

Responsible Care[®] Medical Program

N-R-OCH 001

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Challenger Forum	MCSC and NALT
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1 Responsible Care® Medical Program

1.1 Rationale

The purpose of this document is to define basic requirements of the BASF Medical Program in North America and Central America for site managers.

1.2 Definitions

BASF Corporation medical procedure definitions

the definitions of terms, when needed in context of a specific requirement, are noted in individual BASF Corporation medical procedures

BC responsible manager

the BC employee who supervises BC employees or requests the services of contractor employees, contractors, or temporary workers

contractor employee

an individual engaged by or through a third-party to perform services principally for the third party

contractor

a non-employee engaged through a third-party agency for the performance of specific functions

These individuals:

- perform services with the general oversight of the company and
- generally do not but may perform services for third parties at the same time

employee

an individual who performs services for and under the direction and control of BASF Corporation (“BC”)

Such direction and control include the results to be accomplished and the methods and means by which such results are accomplished. Neither contracting firms, nor contractors, nor temporary workers who are characterized by BC as independent contractors are employees.

[Medical home page](#)

This is the BC medical Intranet page for BC medical program definitions, guidelines, forms, and requirements in detail for workers, supervisors, EHS, site medical, and emergency medical response. The Medical home page is available at <https://medical.north-america.intranet.basf.com/>.

occupational health staff

Includes corporate medical director, associate medical director, assistant medical director, occupational health manager, site occupational health physician, occupational health nurse, and paramedic staff.

PMU employee

employees who work in production, maintenance, or utilities departments; includes all research and development laboratory personnel and production laboratory personnel with the potential for significant exposure to chemical, biologic, and physical hazards

Engineering, environmental health and safety (EHS), professional development program (PDP), technical sales, and other personnel who may regularly complete their work

assignments in manufacturing areas (including customer manufacturing areas), have potential for significant exposure to chemical, biologic, and physical hazards or are covered by the need for a mandatory examination should be considered as PMU employees for the purposes of pre-placement and periodic health examinations.

site

Occupational Medicine and Health Protection performance standards apply to all types of business operations. The term “site” in this requirement refers to all types of sites operated by the BASF Corporation and all NA subsidiaries (production, research, sales, virtual, administration, etc.).

site medical contact

The site medical contact (SMC) is identified by the respective site manager as the BASF employee who is present on-site and will represent the site manager as the primary liaison with the GBW/UE-M organization. Most commonly, the site manager delegates this responsibility to a member of his/her administrative team. The SMC plays a pivotal role in administering the BASF Corporation medical policies and procedures that apply to workers at the site.

site occupational health nurse

a nurse who is trained in occupational health and is responsible for the provision of OH at a BASF location

They work under the guidance of GBW/UE-M and the site OH physician and their tasks and responsibilities are defined in specific OH regulations and procedures. Depending on local conditions and the size and type of operations, different models of OH services are possible, e.g., in-plant model with on-site medical services, medical services from an external provider, etc. In sites without an SOHP they may assume some of the roles of SOHP (within their scope of practice).

site occupational health physician or provider (SOHP)

a medical doctor, nurse practitioner or physician’s assistant trained in occupational health who is responsible for the medical services at a BASF location

Depending upon the state, nurse practitioners and physician’s assistants may require supervision of a coordinating physician, preferably specializing in occupational medicine.

Depending upon local conditions as well as size and type of operations, different models of occupational health services are possible, e.g., on-site medical services (with permanent or part-time presence), medical services from an external provider, etc.

temporary worker

a non-employee engaged through a third-party agency for the purpose of temporarily filling a vacant authorized position, typically for a period of fewer than six (6) months

The vacant position must be for a BC employee and is generally from an illness, vacation, turnover, termination, etc. The term, “temporary workers” also refers to contracted (leased) workers.

1.3 Target Group Responsibilities

Site Occupational Health Physician (SOHP)

- shall refer to the appropriate section of the BC Medical Department Procedures Manual to determine the guidelines for these examinations
- in the absence of BASF medical procedures or guidelines, uses the applicable United States, Canadian, or Mexican health and safety regulation as a guide

Site Manager

- has ultimate responsibility for site’s medical program
- designates the site medical contact

- shares responsibility with the Corporate Medical Staff (GBW/UE-M) for selection and oversight of the local medical services provider
- determines (in consultation with the Legal Department) which employees at the site hold safety-sensitive positions
- ensures that required medical exams or clearances are provided for BASF employees, contractor employees, contractors, and temporary workers

Site Medical Program Contact

- a site employee whom the site manager designates as having immediate responsibility for the medical program at the site
- responsible for the implementation and administration of this procedure at his/her site(s)
- consults with site EHS, and site management to develop a list of covered individuals

Site Occupational Health Nurse

- when present on site administers required exam components and testing in accordance with BC Medical Department Procedures
- schedules exams with SOHP
- serves as site medical contact for the site upon which the BASF clinic is located

Site Environmental/Safety/Industrial Hygiene Coordinator

- consults with the site medical program contact and site management to develop a list of covered individuals
- provides specific information regarding the work exposures and personal protective equipment requirements

Human Resources

- coordinates Return-to Work Evaluations with site medical or external medical providers
- arranges mandatory EAP referrals where appropriate
- upon notification of employee reproductive concerns, informs corporate medical department of need for developmental and reproductive hazards assessment

Corporate, Associate or Assistant Medical Director, Occupational Health Manager

- interprets all BC medical policies and procedures
- provides guidance to sites in the development of site-specific implementation
- delegates the HIPAA Privacy Officer and HIPAA Security Officer positions

1.4 Functional Responsibilities

The GBW/UE-M organization has oversight, consultative, and support roles in developing programs, maintaining systems, and coordinating contracts in support of the North American region. A corporate physician and/or nursing staff may perform the roles and responsibilities of the GBW/UE-M organization.

