE YOU DON'T HAVE TO HAVE THE PERFECT ANSWER.
LISTENING IS A POWERFUL WAY TO HELP.
ANOTHER WAY TO HELP IS TO PROVIDE PRACTICAL AID DURING TIMES OF STRAIN.
FIRST OF ALL, IF YOU'RE FAMILY HAS HAD SOME KIND OF IMMEDIATE
EMERGENCY OR MEDICAL NEED MAKE SURE THEY'VE BEEN TENDED TO AND
GET THEM ANY INFORMATION YOU HAVE ABOUT OTHER FAMILY OR FRIENDS.
THEN GET THEM TO A SAFE AND SECURE PLACE OFF-SITE, PERHAPS WITH
RELATIVES OR YOUR OWN HOME.
IT'S IMPORTANT TO MAINTAIN THOSE DAILY ROUTINES ONCE YOU GET THEM
OFF SITE, MAKE SURE THEY'VE EATEN AND HAVE GOTTEN ENOUGH TO DRINK
AND ARE COMFORTABLE.
AND ALSO IF YOU ARE HAVING TO MOVE, BE SURE YOU BRING MEDICINES
AND OTHER NECESSARY ITEMS FROM HOME AS WELL AS A SMALL NUMBER OF
FAMILIAR COMFORT ITEMS LIKE A FAVORITE COFFEE CUP FOR ADULTS OR A
TEDDY BEAR FOR CHILDREN.
THAT FIRST NIGHT OFF-SITE MAKE SURE THEY GET SOME SLEEP IN A
PRIVATE SPACE.
AND THEN IT'S SIMPLE.
JUST PROVIDE REGULAR EVERYDAY COMPANIONSHIP.
HELP THEM RESTORE THE DAILY RITUALS AND ROUTINES.
THOSE ARE VERY HEALING.
SUCH AS A CUP OF COFFEE IN THE MORNING OR THE PAPER.
ONCE THE IMMEDIATE EMERGENCY HAS PASSED AND THE SYMPTOMS OF SHOCK
AND CONFUSION HAVE SUBSIDED OVER A FEW DAYS, MOST ADULTS WILL
ENTER THE PHASE OF ASSESSING THEIR LOSSES AND BEGINNING TO
REBUILD THEIR LIVES.
IN A PSYCHOLOGICAL PHASE OF WORKING THROUGH THE MEANING OF THE
EXPERIENCE.
NOW THE PRACTICAL ASSISTANCE FROM YOU PROBABLY CONSISTS OF
HELPING THEM RECOVER THEIR OLD LIVES LIKE FINDING A CAR OR A NEW
PLACE TO LIVE.
ANYTHING YOU CAN DO PRACTICALLY WILL HELP THEM PICK UP THE NORMAL
JOB AND FAMILY ROUTINE.
ALSO, THROUGHOUT RECOVERY BE SURE TO KEEP LISTENING TO YOUR FAMILY.
AND DON'T BE AFRAID TO LOOK FOR AND GENTLY CONFRONT
SELF-DEFEATING BEHAVIORS SUCH AS INCREASED USE OF DRUGS OR
ALCOHOL OR IF YOU SEE ANY KIND OF PSYCHOLOGICAL BLOCKED RECOVERY SYMPTOMS.
MAKE SURE THEY GO FOR PROFESSIONAL IF NEEDED.
BUT MOST PEOPLE WILL RECOVER WITH JUST SIMPLE ASSISTANCE.
WELL, SO FAR, WE’VE Talked ABOUT HELPING THE ADULTS IN YOUR LIFE AFTER A DISASTER.
HOW DO YOU HELP CHILDREN DURING AND AFTER A DISASTER?

