

Individual Monitoring Etiquette at IAEA Radiation Safety Technical Services During COVID-19 Pandemic

Michael Hajek

International Atomic Energy Agency Division of Radiation, Transport and Waste Safety Vienna International Centre, Vienna, Austria

E-Mail: m.hajek@iaea.org

IAEA Webinar Series | Continuity in COVID-19 Pandemic 27 May 2020, IAEA COVID-19 Webinar Series

Radiation Safety Technical Services Laboratory

- External and internal individual monitoring for all operations under IAEA control or supervision around the globe
 - Accreditation to EN ISO/IEC 17025:2017
 - Bound to IAEA Radiation Safety and Nuclear Security Regulations implementing requirements of International Basic Safety Standards











Continuation of Service



- Nine weeks of access restrictions before gradual return to premises
- Safety-critical service to be maintained during COVID-19 pandemic
 - Continuation of safeguards inspections worldwide to ensure that nuclear material is not diverted from peaceful use
 - Postponement of most meetings and non-critical travel through at least 1 June 2020



General Guidance



Working in separate teams rotated weekly to reduce contagion

Adherence to general hygiene measures

- Avoid close contact with others and keep a minimum distance of 1 m
- Wear face masks covering mouth and nose in public areas
- Practise frequent hand hygiene
- Avoid shaking hands and touching your face
- Limit touching of door knobs
- Stay home with fever and/or respiratory symptoms
- Seek remote guidance from Medical Service if unsure



Measures for External Dosimetry

Extension of monitoring period for dosimetry of record

- 1 month \rightarrow 3 months
- 3 months \rightarrow up to 6 months

Provision of active personal dosimeters upon request

- Direct reading capability
- Continuous operation up to 5 months

Personal safety

- Disinfection of all items returned by clients
- Use of personal protective equipment as appropriate













Measures for Internal Dosimetry

- Extension of confirmatory in-vivo monitoring intervals to 12 months in favour of in-vitro bioassay of excreta
 - De facto temporary suspension of confirmatory in-vivo monitoring
 - Minimization of SARS-CoV-2 spread

Maintenance of routine QA/QC procedures

 Availability of whole-body counter in the event of suspected internal contamination and emergencies

Personal safety

- Wear of face masks for monitored individuals and FFP3 respirators for laboratory technicians
- Frequent disinfection of equipment, ventilation of room