The site manager has ultimate responsibility for site's Medical program. Most commonly, the site manager delegates this responsibility to a member of his/her administrative team. This person, the site medical contact (SMC), plays a pivotal role in administering the BASF Corporation medical policies and procedures that apply to workers at the site. The respective site manager identifies the SMC as the BASF employee who is present on-site and will represent the site manager as the primary liaison with the GBW/UE-M organization. The site manager shares responsibility with the corporate medical staff (GBW/UE-M) for selection and oversight of the local medical services provider.

For sites with an embedded BASF clinic, the site nurse plays a pivotal role in administering the BASF Corporation medical policies and procedures that apply to the site. The GBW/UE-M organization is responsible for the selection and management of clinical staff (internal or contractor staff, nursing, and physician).

This functional responsibility is performed in cooperation with all operational divisions, regional management, BASF Corporation companies, and sites. In this sense, GBW/UE-M coordinates a regional network of SOHPs, site occupational health nurses, external service providers, and SMCs.

The main functions of GBW/UE-M are:

- Provide OM&HP services, i.e., occupational medicine, emergency medical care, health promotion.
- Provide professional leadership and coordination of OM&HP activities within the entire BASF Corporation and its NA subsidiaries.
- Develop targets, policies, and procedures regarding OM&HP.
- Share expertise in all OM&HP issues.
- Promote transfer of knowledge and exchange of best practices on OM&HP issues.
- Inform and advise upper management on OM&HP topics relevant for business planning and operations.
- Promote and support emergency preparedness, assist in crisis management, and offer advice in special cases of local or national dimensions.
- Review OM&HP on site-level with a corporate medical audit system.
- Represent and promote BASF's position on OM&HP in committees, working groups, and associations.

1.5 Scope

These requirements apply to BASF Corporation and all its subsidiaries and affiliates in North America (NA). These requirements also apply to (i) [BASF Canada](#), Inc., its Canadian subsidiaries, and partnerships in which BASF Canada, Inc., and/or its subsidiaries have a majority interest, (ii) [BASF Mexicana](#), S.A. de C.V. and BASF Interservicios, S.A. de C.V., (iii) BASF de Costa Rica, S.A., BASF de Guatemala, S.A., BASF de El Salvador, S.A., BASF Dominicana, S.A., and BASF de Panama, S.A. de C.V.

1.6 Policy, Principles of Site Medical Service

1.6.1 Site Medical Contact (SMC)

The SMC should have goals and objectives related to the medical program as part of his/her performance reviews. The SMC schedules and tracks completion of medical examinations by the designated clinic and provides feedback to site management and GBW/UE-M on clinic performance.

1.6.2 Electronic Medical Clearance Program (eMCP)

The eMCP is a medical surveillance/medical clearance software system. Find the eMCP [here](#). (Log into eMCP with your Novell user ID and password.) Homogenous Exposure Groupings – Medical (HEG-M) are the job/task work assignments specific to each site/plant with defined, required medical clearances (See [HEG-M summary](#).) HEG-Ms in the eMCP should be reviewed and updated at least annually, and the SMC should verify all employees are assigned an HEG-M.

1.6.3 BASF Clinic Manual

Update the designated clinic's manual of BASF Medical Policies and Procedures, tools and forms, regularly.

1.6.4 Country-Specific Requirements

BASF Canada are at [Canadian Information](#) and [Canadian Procedures](#).

BASF Mexico, Centroamerica y el Caribe are at [Corporativo / 83 Salud Ocupacional](#).

1.6.5 Protection

Protect the health and well-being of BC employees in the workplace.

1.6.6 Fitness for Duty

Assess new and current employees, when appropriate, to determine whether they are in jobs that they can perform without risk to themselves, their fellow workers, or BC property.

1.6.7 Treatment

Provide emergency medical care as well as definitive care and rehabilitation for employees ill or injured because of their occupation. Non-occupationally ill or injured employees will receive emergency care until they can be referred to their own physicians or a community medical facility.

1.6.8 Maintenance

Assist employees to achieve and maintain good health through health promotional activities, health counseling, and periodic review of employee health status.

1.6.9 Medical Confidentiality

Maintain the confidentiality of individual employee medical information and safeguard medical information by keeping medical records secure with access limited to physicians, their qualified designees, those people who have a legal right to access, and to whom access is permitted, including employees to their own records.

When medical information or records are transmitted, only that information pertinent to the issue should be sent, unless otherwise authorized.

- Recommendations concerning an employee's medical clearance, performance, and/or safety in the workplace shall not include medical diagnoses.

1.7 Medical Staff

The site provider should be experienced in the practice of occupational medicine, and the clinic staff should be trained and certified in audiometry (CAOHC), complete a NIOSH-approved spirometry course, and, where appropriate, be trained as drug test certified professional collectors and as breath alcohol testing technicians in accordance with US DOT standards.

Agreements should be in place between the site and the site provider enabling site management to contact him/her for consultation and assistance during evenings, weekends, and holidays.

The site provider should have toured each production plant and laboratory at least once within the last twelve (12) months and provided a written report ([N-ID-OCH 018: Plant Tours](#)). For content of a site tour, see the [Physician Site Tours](#) section of the EHS page on the [Medical website](#).

1.8 Medical Facilities

1.8.1 External Contract Medical Clinic

Many sites use an external contract medical clinic. The site should designate, and Corporate Medical should approve, the medical clinic performing examinations for the site. Use the [Site Medical Services Assessment form](#) to select and review an external contract medical clinic.

1.8.2 First Aid

- Dedicated first aid space and equipment should be available on site, including mass casualty equipment required per [N-ID-OCH 019: Medical Emergency Preparedness](#) and the BASF [First Aid Manual](#). A Spanish version of the First Aid Manual is available for Mexico and the Caribbean as the [Manual de Primeros Auxilios para BASF Mexicana CA&C, M.C.83-01](#).
- First aid kits should have standardized first aid kit [contents](#).
- The first aid kits should be locked or sealed with a tamper tag and a sign-out sheet to document use.
- Mexico-specific requirements are as per [Procedimiento de Atención de Emergencias Médicas, P.C.83-01](#) and [Procedimiento de Manejo de la Atención Médica, P.C.83-02](#).