KYSA, I’D LIKE TO GIVE SOME POINTERS IN PARENTING CHILDREN AFTER A DISASTER.
FIRST OF ALL, HOW A CHILD RESPONDS TO DISASTER DEPENDS ON MANY THINGS AND THEY RESPOND DIFFERENTLY THAN ADULTS.
ONE FACTOR, AS IN ADULTS, IS THE DROGUE OF EXPOSURE A CHILD HAS TO A DISASTER WILL DETERMINE THE IMPACT.
HOW CLOSE WERE THEY TO THE EVENT?
WHETHER OR NOT THEY WERE PERSONALLY INJURED, OR KNEW SOMEONE WHO WAS INJURED OR KILLED.
ALSO, IN THIS MEDIA AGE, EXPOSURE TO THE EVENT BY TELEVISION HAS BEEN FOUND TO HAVE A HARMFUL EFFECT ON VERY SMALL CHILDREN.
ANOTHER VERY IMPORTANT VARIABLE IS THEIR AGE AND HOW THEY RESPOND.
CHILDREN OF DIFFERENT AGES UNDERSTAND THE WORLD VERY DIFFERENTLY.
OBVIOUSLY A 2-YEAR-OLD AND A 14-YEAR-OLD WILL NOT PROCESS A DISASTER IN THE SAME WAY AT ALL.
DURING DISASTERS VERY YOUNG CHILDREN AGES 1 TO 6 TEND TO BE BOTH OVERWHELMED BOTH EMOTIONALLY AND MENTALLY.
AND AFTER A DISASTER IT TAKES LONGER FOR VERY YOUNG CHILDREN TO WORK OUT AND EVEN UNDERSTAND WHAT HAS HAPPENED, AND THEY WILL NEED ADULT HELP IN DOING SO.
ONE VERY IMPORTANT THING THAT PARENTS OF VERY SMALL CHILDREN CAN DO IS LIMIT THE TV VIEWING OF THE EVENT.
IT IS FELT THAT SMALL CHILDREN SHOULDN’T WATCH THE EVENT ON TV.
BUT IF THAT IS IMPOSSIBLE ADULTS SHOULD BE PRESENT WHEN THEY ARE VIEWING IT.
ALSO, BE AWARE THAT YOUNG CHILDREN WILL NOT UNDERSTAND THAT TV REPLAYS OF THE EVENTS ARE RERUNS, AND THEY WILL THINK THAT A NEW DISASTER IS HAPPENING EVERY TIME THEY SEE IT ON THE TV EVEN IF IT’S THE SAME EVENT.
YOU NEED TO TELL THEM OTHERWISE, THOUGH.
AFTER A DISASTER, BOTH YOUNG AND SCHOOL-AGE CHILDREN WILL TEND TO RE-EXPERIENCE THE EVENT IN DREAMS AND HAVE SCARY DREAMS JUST LIKE ADULTS DO.
THE CHILDREN MAY BECOME MORE CLINGY AND FEARFUL AS BEDTIME APPROACHES, AND MAY WANT TO SLEEP WITH YOU.
THEM’LL KIND OF REGRESS IN THEIR BEHAVIOR.
CHILDREN MAY ALSO STARTLE EASILY AND BE JUMPY, AND ANYTHING THAT REMINDS THEM OF THE TRAGEDY WILL UPSET THEM AGAIN.
AFTER A DISASTER SCHOOL AGE CHILDREN FROM ABOUT 7 TO 11 MAY HAVE ANGRY OUTBURSTS AT VERY SLIGHT PROVOCATIONS.
BOTH YOUNG AND SCHOOL-AGE CHILDREN MAY EXPRESS THEIR FEELINGS NOT BY WORDS, BUT BY GETTING SICK, BY HAVING BODILY SYMPTOMS SUCH AS HEADACHE.
REMEMBER, AFTER AN EVENT CHILDREN WILL WANT TO FREQUENTLY CHECK IN WITH YOU, THEIR PARENTS AND OTHER MEMBERS OF THEIR FAMILY TO MAKE SURE YOU'RE OKAY AND ANOTHER DISASTER HAS NOT HAPPENED TO YOU.

