**50 Things Every EH&S Staff Member Should Know**

|  |  |  |  |
| --- | --- | --- | --- |
| NO. | QUESTION | ANSWER |  REMARKS |
| *General Program Administration* |
| 1 | What are the core missions of any university? | Teaching, research and service (in our case, include clinical care service) |  |
| 2 | What are the three main institutional constituencies we serve and who is the most important? | Faculty, students, staff, with faculty being most important |  |
| 3 | What is the mission of our EH&S department? | Help people go home as healthy and as safe as they arrived |  |
| 4 | What are the 4 main areas of performance indicators for our department? | Losses – personnel, propertyCompliance – external, internalFinancial –expenditures, revenuesClient satisfaction – external, internal |  |
| 5 | What are the department’s strategic initiatives and desired outcomes for the current year?  | Maintain high quality of service levels Particular focus on support for growing clinical enterprise |  |
| 6 | What is the safety committee structure for UTHealth? | Overarching UTHealth Safety Council, supported by three committees: radiation, chemical, and biological safety |  |
| 7 | What is “goodwill value” and how do we measure it in our department? | Goodwill value is an accounting term that quantifies the value of intangibles such as service, reputation, and trust. Goodwill value is calculated by determining the difference between the market value of an organization minus the total asset valueGoodwill value is measured in our department through the provision of prompt services and the routine assessment of client satisfaction with our services |  |
| 8 | What is the total budget for our EH&S department (rough estimate)? What are the two biggest expenditures? | Approximately $2.5M, with the largest percentages going to personnel (salaries) and hazardous waste disposal | Note: Total institutional operating budget: $1.07 billion (FY14) |
| 9 | What is “indirect cost recovery”? | Indirect cost recovery is a rate negotiated between a funding agency and the university that provides for funds in addition to the funds allocated to support a research project to pay for institutional services such as building maintenance, utilities, and administrative costs |  |
| 10 | What is our total campus square footage and the subset amount of lab/clinic square footage? How many buildings do we have on campus? | Approximately 4.35M gross sq ft, with 623,500 lab sq ft (about 14%).We possess 13 buildings, plus the UT Housing Apartment Bldgs, and lease space in other bldgs | Note: Total research expenditures: $223 million (FY14) |
| *Biological Safety* |
| 11 | What are the two main elements of a “biosafety level”, and what is the main driver for the assignment of these levels? | Facility characteristics combined with actual lab practicesThe main driver for the assignment of a biosafety level is the route of transmission of the microbial agent |  |
| 12 | How is a biosafety cabinet different from a chemical fume hood? | Biosafety cabinets afford both user protection and product protection, whereas chemical fume hoods only afford worker protection |  |
| 13 | What is the certification frequency for a biosafety cabinet? | Annually or when serviced or moved for work within a BSL-2 or greater. |  |
| 14 | What is the difference between a biosafety cabinet and a clean air bench? | Biosafety cabinets afford both user protection and product protection, whereas a clean air bench only affords product protection |  |
| 15 | How should a blood borne pathogen exposure, such as a needle stick be handled? | Bleed the wound, wash or flush, dress the wound, report via the needle stick hotline. Maintain source exposure information if possible |  |
| 16 | What is the most common disinfectant used for effectively cleaning up most spills or leaks of potentially infectious agents? | 1:10 dilution of bleach, with a contact time of at least 15 minutes |  |
| *Chemical Safety* |
| 17 | What is the desired fume hood flow rate? What should be done if this rate is not achieved, and what are the most common problems causing this failure? | 100 lfpm is ideal, range from approx. 60-150 is acceptable. If not within range, notify user, post unit out of order, and contact FIXT for repairMost common problems include balancing of ventilation and fume hood mechanical malfunction (fan failure) |  |
| 18 | What are the critical chemical classes at UTHSC-H we do not want stored together? | Acids & basesFlammables & oxidizersEssentially, all chemicals should be segregated according to class |  |
| 19 | What chemicals form peroxides and thus can be explosive, hence are ones we should look out for? | Old organic peroxides, especially with crystals noticeable around the cap, are a possible explosion risk and should be handled with great care Other explosion risks can include dry picric acid |  |