1.8.3 Automatic External Defibrillator (AED)

- If the site has an automatic external defibrillator (AED), implement the BASF corporate AED procedure, [N-ID-OCH 023: Automatic External Defibrillator Use in On-Site First Aid](#). Cover maintenance of the site's AEDs through a "wrap-around" program from a vendor or write a specific site AED plan that specifies a supervising physician who must provide medical direction for the AED program.
- Designate a responsible person at the site for maintenance of the first aid kits and AEDs.
- A Canadian AED procedure is available, [Automatic External Defibrillator for Use in On-Site First Aid – C-IDOCH 034](#).

1.9 Medical Examination

1.9.1 Pre-Placement and Periodic Health Examinations

- New employees should receive a pre-placement exam including the clearances their new BASF jobs require before starting work. [Pre-Placement Health Examinations – N-ID-OCH 002](#).
- Production, maintenance, utilities, and lab workers receive notification of the availability of voluntary periodic medical examinations. ([Periodic Health Evaluations – N-ID-OCH 003](#)).
- The SMC should receive a copy of the medical clearance form following each examination of an employee.
- Workers should receive information about the medical results and fitness-to-work status after each clearance and/or surveillance examination.
- Canadian requirements for pre-placement examinations are as per [Pre-Placement Health Examinations – C-ID-OCH 003](#).
- Mexico-specific requirements are as per [Programa de Vigilancia Médica Ocupacional - P.C.83-04](#) and [Requerimientos Médicos para Empleados, Personal Contratista, Outsourcing, Becarios, Practicantes y Trabajadores Temporales - P.C.83-05](#).

1.9.2 Specific Clearance Examinations

Specific occupational surveillance and clearance examinations required for workers depending upon their HEG-M job/task work assignments have been defined at the site; the requirements for each worker are communicated to the examining clinic so that the required, appropriate testing is performed as per the [Health Surveillance Program Requirements](#) chart.

- For respirator clearances, the examining physician is informed of the type of respirator, intended use, and expected level of physical exertion for each employee to be cleared. Cardiac stress testing is performed for clearance to use SCBA respirators (*Respiratory Medical Clearance – N-ID-OCH 007*).
- Annual audiometry is required for individuals who exceed the action level of the respective appropriate hearing conservation standards. These requirements are summarized in *Hearing Conservation Program – N-ID-OCH 009* - including the hearing conservation system for review of standard threshold shifts. Voluntary hearing tests are offered as per the [G-GD-OCH-060: Hearing Conservation](#) as part *Periodic Health Evaluations – N-ID-OCH 003*.
- The site medical contact should receive a copy of the medical clearance form following each examination of an employee, including a copy of substance-specific clearances when required for specific compounds (e.g., Hexavalent Chromium, Ethylene Oxide).
- Clearances and restrictions regarding fitness for duty and specific medical clearances are communicated to employees' supervisors. Workers are informed about the medical results and fitness-to-work status after each clearance and/or surveillance examination.
- If blood or urine testing to assess exposure to toxic substances is performed (e.g., for anti-cholinesterase chemicals or benzene), a written protocol with instructions for medical staff or external clinic for each program should be in place. (*Biomonitoring – N-ID-OCH 015*)
- Contracted (leased) workers should receive medical clearance exams consisting of the mandatory testing for the clearances their new BASF jobs require before starting work similar to BASF employees performing the same function as per *Medical Clearances for Contractor Employees, Contractors, and Temporary Workers – N-ID-OCH 026*.
- Canada-specific requirements are posted at [Canadian Procedures](#).
- Mexico-specific requirements are as per [Programa de Vigilancia Médica Ocupacional - P.C.83-04](#) and [Requerimientos Medicos para Empleados, Personal Contratista - Outsourcing, Becarios, Practicantes y Trabajadores Temporales - P.C.83-05](#).

1.10 Health Promotion, Prevention, and Rehabilitation

1.10.1 Global BASF Health Promotion

- The [Global BASF Health Promotion Campaign](#) or an independent activity should be offered at the site every year.
- Workers should be informed about computer workstation ergonomics and proper body mechanics when lifting and carrying.
- Workers in jobs that meet one or more of the risk assessment criteria in Section 3 of the [G-GD-OCH 020: Occupational Skin Diseases – Recognition and Prevention](#) should receive:
 - 1) instructions on safe handling
 - 2) correct use and selection of personal protective equipment and gloves
 - 3) the type of potential workplace-related health effects
 - 4) adequate skin cleansing agent and care product suitable for the workplace

1.10.2 Immunizations

Offer immunizations for:

- tetanus to injured employees and as an option for general prevention every ten (10) years
- seasonal influenza to all workers on site
- Hepatitis B to the first aid squad (*Hepatitis B Immunization Program* – [N-ID-OCH 006](#))

1.10.3 Return-to-Work Evaluations

Focused return-to-work evaluations are conducted for personal medical absences of five (5) or more working days on personnel in safety-sensitive positions in compliance with local regulations. They will also be performed for disability resulting from work-related injuries or illnesses of any duration. (*Return-to-Work Examination* – [N-ID-OCH 020](#))

1.10.4 Drug and Alcohol Substance Abuse

Perform substance abuse testing in accordance with *Alcohol and Substance Abuse Requirement for US Sites* (N-R-OCH 002) and *Drug- and Alcohol-Free Work Place* (N-ID-OCH 033). In Mexico testing should be in accordance with [Sustancias Psicoactivas – PO.C.83-01](#)

- Use a third-party administrator that BASF Medical has designated for random substance abuse testing where permissible.
- Post-accident substance abuse testing requires a written, announced, site-specific procedure that Corporate Legal/Human Resources has reviewed.
- Site procedures have been defined for reasonable suspicion substance abuse testing, including concurrence by supervision and site Human Resources and arrangements for off-hours testing. A quick reference guide is available at https://medical.north-america.intranet.basf.com/download_file/view/7021/3777
- Mandatory Employee Assistance Program services are available for individuals who test positive in the U.S.