PAM, WHAT ABOUT OLDER CHILDREN AND TEENAGERS, FOR INSTANCE?
TEENAGERS TEND TO HAVE A MORE MATURE, ADULT VIEW OF THE EVENT, AND THEY CAN HANDLE MORE INFORMATION ABOUT AN EVENT THAN YOUNGER CHILDREN CAN.
THEM HAVE EMOTIONAL RESPONSES SIMILAR TO ADULTS SUCH AS GUILT OVER SURVIVAL.
THEY CAN GET SAD OVER WHAT'S HAPPENED, AND THEY CAN GET NUMB.
HOWEVER, TEENAGERS BEING TEENAGERS TEND TO HANDLE THEIR EMOTIONS BY ACTING ON THEM AND THEY CAN EITHER DO THINGS LIKE WITHDRAWING OR HAVE ACTING OUT BEHAVIORS SUCH AS GET ANGRY AND GETTING IN ARGUMENTS WITH YOU.
IT'S IMPORTANT TO GENTLY POINT OUT TO THE TEENAGER THE LINK.
BETWEEN THE EMOTIONS THEY'RE FEELING AND THE BEHAVIORS THEY'RE EXPRESSING.

>> I GUESS THE NEXT LOGICAL QUESTION IS WHAT CAN WE DO TO HELP CHILDREN WHO ARE EXPRESSING A LOT OF STRESS DUE TO DISASTER?
>> THERE ARE SOME SIMPLE THINGS THAT YOU CAN DO TO HELP PEOPLE AND HELP CHILDREN WITH THEIR FEELINGS AND BEHAVIORS.
WHAT YOU WANT TO DO IS MAINTAIN A CHILD'S ROUTINE AND ORDER.
CHILDREN ARE CREATURES OF ROUTINE.
THEY NEED TO BE KEPT TO THEIR REGULAR SLEEPING AND EATING ROUTINES, ESPECIALLY IF THEY'RE IN A STRANGE PLACE AFTER THE DISASTER.
A PREDICTABLE ENVIRONMENT MAKES CHILDREN FEEL SAFE, AND IT CALMS THEM DOWN.
IF OLDER CHILDREN ARE HAVING TROUBLE GOING TO SLEEP ALONE, YOU CAN ADD A NIGHTLIGHT OR ALLOW THEM TO READ, YOU KNOW, BEFORE BED SHORTLY OR PUT MUSIC ON, AND THIS WILL HELP EASE THE TRANSITION TO SLEEP.
BE SURE TO TALK WITH THE CHILDREN ABOUT WHAT HAS HAPPENED.
AND ITS IMPACT ON YOUR FAMILY.
CHILDREN MAY HAVE A CONFUSED EMOTION ABOUT THE DISASTER, AND TALKING WITH THEM WHEN THEY ARE READY AND GIVING AGE-APPROPRIATE ANSWERS CAN HELP GIVE THEM A CLEARER PICTURE OF WHAT HAPPENED.
BE CAREFUL, ESPECIALLY WITH SMALL CHILDREN LIKE TODDLERS UP TO AGE 6 OR 7.
DON'T GIVE THEM TOO MUCH INFORMATION BECAUSE THEY MAY NOT BE ABLE TO TAKE IT ALL IN AND THIS JUST ADDS TO THEIR CONFUSION.
AND ALSO, BE SURE TO TALK WITH CHILDREN ABOUT WHAT THEY'RE FEELING.
REMEMBER, VERY YOUNG CHILDREN UNDER AGE 6 MAY NOT KNOW HOW TO NAME THEIR FEELINGS AND HAVE TROUBLE RECOGNIZING THEM.
GIVE THEM A NAME FOR THEIR FEELINGS, SAY YOU LOOK SAD OR YOU LOOK ANGRY OR ARE YOU SCARED OR ARE YOU TROUBLED?
KEEP THESE CONVERSATIONS ABOUT FEELINGS SHORT AND SIMPLE, AGAIN, TO AVOID OVERWHELMING YOUNG CHILDREN.
ALSO YOUNG CHILDREN TEND TO WORK THROUGH THEIR FEELINGS BY PLAYING DISASTER.
BE SURE TO KEEP AN EYE ON THE WAY THEY PLAY.
IF IT KEEPS REVOLVING AROUND SCARY OR HURTFUL THINGS AND THEIR DISASTER PLAY DOESN'T SEEM TO END BUT KEEPS GOING ON AND ON YOU MIGHT WANT TO STEER THE CHILD AWAY FROM THIS ACTIVITY.
OLDER CHILDREN AND TEENAGERS MAY NEED YOUR EMOTIONAL SUPPORT AND REASSURANCE THAT WHAT THEY'RE FEELING IS NORMAL AND IT WILL HEAL WITH TIME, AND BE SURE TO REFER TO RESOURCES IN THE MANUAL FOR FURTHER INFORMATION ON HELPING CHILDREN AND FAMILY WITH DISASTERS.
REMEMBER, THIS COURSE IS JUST A GENERAL INTRODUCTION AND ALL OUR TIPS HAVE BEEN VERY GENERAL.
THERE ARE MORE RESOURCES ON THIS AND OTHER TOPICS FROM THIS PROGRAM IN OUR MANUAL.