| 20 | Where do I access MSDS information? And what are the important pieces of information on these documents? | MSDS may be located online by searching “MSDS” on the UTHSC-H homepage or may be obtained through the manufacturer; and may be found in existing chemical safety binders within laboratories. The important information on the MSDS includes the 24-hour emergency hotline number, hazards identification, first-aid measures, accidental release measures, exposure controls, and stability & reactivity. |  |
| 21 | What are the accepted key indicators of indoor air quality? | Temperature, relative humidity, CO2, CO, TVOC’s particulates, and perhaps viable and non-viable spores |  |
| 22 | What are the common causes of IAQ complaints? | Malfunctioning HVAC systems, poor or absent HVAC maintenance, closed fresh air intakes, re-entrainment of contaminants (source located near intakes) or poor usage of local exhaust ventilation systems (fume hoods) |  |
| 23 | What is the key to successfully addressing an IAQ complaint? | Responsiveness and empathy, and prompt feedback |  |
| *Radiation Safety* |
| 24 | What is the annual whole body dose limit? The limit for the skin and extremities? And the limit for the fetus? | 5 rem/yr to the whole body, 50 rem/yr to the skin or extremities, and 0.5 rem/9 month gestation period for the fetus of a declared pregnant individual |  |
| 25 | What is the requirement for the issuance of a dosimeter? What if someone requests one and does not meet this threshold? | A person must be issued a dosimeter if they are likely to receive any dose in excess of 10% of the applicable limit. When someone requests a badge, even if unlikely to reach this limit, it is usually prudent to provide for monitoring in some capacity to objectively demonstrate to the person the actual doses being delivered. |  |
| 26 | What is the difference between “radiation” and “radioactivity”? What is the difference between being “radioactive” and “contaminated”? | Radiation is energy in motion, whereas radioactivity is the characteristic of some materials to be able to spontaneously emit radiation.Something is considered radioactive only if it can spontaneously emit radiation. Surfaces and people can become contaminated with radioactive particles –the particles exhibit the characteristic of radioactivity, whereas the surface or person is contaminated and in many cases can be decontaminated |  |
| 27 | What is the predominant radiation emission type from the radionuclides used at UTHSCH? | Mostly beta with some gamma |  |
| 28 | How do you detect H-3? | Because the beta emitted by H-3 is so weak, it must be monitored for by liquid scintillation counting rather than a portable GM survey instrument |  |
| 29 | What is a “broad license” and why do we have one? | A broad license permits on-site management of principal investigator sublicenses to accommodate the dynamics of large research enterprises. Broad licenses are expensive (>$10,000/yr in license fees alone), and necessitate to presence of vibrant radiation safety programs to support the activities, but better accommodate the needs of a research enterprise like ours. |  |
| *Environmental Protection* |
| 30 | What are the three main hazardous waste steams we manage? | Hazardous chemical, biological and radioactive wastes |  |
| 31 | What is our UTHealth hazardous waste generator status? | SQG Medical School and South Research Park  CESQG for all other UTHealth facilities including RAS, SON, UCT, and SRB |  |
| 32 | Where are the main bulk storage areas for possible environmental contaminants? | Diesel fuel storage: MSB Loading Dock, South Research Park Physical Plant, OCB courtyard, and HCPC UST.  Liquid Chlorine (sodium hypochlorite): Recreation Center pool Hazardous Wastes: CYF basement, MSB loading dock hazstore building, MSB Dock Cage, BBS 1.402, RAS B3, hazardous waste include biological, chemical, and radioactive materials |  |
| 33 | What are the reportable quantities (RQs) for petroleum products spilled on the land and water? | Diesel fuel and used oil RQ is 25 gal on land, or amount sufficient to cause a sheen on a waterway  |  |
| 34 | In a satellite accumulation area, a full container of hazardous chemical waste must be removed from the lab within what time period? | 72 hours (3 days)  |  |
| 35 | What hazardous waste can be classified as universal waste, and what are the labeling requirements for universal waste? | Batteries, pesticides, mercury containing equipment, and fluorescent lamps, and in TX paint and paint related waste.  Label container as universal waste + type, used + type, or waste + type, date. |  |