1.11 Emergency Preparedness and Emergency Medical Care

1.11.1 Medical Emergency Preparedness Plan

The site should have a written medical emergency response plan (See *Medical Emergency Preparedness* – [N-ID-OCH 019](#).) separate or as part of the site emergency plan, that includes:

- organization of on-site first aid response
- name and address of closest hospital or site physician for emergency medical treatment identified and communicated to site personnel
- transportation of injured employees to appropriate medical care on a 24/7 basis
- procedures for a *Multiple-Casualty Incident* – [N-ID-OCH 024](#).
- arrangements for specific intoxication treatment coordinated with local EMS and hospitals
- Document all first aid and medical emergency responses and review them in a debriefing session.
- Mexico-specific requirements are as per [Procedimiento de Atención de Emergencias Médicas](#) - P.C.83-01 and [Procedimiento de Manejo de la Atención Médica](#) - P.C.83-02.

1.11.2 Medical Emergency Preparedness Drill

Test the site emergency medical instructions annually through a medical drill following a scenario that simulates realistic conditions at the site and includes at least one casualty (e.g., chemical exposure, broken leg, heart attack). Medical drill scenarios are available in *Medical Emergency Preparedness – N-ID-OCH 019*, Attachment 5.

- You may use an actual medical emergency response using the site system with a post-incident debrief to meet this drill requirement.
- Medical drills may be integrated into a general emergency drill (e.g., fire drill). At administrative sites, an evacuation drill may serve as a medical drill.

1.11.3 Medical Emergency Preparedness Training and Equipment

Sites with more than 200 employees should contact Corporate Medical regarding whether they meet the definition for Category A or B sites and have additional training and equipment requirements per *Medical Emergency Preparedness – N-ID-OCH 019*, Page 2.

- All responders must be trained in basic cardiac life support and first aid (meeting a national certifying standard) and must be currently certified. Track compliance.
- The number of first aiders on the site's squad must equal or exceed 10% of production, maintenance, and laboratory workers plus 5% of administrative employees.
- At least one (1) first aider must be on duty and available during each shift when production is running.

1.11.4 Chemical Emergency Medical Guidelines

Specific antidotes may need to be available at the site. All applicable [BASF Chemical Emergency Guidelines](#) (CEMGs) for chemicals used at the site should be identified.

- Use Section A of the relevant CEMG for training first aid personnel.
- A system should be in place whereby safety data sheets (SDSs) and Sections C (for doctors in hospital emergency departments) and D (for patients) of the relevant CEMGs is provided to the emergency room staff on duty when a worker is sent there for medical care after exposure to a hazardous chemical.

1.12 Documentation, Evaluation, and Assessment

- Medical records are confidential and maintained at Corporate Medical where an on-site clinic does not exist. External contract site clinics should send original copies of medical records and chest X-rays to the designated Corporate Medical location in their country. (*Retention and Release of Medical Information/Records – N-ID-OCH 001*)
- Employees must be informed that they may request a copy of their medical records from the Corporate Medical Department by means of the [Employee Request for Medical Records Information form – Attachment 2](#).
- Employees must complete an authorization for medical examination that they must obtain in the U.S (*Retention and Release of Medical Information/Records – N-ID-OCH 001*, Attachment 1) and Canada ([Canadian Authorization for Medical Exam](#)).

1.13 Health Protection, Safety, and Ecology

- Identification and control of potential health hazards in the work situation by cooperation with other health professionals such as industrial hygienists, toxicologists and safety officers.
- Regularly assess and monitor chemical and physical exposures across the site. Review the exposure assessment results with the site physician.
- Employees should uniformly comply with site and plant procedures regarding the use of personal protective equipment (PPE). PPE requirements are easily available for each task.

- Establish a mechanism for ergonomic review of computer workstations and implement a process for the correction of computer workstation-associated ergonomic deficiencies.
- Assess workplaces for awkward, heavy, and repetitive lifting.
- Provide training to employees regarding ergonomically correct setup and use of computer workstations and handling of heavy materials.
- Coordinate arrangements for medical case management at U.S. sites as per *Medical Case Management – U.S. Sites – N-ID-OCH 031* with GBW/UE-S and site safety for employees and contractors.

2 Requirement

2.1 Health Protection

2.1.1 International Travel

All North American BASF employees transferred or traveling to regions outside the United States, Canada, Japan, Australia, New Zealand, and Western Europe must have access to a travel medicine evaluation that includes medical preparedness and plans for medical emergency management in accordance with [G-GD-OCH 030](#) **“Health Management for BASF Business Travelers and Transferees.”** Refer to *International Travel Medical Program – Health Professionals – N-ID-OCH 013* for the procedure on implementing travel medicine evaluations.

2.1.2 Reproductive and Developmental Hazard Assessment

ALL North American BASF employees, regardless of gender, must be made aware of and have access to a program that assesses potential reproductive hazards in the workplace and implements measures to manage hazard exposure with the purpose of preserving fertility and protecting the unborn fetus. The program must comply with local state and federal laws. Workers should notify management, Human Resources, and Medical of reproductive health concerns to initiate a reproductive hazard assessment for those who have such a concern.

Refer to *Reproductive and Developmental Hazard Assessment – Health Professionals – N-ID-OCH 014* or *Evaluación de Riesgos Para la Salud Reproductiva, Protección del Embarazo y Lactancia* (in Mexico) for procedures regarding implementation of reproductive and developmental hazard assessments.

2.1.3 Ergonomics

All sites regardless of environment (office, manufacturing, laboratory, etc.) must have a protocol in place to identify risk factors for work-related musculoskeletal disorders at the various workplaces. There should be an established method in place for eliminating or mitigating such risks whenever feasible. Refer to *Ergonomic Medical Surveillance – N-ID-OCH 017*.

2.1.4 Hepatitis B and Exposure Control

*All BC sites are required to have a written exposure control plan if those sites have workers who serve as first aid responders or any other workers who are potentially at risk of significant exposure to human tissue or fluids as per **29 CFR 1910.1030**.*

All BC workers who are potentially at risk of significant exposure to human tissue or fluids, including, but not limited to first responders, medical staff, laboratory personnel

who work with human tissue or fluids, must be offered immunization against Hepatitis B in accordance with **29 CFR 1910.1030**. See *Hepatitis B Immunization Program – N-ID-OCH 006* for proper implementation.