>> THANK YOU.
>> AND THANK YOU, PAM.
NOW FOR THE REST OF THE WEBCAST WE'D LIKE TO ADDRESS SOME OF THE QUESTIONS THAT YOU SUBMITTED.
IF YOU DO NOT HAVE YOUR QUESTION ANSWERED DURING TODAY'S WEBCAST, WE WILL POST ALL OF OUR ANSWERS ON THE WEBSITE ADDRESS, WHICH WE WILL GIVE YOU LATER.
LET'S GET STARTED.
OUR FIRST HERE IS OUR FIRST QUESTION.
QUESTION YOU SAY IT'S A GOOD IDEA TO PARTICIPATE IN MEMORIALS.
IS THIS DEPENDENT ON THE PERSON?
I WONDER IF IT MAY BE MORE HARMFUL THAN HELPFUL TO SOME FIRST RESPONDERS AS IT SEEMS TO PROLONG OR INTENSIFY THE EMOTIONAL PART OF THE STRESS RESPONSE?
AND SCOTT, I THINK YOUR NAME IS ON THIS QUESTION.
>> ONE OF THE THINGS WE FOUND OUT DURING THE "COLUMBIA" SHUTTLE
DISASTER RESPONSE IS ABOUT 12 DAYS INTO THE RESPONSE IT WAS
DECIDED THAT WE WERE GOING TO HAVE A MEMORIAL FOR THE VICTIMS.
The astronauts there in Lufkin, Texas, which was the -- kind of
the disaster field office that was set up for the entire response.
And the administrator of NASA, along with the vice president of
the United States, came to the memorial, and all the responders
-- it was limited to just the responders.
Were able to attend this memorial, and I think what it
accomplished was it actually unified all our emotions and kind of
bonded all the responders together, and in many respects it kind of
turned our emotions or thoughts away from the grisly task at
hand and enable us, again, to kind of come together and kind of
be able to forge on into the incident.
>> CHAD, HOW MANY FIRST RESPONDERS ACTUALLY DEVELOP MORE SEVERE
PSYCHOLOGICAL DISORDERS?
ARE THERE ANY STATISTICS OR STUDIES ON THIS THAT YOU KNOW OF?
>> THE POST-TRAUMATIC STRESS THAT I SAW WAS 2.3, THAT 3 PEOPLE
OUT OF 10 IN THE FIRE SERVICE WOULD DEVELOP IT.
Pam would probably have a good idea on --
>> THERE AREN'T A LOT OF STUDIES FROM DISASTER RESEARCH ON THE IMPACT.
AND ACTUALLY, IT DEPENDS ON THE DISASTER.
NATURAL DISASTERS TEND TO HAVE VERY FEW PSYCHOLOGICAL IMPACTS.
MOST PEOPLE COPE FAIRLY WELL WITH IT.
THEY FOUND WITH TECHNOLOGICAL DISASTERS THAT AS A STRESS OF A
DISASTER GOES UP YOU SEE MORE IMPACT.
FOR EXAMPLE, WITH A TECHNOLOGICAL DISASTER YOU MAY SEE MAYBE, YOU
KNOW, 5% OR 10% OF THE PEOPLE MAY HAVE SOME KIND OF SERIOUS