| *Occupational Safety and Fire Prevention* |
| 36 | What are the three key aspects that should be examined every time we pass by a fire panel for a building? What should you if you find an abnormal condition? | Alarm, trouble, supervisory conditions.  If an abnormal condition is found, notify OSFP of condition.  If it is an alarm event you need take response actions including making the investigation announcement |  |
| 37 | How do you respond to a fire alarm? | Report to panel and identify alarm location(s) Make the alarm notification announcement over the building speakers Inform responding emergency response personnel (Facility Operations, Houston Fire Department, EH&S) of alarm location(s) Remain at panel to give further announcements as necessary Give the building evacuation announcement if necessary (i.e. fire) Give the all clear announcement after emergency response personnel complete alarm investigation  |  |
| 38 | What should be verified on any portable fire extinguisher, emergency shower and eyewash station? | That the unit is present, it is functional and charged, not tampered with and has been inspected within the last year. |  |
| 39 | What is the UTHSC-H policy on the placement of items in a corridor? | HOOP 18.08: Items cannot limit required egressNo flammable or combustible liquidsNo compressed gas cylindersNo liquefied gasses , radioactive materials or biohazardous agents No equipment, which by design or use, would present a significant hazard (ie incubators, drying ovens, centrifuges)No waste containers or construction items |  |
| 40 | Which buildings are/are not equipped with a fire suppression system? | All buildings 100% covered except:95% UTPB0% Old Student Housing |  |
| 41 | What are the primary loss prevention and control techniques being used to prevent accidents and minimize the potential for accidental and financial loss? | Education and awareness, and engineering controls such as lifting aids |  |
| *Risk Management & Insurance* |
| 42 | From an insurance perspective, what are the major “perils” for our properties? | Fire, flooding, and wind |  |
| 43 | What is the deductible on our property insurance policy? | $250,000. |  |
| 44 | How does one go about responding to and reporting an injury? | For injuries/illnesses which appear to be life threatening:                                                               i.      Contact **911** or UTPD at 713-500-HELP (713-500-3457) and provide the dispatcher with:                                                             ii.      Remain with the injured person until Emergency Medical Services arrive on scene.                                                            iii.      The supervisor must prepare a Supervisor’s First Report of Injury once the emergency situation is under control.  This form can be found on the UTHSC-H website at the following location:For minor or work related injuries:                 If the employee chooses to seek medical attention through UTHealth, the supervisor should call the UT Health Services (500-3267).                   An injured employee may request to see his/her Health Care Provider. An employee utilizing his/her personal physician should refer the physician to Risk Management and Insurance (500-8100) for Workers’ Compensation verification and billing instructions. |  |
| 45 | What is a workers compensation “experience modifier” and what is UTHSCH’s current EM? | An experience modifier is a means of adjusting an organization’s WC insurance premium based or good or poor performance. Experience is compared to industry average norms (1), so organizations with low numbers of losses will have an EM <1, whereas those with relatively high numbers of losses with have an EM >1. The FY14 WCI EM for UTHealth is 0.07 |  |
| 46 | What is the most common injury reported by Employees? Residents? Students? | Employees: assaults, slips/trips/falls, needlesticksResidents and students: needlesticks, cuts and other bloodborne pathogen exposures |  |
| 47 | What are the top 3 departments experiencing the highest frequency of workplace incidents and injuries?  | Nursing (HCPC), Animal Care, Facilities |  |
| 48 | How many tort claims and/or premises liability claims were reported in the last year? | None |  |
| 49 | What is the institution’s total insured value – TIV (building and contents) | FY14 $1,528,867,328 Buildings and contents $ 325,923,703 Business income |  |
| *Security* |
| 50 | What are the most common security risks that we encounter in the field that we can assist with correcting? | Theft is our most common security risk, so EH&S can be mindful of unsecured operations and help remind the community about this risk. Monitoring for proper badging and suspicious persons can also be useful |  |