2.2 Medical Surveillance

2.2.1 Ethylene Oxide

All sites where there is exposure to ethylene oxide (EtO) must establish and maintain an EtO medical surveillance program that complies with 29 CFR 1910.1047. Please refer to *Ethylene Oxide Medical Surveillance – N-ID-OCH 004* for detailed procedure.

EtO medical surveillance is required when:

- A worker is occupationally exposed at or above the action level (airborne concentration of EtO of 0.5 ppm averaged over an 8-hour time-weighted average) for more than 30 days in any consecutive 12 months (29 CFR 1910.1047), or
- Site Ecology has determined that the potential for significant exposure to EtO exists.

2.2.2 Hearing Conservation Program

All North American sites where workers are exposed to loud noise must establish and maintain a hearing conservation medical surveillance program in accordance with the **OSHA Hearing Conservation Standard 29 CFR 1910.95** and the **MSHA Occupational Noise Exposure Standard 30 CFR 62**.

All workers that are assigned to an environment where noise exposure is at 85 dBA 8-hour TWA or higher (with or without PPE) must be enrolled in a hearing conservation surveillance medical surveillance program.

Refer to *Hearing Conservation Program – N-ID-OCH 009* - for proper procedure on implementing such program.

2.2.3 Cholinesterase-Inhibiting Pesticides Medical Surveillance

A medical surveillance program for workers who apply or are exposed in any way to cholinesterase-inhibiting pesticides must be implemented. It must comply with the California Department of Health pesticides regulations and any other state or Federal pesticides regulations.

Refer to *Cholinesterase-Inhibiting Pesticides Medical Surveillance – N-ID-OCH 010* - for procedure on proper implementation of such medical surveillance program.

2.2.4 Lead Medical Surveillance

All sites where there is exposure to lead as defined by **29 CFR 1926.62** and **29 CFR 1910.1025** must establish and maintain a lead surveillance program for affected workers.

Lead medical surveillance is required when:

- a worker is occupationally exposed on any one day in the performance of construction activities (**29 CFR 1926.62**) to Lead at or above the action level of 30 μ g/m³ averaged over an 8-hour time-weighted average,
- a worker is occupationally exposed at or above the action level (airborne concentration of Lead of 30 μ g/m³ averaged over an 8-hour time-weighted average) for more than 30 days in any consecutive 12 months (**29 CFR 1910.1025**), or
- Site Ecology has determined that the potential for significant exposure to lead exists.

Refer to *Lead Medical Surveillance – N-ID-OCH 011* - for procedure on proper

implementation of such medical surveillance program.

2.2.5 Diisocyanates Medical Surveillance

In the work environment, exposure to diisocyanates can occur through inhalation or contact with skin potentially causing dermatologic, pulmonary or allergic effects. All North American BASF sites that produce or use diisocyanates in manufacturing/product support applications must provide surveillance examinations for employees who could be exposed to these chemicals during their employment. Refer to *Diisocyanates Medical Surveillance* – [N-ID-OCH 012](#) - or [Diisocyanates Medical Surveillance - C-ID-OCH 019](#) in Canada and [Vigilancia Médica a Diisocianatos](#) in Mexico for procedure on proper implantation of such surveillance program.

2.2.6 Formaldehyde Medical Surveillance

*All BC sites where there is potential exposure to formaldehyde as defined by **29 CFR 1910.1048** must establish and maintain a formaldehyde surveillance program for affected workers.*

Formaldehyde medical surveillance is required when:

- *A worker is exposed to Formaldehyde at air concentrations at or exceeding the action level (0.75 ppm averaged over an 8-hour time-weighted average) or exceeding the short-term exposure limit (STEL) (2.0 ppm).*
- *A worker develops signs and symptoms of overexposure to formaldehyde.*
- *A worker is exposed to Formaldehyde in emergencies.*
- *Site Ecology or Industrial Hygiene will provide a list of exposure groups/job classifications to the Medical Department if exposures meet the above-noted criteria.*

Refer to *Formaldehyde Medical Surveillance* – [N-ID-OCH 016](#) - for procedure on proper implementation of such medical surveillance program.

2.2.7 Benzene Medical Surveillance

*All sites where there is potential exposure to benzene as defined by **29 CFR 1910.1028** must establish and maintain a benzene surveillance program for affected workers.*

Benzene medical surveillance is required when the worker:

- *has airborne exposure at or above the action level (0.5 ppm calculated as an 8-hour time-weighted average) 30 or more days per year,*
- *has airborne exposure at or above the permissible exposure limit (PEL) (1 ppm as an 8-hour time-weighted average), or the short-term exposure limit (STEL) (5 ppm for 15 minutes) 10 or more days per year, OR*
- *is exposed to Benzene in emergencies.*

Site Ecology or Industrial Hygiene will provide a list of exposure groups/job classifications to the medical department or the Site Medical Program Contact if exposures meet the above-noted criteria.

Refer to *Benzene Medical Surveillance* – [N-ID-OCH 021](#) - for the procedure on proper implementation of such medical surveillance program.

2.2.8 1,3-Butadiene Medical Surveillance

*All sites where there is exposure to 1,3-butadiene (“BD”) as defined by **29 CFR 1910.1051** must establish and maintain a BD surveillance program for affected workers.*

BD medical surveillance is required when a work is occupationally exposed:

- *at or above the action level (airborne concentration of BD of 0.5 ppm averaged over an 8-hour time-weighted average) for more than thirty (30) days in any consecutive 12 months (**29 CFR 1910.1051**), or*

- at or above the permissible exposure level (PEL) (airborne concentration of BD of 1.0 ppm averaged over an 8-hour time-weighted average) on 10 or more days a year
- at or above the short-term exposure limit (STEL) of 5 ppm for 15 minutes
- following an emergency situation
- when Site Ecology has determined that the potential for significant exposure to BD exists

Medical surveillance for workers, whose work histories indicate exposure to BD, after transfer to a non-BD exposed job and regardless of when transferred, is required when they had been occupationally exposed:

- at or above the PEL on 30 or more days a year for 10 or more years;
- at or above the action level on 60 or more days a year for 10 or more years; or
- above 10 ppm on 30 or more days in any past year.