REACTION TO IT, BUT TERRORISM IS ACTUALLY THE WORST AND CAUSES
THE MOST PSYCHOLOGICAL CASUALTIES.
THERE'S BEEN LOTS OF RESEARCH DONE ON THIS.
AND THEY FOUND THAT AFTER 9/11 THAT ABOUT 25% OF PEOPLE WHO WERE
IN THAT PART OF LOWER MANHATTAN ACTUALLY DID HAVE SOME
POST-TRAUMATIC STRESS SYMPTOMS, BUT THAT WAS SHORTLY AFTER, AND
IT TENDED TO RESOLVE WITH TIME.
SO IT REALLY DEPENDS ON THE PERSON'S EXPERIENCE IN THE DISASTER,
WHAT HAPPENS TO THEM, HOW SEVERELY IMPACTED THEY ARE, WHETHER
THERE'S A REALLY SERIOUS IMPACT.
I THINK THE TAKE-HOME MESSAGE IS THAT MOST PEOPLE COPE WELL AND
ARE VERY RESILIENT BUT IT'S JUST IMPORTANT TO KNOW THAT IF THERE
ARE COMPLICATIONS THAT THERE ARE THINGS YOU CAN GO AND DO AND
PEOPLE THAT WILL HELP YOU WITH THEM.
>> MM-HMM.
NOW, THIS E-MAIL IS FROM WASHINGTON, AND THE QUESTION IS, OR THE
STATEMENT, "I'M MORE LIKELY NOT TO LET PEOPLE KNOW THAT I'M IN
TROUBLE AS I WANT TO KEEP MY JOB AND I FEAR THAT IF I SEEK
PSYCHIATRIC CARE I WILL BE LABELED OR PUT ON MEDICATION THAT WILL
INTERFERE WITH MY ABILITY TO DO MY JOB."
AND THEN THE QUESTION IS, "WHAT ARE YOUR THOUGHTS ON THIS?"
ANYBODY.
>> MY ANSWER THAT I HAVE IS THAT'S WHEN I SAID EARLIER YOU SHOULD
HAVE MORE MONEY AND MORE MARGIN OF MONEY, YOU CAN PAY FOR THAT
UNDER AN ASSUMED NAME.
NOBODY NEEDS TO KNOW WHO YOU REALLY ARE.
BUT YOU'VE GOT TO PAY FOR IT OUT OF POCKET.
>> BUT AREN'T THOSE EMPLOYEE ASSISTANCE PROGRAMS DESIGNED TO
PROTECT YOUR IDENTITY IN PART?
>> YES, THEY ARE.
WE HAVE ONE AT THE EPA.
AND YOU'RE GIVEN FIVE OR SIX DIFFERENT SESSIONS THAT YOU CAN GO TO. BUT I UNDERSTAND THIS A LITTLE BIT, YOU KNOW, KIND OF -- MAYBE NOT THE RIGHT THING TO SAY, BUT THE OLD SCHOOL. YOU KNOW, I GREW UP WHERE YOU DIDN'T REALLY TALK ABOUT YOUR EMOTIONS, YOUR FEELINGS, YOU JUST DID YOUR JOB AND WENT THROUGH IT. YOU KNOW, EVEN FROM VIETNAM ERA, WHICH I WAS IN VIETNAM. THERE WAS NOT A LOT OF DISCUSSION AFTERWARDS ABOUT THE SITUATION. AND I WOULDN'T WANT TO SAY IT'S A MACHO IMAGE OR NOT, BUT THERE'S THAT TENDENCY TO THINK THAT YOU CAN HANDLE IT YOURSELF. AND IT'S ONLY AFTER, YOU KNOW, YEARS OF REALIZING THAT THE PROCESSES THEY'RE TALKING ABOUT UNDER CISM AND THE STRESS-RELATED INCIDENTS, THAT THERE ARE METHODS TO REDUCE, YOU KNOW, THE DAMAGE TO THE BODY AND TO THE MIND THROUGH THIS PROCESS. 