Guiding Work Procedure



| WI-IM-10 0 2020-05-06 1 Cuality Management System Radiation Safety Technical Services Laboratory GUIDANCE ON INDIVIDUAL MONITORING DURING COVID-19 PANDEMIC OUTBREAK Muthorized Function Name Signature and Date Authorized Deputy Technical Manager D. Tucker TUCKER, David Digital speed by UCCRE, During David Digital speed by UCCRE, During Digital speed by UCCRE, During Digi | (A) | Code | Revision Numb | Date of entry into force | Page | of pages | | |
|--|--------------|----------------------|------------------|--|---|----------|--|--|
| Quality Management System Radiation Safety Technical Services Laboratory GUIDANCE ON INDIVIDUAL MONITORING DURING COVID-19 PANDEMIC OUTBREAK GUIDANCE ON INDIVIDUAL MONITORING DURING COVID-19 PANDEMIC OUTBREAK Authorized Function Name Signature and Date Authorized Deputy Technical Manager D. Tucker TUCKER, David Digitaly spend by David Digitaly spend by Digitaly S | IAEA | WI-IM-10 | 0 | 2020-05-06 | 1 | | | |
| Approved Medical Director M. Lademann LADEMANN Matthias Opposite Director Director Opposite Director Matthias Opposite Director Director Director Approved Medical Director M. Lademann LADEMANN Matthias Opposite Director Director Director Opposite Director Director Director Approved Service Group Leader M. Hajek HAJEK, Michael Opposite Director Director Director Opposite Director BENESCH, Opposite Director T. Benesch BENESCH, Director Director | | | | | | 1 | | |
| Function Name Signature and Date Authorized Deputy Technical Manager D. Tucker TUCKER, David District States and David District States and David Approved Medical Director M. Lademann LADEMANN, Matthias District States and David District States and David District States and David Approved Service Group Leader M. Hajek HAJEK, Michael District States and District States and District States and District States and District States and District States and Date Repistered Outsity Manager T. Benesch BENESCH, BENESCH, David States and Date | Gυ | | | | | N G | | |
| Authorized Deputy Technical Manager D. Tucker TUCKER, David Option input by Distribution Approved Medical Director M. Lademann LADEMANN Matthias Option ispect by Distribution Approved Medical Director M. Lademann LADEMANN Matthias Option ispect by Distribution Approved Service Group Leader M. Hajek HAJEK, Michael Option ispect by Distribution BENESCH, Option ispects T. Benesch BENESCH, BENESCH, Distribution | | COVID- | 19 PAND | EMIC OUTBREAK | (| | | |
| Authorized Deputy Technical Manager D. Tucker TUCKER, David Option input by Distribution Approved Medical Director M. Lademann LADEMANN Matthias Option ispect by Distribution Approved Medical Director M. Lademann LADEMANN Matthias Option ispect by Distribution Approved Service Group Leader M. Hajek HAJEK, Michael Option ispect by Distribution BENESCH, Option ispects T. Benesch BENESCH, BENESCH, Distribution | | | | | | | | |
| Authorized D. Tucker David Desc 2000 not 60 US182-0-000 Approved Medical Director M. Lademann LADEMANN, Dublic speed by Matthias Dublic speed by Dublic spee | | Function | Name | Signature and | Date | | | |
| Approved Neducal Director M. Laberhamn Matthias Disk 200 00.00 00 15 00 +0007 Approved Service Group Leader M. Hajek HAJEK, Michael Disk 400 00 10 01 20 4 20 +0007 Repistered Quality Manager T. Benesch BENESCH, BENESCH, Improvement meters from | Authorized | | D. Tucker | TUCKER, Digitally TUCKER, Digitally TUCKE David Digitally TUCKE 10.51.0 | signed by R, David 120.05.05 2 +02'00' | | | |
| Approved Service Group Leader M. Hajek Michael Michael Michael Michael Benesch BENESCH, approximation free | Approved | Medical Director | M. Lademann | BALLET Date: 2 | Date: 2020.05.05 | | | |
| | Approved | Service Group Leader | M. Hajek | HAJEN, HAJEK Michael | | | | |
| | Registered | Quality Manager | T. Benesch | | wd by BENESCH, Tobias 8.06 15:57:40 +0200 | | | |
| Summary: This procedure is designed to make individual monitoring services s available and minimize risk to laboratory personnel and monit individuals during the COVID-19 pandemic outbreak. | Summary: | availab | ole and minimize | e risk to laboratory persor | nnel and | | | |
| Valid version available: X:104_Working_InstructionsIIndividual Monitoring Service Group) Basic_WIWI-IM-10_Individual_Monitoring_During_COVID-19_V0.dc | Valid versio | | | | | | | |

| | Code | Revision Number | Date of entering into force | Page | of pages | | |
|------|---|-----------------------------|---------------------------------------|-------|----------|--|--|
| | WI-IM-10 | 0 | 2020-05-06 | 2 | 8 | | |
| | | | L MONITORING I MIC OUTBREAK | DURIN | IG | | |
| Та | ble of contents | | | | | | |
| Tal | ble of contents | | | | | | |
| 1 | Purpose and scope | | | | | | |
| 2 | Risks and safety instruction | s | | | | | |
| 3 | Roles and responsibilities | | | | | | |
| 4 | Equipment | | | | | | |
| 5 | Procedure | | | | | | |
| | 5.1 Prioritization | | | | | | |
| | | | | | | | |
| | 5.3 Protection | | | | | | |
| 6 | ,,, | | | | | | |
| | | | | | | | |
| 7 | | | | | | | |
| 8 | , | | | | | | |
| 9 | | | | | | | |
| | | 5 1 1 | oster s for use against SARS-CoV-; | | | | |
| | 5.2 Annex 2. Compatible | surface disinfectante | for use against OARS-COV- | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Prin | ted copies are not controlled for valid vidual Monitoring Service Group\Basi | ity. For valid copy, please | refer to: X:\04Working_Instruction | ns\ | | | |
| Indi | vidual Monitoring Service Group\Basi | c_WI\WI-IM-10_Individua | [_Monitoring_During_COVID-19_V0. | docx. | | | |

Collaboration with Clients



Poster reminder of individual monitoring at laboratory entrance

 Complimentary to comprehensive guidelines advised by United Nations Offices in Vienna

Regular correspondence with Radiation Protection Officers

- Facilitation of information of workers
- Roundtables to discuss safety issues

Backup services in case of incapacity

 Practical Arrangements with external suppliers of individual monitoring services





N