If individuals become BC workers (affected by successive ownership) and were previously covered by the BD standard, the provisions of this section apply.

Refer to *1,3-Butadiene Medical Surveillance* – [N-ID-OCH 022](#) - for the procedure on proper implementation of such medical surveillance program.

2.2.9 Hexavalent Chromium Medical Surveillance

All sites where there is exposure to hexavalent chromium (HC) as defined by **29 CFR 1910.1026** must establish and maintain a HC surveillance program for affected workers.

HC medical surveillance is required when a worker:

- is occupationally exposed at or above the action level (of 2.5 micrograms HC per cubic meter of air (2.5 µg/m³) calculated as an 8-hour time-weighted average (TWA) for more than thirty (30) days in any consecutive 12 months (**29 CFR 1910.1026**); or
- experiences signs or symptoms of the adverse health effects associated with HC exposure;
- is exposed to HC following an emergency situation;
- when Site Ecology has determined that there is exposure to HC as defined by **29 CFR 1910.1026**

Refer to *Hexavalent Chromium Medical Surveillance* – [N-ID-OCH 025](#) – for the procedure on proper implementation of such medical surveillance program.

2.2.10 Crystalline Silica Medical Surveillance

All sites that produce or use Crystalline Silica in manufacturing/product support applications must provide surveillance examinations for covered workers in accordance with **29 CFR 1910.1053, Respirable Crystalline Silica**.

- Silica medical surveillance is required when workers are exposed to a crystalline silica concentration > 0.025 mg/m³, as a respirable dust, calculated as an 8-hour time-weighted average for > 30 days annually or exposed in excess of the applicable ACGIH TLV relevant to the type of silica manufactured.
- Site Ecology and Safety (NTU) will provide a list of exposure groups/job classifications to the medical department or the Site Medical Program Contact if exposures meet the criteria noted above.

Refer to *Crystalline Silica Medical Surveillance* – [N-ID-OCH 028](#) - for the procedure on proper implementation of such medical surveillance program.

2.2.11 Platinum Medical Surveillance

Respiratory and dermal exposure to platinum salts is an occupational hazard. Short-term exposure to platinum salts may cause irritation of the eyes, nose, and throat and longer-

term exposure may result in occupational asthma (platinosis) and occupational allergic contact dermatitis.

All sites that produce or use platinum salts in manufacturing/product support applications must provide surveillance examinations for covered workers.

Refer to *Platinum Medical Surveillance* – [N-ID-OCH 029](#) - for the procedure on proper implementation of such medical surveillance program.

2.2.12 Nickel Medical Surveillance

Exposure to nickel occurs by inhalation and/or dermal exposure in the work environment. Nickel metal and its alloys represent the most frequently occurring contact allergen. Nickel (2+) sulfate and other inorganic nickel compounds may result in both skin and lung allergy and irritation. It is associated with the onset of lung and nasopharyngeal cancer.

At all sites where there is exposure nickel sulfate and other inorganic nickel compounds, nickel medical surveillance is required when a worker:

- is occupationally exposed, calculated as an 8-hour time-weighted average (TWA) for more than thirty (30) days in any consecutive twelve (12) months, to
 - elemental nickel at or above 1.0 mg per cubic meter of air (1.0 mg/m³)
 - soluble compounds of nickel at or above 0.1 mg per cubic meter of air (0.1 mg/m³)
 - insoluble compounds of nickel at or above 0.2 mg per cubic meter of air (0.1 mg/m³)
- has direct dermal exposure to nickel
- experiences signs or symptoms of the adverse health effects associated with nickel exposure
- is exposed to nickel in an emergency situation

Refer to *Nickel Medical Surveillance* – [N-ID-OCH 030](#) - for the procedure on proper implementation of such medical surveillance program.

2.2.13 Enzyme Medical Surveillance

Exposure to enzyme dusts has long been known to cause occupational allergies and asthma. Industrial enzymes, such as α -amylase, cellulase, lipase, phytase, protease, lactase, lipase, and xylanase have been associated with allergic sensitization. Sensitization may cause respiratory allergy in individuals exposed repeatedly to sufficiently high airborne concentrations of enzyme dust or aerosols.

All BC sites that produce or use dry or aerosolized enzymes in manufacturing/product support applications must provide surveillance examinations for employees who could be exposed to these substances during their employment.

Refer to *Enzyme Medical Surveillance* – [N-ID-OCH 032](#) – for the procedure on proper implementation of such medical surveillance program.

2.2.14 HAZWOPER Medical Surveillance

Workers who have exposure or potential exposure to hazardous waste at hazardous waste operations and/or during emergency response to hazardous substance incidents should receive occupational health surveillance.

*All BC sites shall establish and maintain a hazardous waste operations surveillance program for their affected workers as defined by **29 CFR 1910.120**, whose work activities require:*

- *exposure or potential exposure to hazardous waste at hazardous waste operations, and/or*
- *during an emergency response to hazardous substance incidents or fire*

Refer to *HAZWOPER Medical Surveillance* – [N-ID-OCH 005](#) - for the procedure on proper implementation of such medical surveillance program.

2.2.15 Cotton Dust Medical Surveillance

All sites that produce Cotton Seed or produce Cotton Dust in manufacturing/product support applications must provide surveillance examinations for covered workers in accordance with 29 CFR 1910.1043:

- *Workers exposed to Cotton Dust when workers are exposed to*
 - *cotton dust concentrations > 0.1 mg/m³, as a respirable dust, calculated as an 8-hour time-weighted average.*
- *All workers engaged in cotton seed processing and waste processing operations.*
 - *Site Environment, Health, and Safety (NCU) will provide a list of exposure groups/job classifications to the Medical Department or the Site Medical Program contact if exposures meet the above-noted criteria.*

Refer to [N-ID-OCH 034: Cotton Dust Medical Surveillance](#) for the procedure on proper implementation of such medical surveillance program.