>> PAM, WOULD YOU SAY RISK IT BECAUSE OF SOMEONE'S FEAR THAT THEY MAY LOSE THEIR JOB, OR DO YOU SAY GO AND GET THE HELP THAT YOU NEED? 

>> WELL, I GUESS THERE IS STIGMA AGAINST PEOPLE WHO DEVELOP PSYCHOLOGICAL DISORDERS, WHETHER IT'S JUST GENETICALLY OR WHETHER IT'S BECAUSE OF TRAUMA, AND THAT'S A DEEP SHAME. AND IT DOES KEEP PEOPLE FROM SEEKING HELP. I THINK THAT CHAD KIND OF HIT ON IT IN A WAY IN THAT YOU NEED TO CONTROL ACCESS TO YOUR MEDICAL HISTORY IF YOU DO GO SEEK HELP. I THINK IT WOULD BE NICE -- I WOULD BE THAT YVES TO SAY YES, GO SEEK HELP AND DESPITE THE STIGMA AND KNOW THAT THERE WON'T BE CONSEQUENCES BECAUSE I KNOW THERE ARE, BUT THAT SHOULDN'T STOP YOU FROM SEEKING HELP. IT JUST MEANS YOU NEED WISE IN THE PEOPLE YOU TRUST WITH TELLING ABOUT HAVING A PSYCHOLOGICAL DISORDER. BUT IT SHOULDN'T STOP YOU FROM GOING. AND YOU SHOULD ALSO KNOW THAT WHEN YOU SEE A PRIVATE PSYCHOLOGIST OR PSYCHIATRIST THAT IT IS VERY CONFIDENTIAL. 

>> SCOTT, YOU ACTUALLY REFERENCED THIS IN YOUR PRESENTATION. IT'S FROM GEORGIA. ARE THERE WAYS TO COPE WITH THE SECOND-GUESSING OF DECISIONS MADE IN THE FIELD? WHAT IF THIS BECOMES A PREOCCUPATION WHICH INTERFERES WITH FUNCTIONING ON THE JOB? 

>> WELL, ONE OF THE WAYS WE FOUND THAT YOU CAN, YOU KNOW, DEAL WITH THE ARMCHAIR QUARTERBACKING IS WHEN YOU GET BACK OFF OF A RESPONSE, YOU TRY TO ENGAGE YOUR SUPERVISORS AND SENIOR-LEVEL MANAGEMENT OFFICIALS IN WHAT'S CALLED A HOT WASH AND DISCUSS THE DECISIONS YOU MADE IN THE FIELD AND WHAT THE REASONING WAS BEHIND IT. BUT YOU SHOULD NEVER LET ANY OF THE SECOND-GUESSING DRIVE YOUR FUTURE DECISIONS ON WHAT YOU'RE GOING TO MAKE OUT IN THE FIELD. 

>> A QUESTION FROM FLORIDA. DO YOU THINK A FIRST RESPONDER ALWAYS NEEDS TO TAKE SOME DOWN TIME AFTER A TRAUMATIC EVENT, OR IS IT BETTER FOR SOME TO KEEP ON WORKING AS A WAY TO DEAL WITH THE STRESS? 

>> I THINK THERE'S -- YOU SHOULD ALWAYS EVALUATE AND IT SHOULD BE PART OF OUR TOOLS THAT WE SHOULD HAVE IN OUR TOOL BAG TO HAVE A GROUP THAT YOU CAN GO TO AND TALK TO WHETHER IT'S A BIG DEAL OR SMALL DEAL TO TOUCH BASE AND HAVE THAT LIGHTHOUSE OFF IN THE DISTANCE, KIND OF A REFERENCE POINT OF WHERE YOU ARE AND WHERE YOU'RE GOING. 

>> AND IT MAY DEPEND ON HOW IT'S AFFECTED YOU PERSONALLY. YOU KNOW, IF IT'S REALLY IMPACTED YOU, IT MAY BE DIFFICULT TO GO BACK TO SOME OF THOSE FOLKS IN THE NORMAL ROUTINE THAT MAY BRING UP THIS PARTICULAR SITUATION. SO YOU MAY NEED SOME TIME OFF. BUT THE CONVERSE OF IT IS YOU MAY WANT TO GO BACK TO THOSE PEOPLE THAT YOU'RE FAMILIAR WITH THAT CAN TALK AND RELIEVE SOME OF THIS
EMOTIONAL BURDEN THAT YOU MAY BE CARRYING.

>> IT’S AN INDIVIDUAL THING AS PAM KIND OF SAID DURING HER PRESENTATION.
DIFFERENT PEOPLE REACT DIFFERENTLY.

>> AND IT DOESN'T HAVE TO BE A BIG THING OR A SMALL THING, IT CAN BE AN ALWAYS TYPE OF THING, THAT YOU DON’T WANT TO WAIT FOR IT TO GET TO BE A BIG PROBLEM.
EARLY ON YOU TOUCH BASE AND SEE WHERE YOU'RE AT ON THE SCALE OF 1 TO 10.

>> THIS QUESTION IS POSED TO PAM.
IT'S FROM OKLAHOMA.
"YOU MENTIONED THAT AN INEXPERIENCED RESPONDER SHOULD BE PAIRED WITH OR SEEK SUPPORT FROM A MORE EXPERIENCED RESPONDER WHEN DEALING WITH GRIEVING AND ANXIOUS FAMILY MEMBERS OF VICTIMS. WHAT IF NO ONE IS AVAILABLE?
ARE THERE TECHNIQUES FOR THE SINGLE RESPONDER?"

>> WELL, THERE ARE.
AND ACTUALLY, MOST OF US, ESPECIALLY IN THE OLD DAYS, WERE UNTRAINED SINGLE RESPONDERS GOING OUT AND DEALING WITH GRIEVING AND ANXIOUS FAMILIES.
AND I THINK WITH THAT IS IF YOU CAN GET TRAINING AHEAD OF TIME AND LOOK UP SOME OF THE DEATH NOTIFICATION TECHNIQUES THAT WE HAVE IN OUR BOOK, THAT WOULD BE GREAT.
IF NOT, DO THE HUMAN THING, WHICH TO ME IS TO BE POLITE AND SENSITIVE WITH THE FAMILIES, AND KNOW THAT THE AVERAGE PERSON, EVEN THOUGH TRAINING WILL HELP YOU, THE AVERAGE PERSON CAN TALK TO A GRIEVING AND ANXIOUS FAMILY AND DO WELL.
IT'S JUST EASIER ON YOU IF YOU'VE HAD A LITTLE BIT OF TRAINING.

>> FROM ARKANSAS THE QUESTION IS "HOW DO YOU DEAL WITH A SITUATION WHERE A PARENT WILL NOT LEAVE A DANGEROUS AREA SECONDARY TO A DECEASED CHILD WHO IS TRAPPED AND CANNOT BE MOVED?"
NOT EVERYONE AT ONCE.

>> THE INCIDENT COMMANDER IS IN CHARGE OF THE SCENE.
AND FOR SOME REASON AS I UNDERSTAND IT WE HAVE A DECEASED PERSON DOWN ON SCENE AND THE FAMILY MEMBER IS CLOSE BY AND WANTS TO BE AROUND IT, I THINK WE’LL BE SYMPATHETIC TO THAT, BUT THE INCIDENT COMMANDER AND THE HEALTH AND SAFETY FOLKS, THEIR PRIMARY RESPONSIBILITY IS TO KEEP EVERYONE SAFE, INCLUDING THAT PARTICULAR FAMILY MEMBER.
SO YOU DON'T REACT JUST OUT OF INSTINCT ON THESE THINGS, BUT YOU TRY TO PROTECT THE WHOLE SITUATION AND GET THAT FAMILY MEMBER TO UNDERSTAND THAT THIS IS A HIGH PRIORITY AND THAT WE WANT TO TAKE CARE OF THIS PARTICULAR PERSON BUT WE DO THE HIGHEST PRIORITY IS TO PROTECT EVERYONE'S HEALTH AND SAFETY.