2.2.16 Methylenedianiline Medical Clearance

All sites where there is exposure to methylenedianiline (MDA) as defined **29 CFR 1910.1050** must establish and maintain an MDA surveillance program for affected workers.

MDA medical surveillance is required when:

- *workers are exposed at or above the action level for 30 or more days per year or*
- *workers are subject to dermal exposure to MDA for 15 or more days per year or*
- *the employer has reason to believe, based on visual inspection, that workers have been dermally exposed or*
- *workers have been exposed in an emergency situation or*
- *workers show signs or symptoms of MDA exposure.*

Refer to the implementation document for the procedure on proper implementation of such medical surveillance program

2.3 Fitness for Duty

2.3.1 Pre-Placement Health Examinations

All applicants for employment or re-employment with BASF and its United States subsidiaries are required to undergo pre-placement evaluation, the contents of which are defined in *Pre-Placement Health Exams* – [N-ID-OCH 002](#). Canadian requirements are defined in *Pre-placement Health Examinations* - [C-ID-OCH 003](#).

2.3.2 Periodic Health Examinations

BC Corporate Medical performs voluntary and mandatory (depending on corporate, state, and federal regulations) periodic medical surveillance and fitness-for-duty examinations. All Employees, Contractor Employees, Contractors, and Temporary Workers who perform tasks at a BC site that result in exposures or use of equipment that require a legally mandated exams or clearance, must be provided with such exams

or clearances. Refer to *Periodic Health Examinations* – [N-ID-OCH 003](#) and *Medical Clearances for Contractor Employees, Contractors and Temporary Workers*, [N-ID-OCH 026](#), for details on procedures, scheduling, and frequency.

2.3.3 Return-to-Work Health Examinations

A Return-to-Work examination must take place after an (occupational or non-occupational) illness or injury when the person's capability to perform their job is not known. It is also indicated when an employee is temporarily working at a modified job and is still undergoing medical treatment and/or rehabilitation. Refer to *Return-to-Work Examination*, [N-ID-OCH 020](#), for proper procedure and scheduling.

2.4 Medical Clearances

2.4.1 Respiratory Protection

*All sites where there are respiratory irritants or substances that can cause toxicity via inhalation, such that use of respiratory personal protective equipment (PPE) is required, must provide a program for medical evaluation for use of respirators in accordance with **OSHA 29 CFR 1910.134 (Respiratory Protection) and MSHA 30 CFR 56.5005 (Control of Exposure to Airborne Contaminants)** to protect and preserve health and safety of BASF workers using respirators. Refer to *Respirator Medical Clearance* – [N-ID-OCH 007](#) for proper procedure for implementing the program. In Canada refer to the procedure for *Respirator Medical Clearance*. In Canada refer to the procedure for *Respirator Medical Clearance* - [C-ID-OCH 011](#).*

2.4.2 Mobile Equipment Operator

All workers whose job classification requires operation of industrial vehicles, such as forklifts, powered hand trucks, and cranes, shall undergo periodic Mobile Equipment Operator Health Exams to ensure the worker is medical fit to operate such equipment safely.

Refer to *Mobile Equipment Operator Health Examination* – [N-ID-OCH 008](#) - for proper procedure on implementing such examinations. There is also a Canadian procedure for *Mobile Equipment Operator Health Exams* -[C-ID-OCH 013](#).

2.4.3 Commercial Motor Vehicle Driver Examination

*All BC sites with workers whose job classification requires operation of a Commercial Motor Vehicle (CMV) must establish and maintain a CMV Driver Examination program for those workers in accordance with **DOT FMSCA Standard 49 CFR 391.41, Physical Qualification for Drivers**.*

Refer to *Commercial Motor Vehicle Driver Examination* – [N-ID-OCH 027](#) - for proper procedure for implementing the program.

2.5 Treatment

2.5.1 Emergency Response and Medical Assistance

North American BASF sites must ensure:

- *the ready availability of medical personnel for advice and consultation on matters of plant health*
- *access to rapid emergency medical assistance*

At sites with a BC clinic this will be provided by BC medical personnel until access to more definitive care can be provided. At sites without embedded medical professionals, OSHA recommends that emergency first aid be available within 3-4 minutes. If this

cannot be accomplished with public EMS, then the site must have an adequate number of trained first aid responders and equipment per **29 CFR 1910.151**.

[GCRC Medical Emergency Preparedness and Emergency Response Guidelines – G-GD-OCH 040](#) establishes requirements for trained first aid responders based on the risk category of the site.

Refer to *Medical Emergency Preparedness* – [N-ID-OCH 019](#) - for procedure on proper implementation.

2.5.2 Medical Case Management

All BC sites must ensure that personnel affected by workplace injury or illnesses receive prompt and effective medical treatment and provide a management system to insure compliance with regulatory recordkeeping requirements. Refer to *Medical Case Management – U.S. Sites* – [N-ID-OCH 031](#) - for proper implementation.

2.6 Retention and Release of Medical Information

BC must comply with corporate requirements, codes of medical ethics, and federal and state statutes and regulations, including HIPAA, GINA, OSHA, regarding maintenance, retention, and release of all medical records. Refer to [N-ID-OCH 001: Retention and Release of Medical Information/Records](#).