>> SENSITIVITY.
SOMETIMES IT JUST SEEMS LIKE A LITTLE COMMON SENSE IN DEALING WITH THESE SENSITIVE SITUATIONS.

>> THAT'S A TOUGH SITUATION.
I MEAN, WE'VE HAD IT.
I'VE NEVER BEEN IN A SITUATION WHERE THERE WAS A TIME PRESSURE TO SEPARATE A FAMILY MEMBER FROM A DECEASED PERSON.
USUALLY, YOU HAVE TIME TO TALK TO THEM.
AND IF YOU DON'T, THAT WOULD BE TOUGH.

>> ALL RIGHT.
UNFORTUNATELY, WE HAVE RUN OUT OF TIME TO ANSWER ANY MORE QUESTIONS DURING THE WEBCAST.
IF YOU HAVE SUBMITTED A QUESTION, LOOK FOR AN ANSWER AT WWW.PHPPO.CDC.GOV/ PHTN/WEBCAST SLASH STRESS-05.
FINALLY, AN ARCHIVE OF THIS PROGRAM WILL BE AVAILABLE FOR VIEWING AFTER APRIL 30th AT THIS SAME WEBSITE.
IF YOU WISH TO RECEIVE CONTINUING EDUCATION CREDIT FOR TODAY'S
PROGRAM, YOU MUST REGISTER AND COMPLETE AN EVALUATION. CME, CNE, CEU AND CECH FOR HEALTH EDUCATORS ARE AVAILABLE THROUGH THE CDC ATSDR CONTINUING EDUCATION AND TRAINING ONLINE SYSTEM. WE WANT EVERYONE TO REGISTER AND COMPLETE THE PROGRAM EVALUATION, EVEN IF YOU ARE NOT TAKING THE PROGRAM FOR CONTINUING EDUCATION CREDIT. FOR THOSE WHO DO NOT WISH TO RECEIVE CE CREDIT, A CERTIFICATE OF ATTENDANCE WILL BE AWARDED TO PARTICIPANTS WHO REGISTER AND COMPLETE THE PROGRAM EVALUATION. THE EVALUATION FOR THIS PROGRAM WILL BE ACTIVE ON THE ONLINE SYSTEM FOR 30 DAYS AFTER THE LIVE PROGRAM. REGISTRATION AND EVALUATION MUST BE COMPLETED NO LATER THAN MAY 31st, 2005, TO RECEIVE CE CREDIT. THE COURSE NUMBER IS WC-0074.

IF YOU HAVE QUESTIONS ABOUT REGISTRATION, YOU CAN RECEIVE ASSISTANCE BY CALLING 800-41-TRAIN. THAT'S 800-418-7246, OR 404-639-1292. CE UNIT PERSONNEL ARE AVAILABLE MONDAY THROUGH FRIDAY FROM 8:00 A.M. UNTIL 4:30 P.M., EASTERN TIME. YOU CAN ALSO RECEIVE ASSISTANCE BY E-MAIL. OUR ADDRESS IS CE@CDC.GOV. THE CONTINUING EDUCATION STAFF WILL BE HAPPY TO ASSIST YOU WITH THE LOGIN AND REGISTRATION PROCESS. FINALLY, I'D LIKE TO THANK OUR GUESTS, DR. PAMELA TUCKER, SCOTT WRIGHT, JAMES MACDONALD AND CHAD DONLEY, AND I'D ALSO LIKE TO THANK YOU, OUR VIEWERS, WHO SENT IN THE QUESTIONS FOR OUR GUESTS DURING THE PROGRAM. AND SO, THIS BRINGS US TO THE CLOSE OF "SURVIVING FIELD STRESS FOR FIRST RESPONDERS." IT CERTAINLY HAS BEEN MY PLEASURE BEING YOUR MODERATOR TODAY. I'M KYSÁ DANIELS, WISHING YOU A GOOD DAY FROM ATLANTA, GEORGIA. -- Captions by VITAC -- ---