3 Supplement

3.1 Revision History

Effective Date	Revision	Section(s)	Short Description of Changes
10/31/2022	4	1.2, 1.5, 1.6.1, 1.6.2, 1.6.3, 1.6.4, 1.6.9, 1.7, 1.8.3, 1.9.1, 1.9.2, 1.9.3, 1.10.1, 1.10.4, 1.11.4, 1.12, 2.1.1, 2.2.5, 2.2.12, 2.2.15, 2.3.1, 2.4.1, 2.4.2, 2.5.1, 3.4	Insert or update links. Add or edit wording. Add abbreviations. Edit titles. Correct punctuation.
8/30/2019	3	1.8.3, 1.9.1, 1.10.4, 2.2.16, 3.2, 3.3, 3.4	updates in nomenclature of referenced documents and addition of required medical surveillance, cotton dust, and MDA
07/23/2019	2	2.2.15; 3.3	new section to add cotton dust medical surveillance; added new section to list in 3.3
10/25/2018	1	1.2, 1.7	reflect allowance of non-physician providers to perform similar functions as physicians
03/28/2017	0	all	initial release

3.2 Mandatory References

Company Requirement	<i>HIPAA Hybrid Entity Requirement</i>
N-R-OCH 002	<i>Alcohol and Substance Abuse Requirement for US Sites</i>
N-ID-OCH 001	<i>Retention and Release of Medical Information/Records</i>

3.3 Guidance Documents & Non-Mandatory References

BC008.002	<i>Controlled Substances/ Authorized Substances/ Alcohol - Testing Categories, Requirements and Procedures</i>
C-ID-OCH 003	<i>Pre-Placement Health Examinations</i>
C-ID-OCH 011	<i>Respirator Medical Clearance</i>
C-ID-OCH 013	<i>Mobile Equipment Operator Health Examination</i>
C-ID-OCH 019	<i>Diisocyanates Medical Surveillance – Health Professionals</i>
C-ID-OCH 034	<i>Automatic External Defibrillators Use in on-site First Aid Programs</i>
G-R-OCH 001	<i>Occupational Health Management</i>
M.C.83-01	<i>Manual de Primeros Auxilios para BASF Mexicana CA&C</i>
N-ID-OCH 002	<i>Pre-Placement Health Examinations</i>
N-ID-OCH 003	<i>Periodic Health Evaluations</i>
N-ID-OCH 004	<i>Ethylene Oxide Medical Surveillance</i>
N-ID-OCH 005	<i>HAZWOPER Medical Surveillance – Health Professionals</i>
N-ID-OCH 006	<i>Hepatitis B Immunization Program</i>
N-ID-OCH 007	<i>Respirator Medical Clearance</i>
N-ID-OCH 008	<i>Mobile Equipment Operator Health Examination</i>
N-ID-OCH 009	<i>Hearing Conservation Program</i>
N-ID-OCH 010	<i>Cholinesterase–Inhibiting Pesticides Medical Surveillance – Health Professionals</i>
N-ID-OCH 011	<i>Lead Medical Surveillance</i>
N-ID-OCH 012	<i>Diisocyanates Medical Surveillance – Health Professionals</i>
N-ID-OCH 013	<i>International Travel Medical Program – Health Professionals</i>
N-ID-OCH 014	<i>Reproductive and Developmental Hazard Assessment – Health Professionals</i>
N-ID-OCH 015	<i>Biomonitoring</i>

N-ID-OCH 016	<i>Formaldehyde Medical Surveillance</i>
N-ID-OCH 017	<i>Ergonomic Medical Surveillance</i>
N-ID-OCH 018	<i>Plant Tours</i>
N-ID-OCH 019	<i>Medical Emergency Preparedness</i>
N-ID-OCH 020	<i>Return-to-Work Examination</i>
N-ID-OCH 021	<i>Benzene Medical Surveillance</i>
N-ID-OCH 022	<i>1,3-Butadiene Medical Surveillance</i>
N-ID-OCH 023	<i>Automatic External Defibrillator Use in On-Site First Aid</i>
N-ID-OCH 024	<i>Multiple-Casualty Incident</i>
N-ID-OCH 025	<i>Hexavalent Chromium Medical Surveillance</i>
N-ID-OCH 026	<i>Medical Clearances for Contractor Employees, Contractors and Temporary Workers</i>
N-ID-OCH 027	<i>Commercial Motor Vehicle Driver Examination</i>
N-ID-OCH 028	<i>Crystalline Silica Medical Surveillance</i>
N-ID-OCH 029	<i>Platinum Medical Surveillance</i>
N-ID-OCH 030	<i>Nickel Medical Surveillance</i>
N-ID-OCH 031	<i>Medical Case Management – U.S. Sites</i>
N-ID-OCH 032	<i>Enzyme Medical Surveillance</i>
N-ID-OCH 033	<i>Drug- and Alcohol-Free Work Place</i>
N-ID-OCH 034	<i>Cotton Dust Medical Surveillance</i>
P.C.83-01	<i>Procedimiento de Atención de Emergencias Médicas</i>
P.C.83-02	<i>Procedimiento de Manejo de la Atención Médica</i>
P.C.83-03	<i>Plan de Contingencia Sanitaria ante Posibles Epidemias / Pandemias</i>
P.C.83-04	<i>Programa de Vigilancia Médica Ocupacional</i>
P.C.83-05	<i>Requerimientos Médicos para Empleados, Personal Contratista, Outsourcing, Becarios, Practicantes y Trabajadores Temporales</i>
P.C.83-06	<i>Vigilancia Médica a Diisocianatos</i>
P.C.83-07	<i>Monitoreos Biológicos</i>

[P.C.83-08](#) *Evaluación de Riesgos Para la Salud Reproductiva, Protección del Embrazo y Lactancia*

[PO.C.83-01](#) *Sustancias Controladas y Alcohol*

3.4 Abbreviations

AED	automatic external defibrillator
BD	1,3-Butadiene
CAOHC	Council for Accreditation in Occupational Hearing Conservation
CEMG	chemical emergency medical guideline
CMV	commercial motor vehicle
DOT	Department of Transportation
EHS	environmental health and safety
eMCP	electronic medical clearance program
EtO	ethylene oxide
GCRC	global competency center Responsible Care®
HAZWOPER	hazardous waste operations and emergency response
HEG-M	homogenous exposure groupings – medical
HIPAA	Health Insurance Portability and Accountability Act
GINA	Genetic Information Nondiscrimination Act
MDA	methylenedianiline
NIOSH	National Institutes of Occupational Safety and Health
OH	occupational health
OM&HP	occupational medicine and health promotion
OSHA	Occupational Safety & Health Administration
PEL	permissible exposure limit
PMU	production, maintenance, utilities
PPE	personal protective equipment
SCBA	self-contained breathing apparatus
SDS	safety data sheet
SMC	site medical contact
SOHP	site occupational health physician
STEL	short-term exposure limit