

# Impacts of Covid-19 on RP

## Testimonies from the Young Generation

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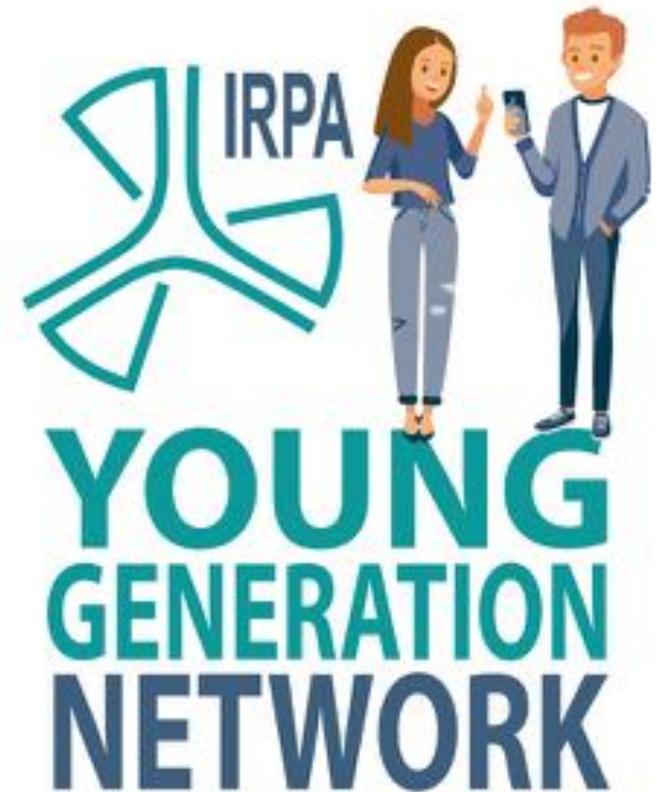
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Ontario Tech University, Canada

**Cinthia PAPP**

National Atomic Energy Commission, Argentina

*on behalf of the IRPA YGN Leadership Committee*



# Activating the IRPA Young Generation Network

## Objective



Bring to light **the impacts of Covid-19** from the **Young Generation in Radiation Protection point of view**

## Method



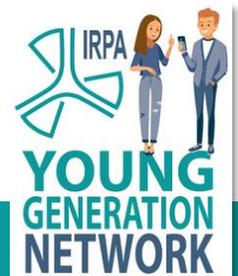
**Testimonies** collected by questionnaire

- *The difficulties encountered in the job because of the Covid-19?*
- *How do you ensure the continuity/consistency of RP?*
- *What are the remaining difficulties?*

## Actions

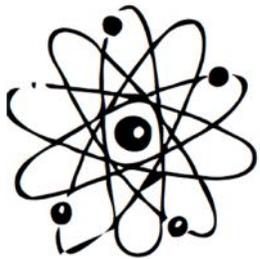


- Diffusion via IRPA YGN LC
- Start : 26 March
- Last answer : 15 May
- Testimonies made 'public' on the IRPA YGN Blog



# Overview

- Information about the participants
- Analysis by sector of activity



Nuclear cycle and related industries



Medical



Research



Regulation

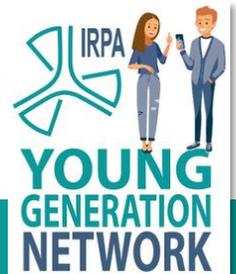


Education & Training

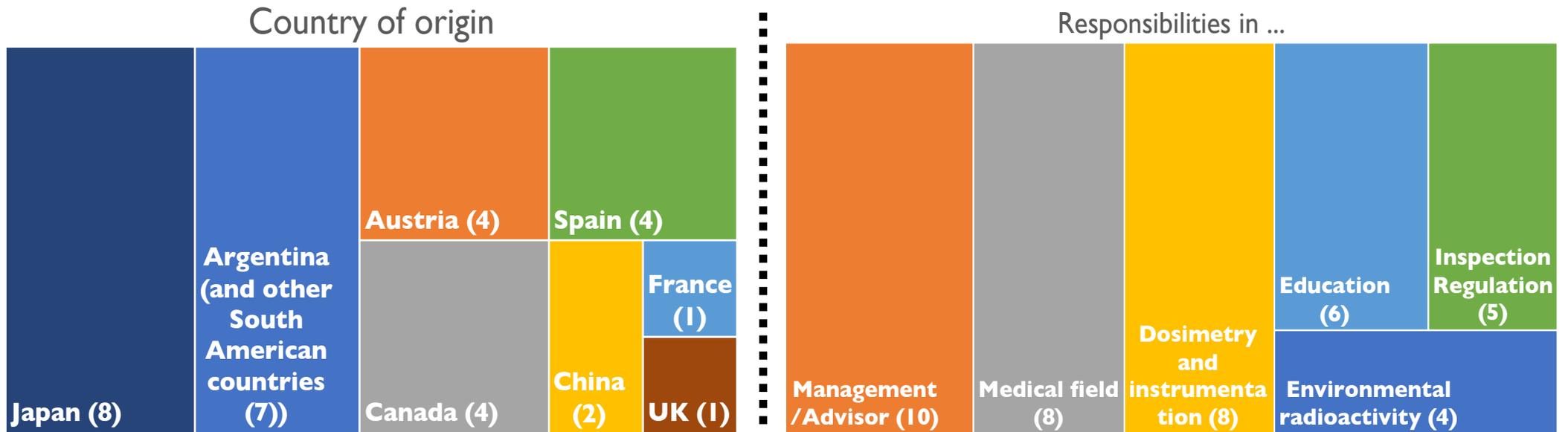
- Synthesis, lessons-learned and perspectives



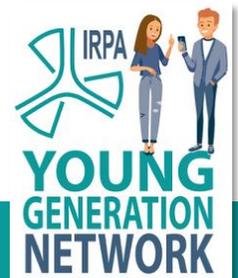
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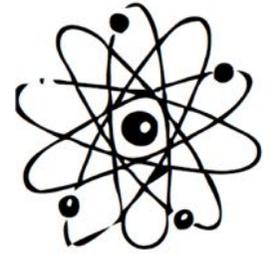
# Information about the (30) participants



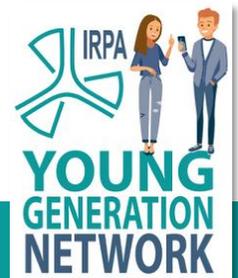
- Answers from 8 countries/regions
- Participants are “multi-tasks” in general: their job covers several RP topics and/or they share several responsibilities in RP
- ⇒ the testimonies cover a large panorama of situations



# Nuclear cycle and related industries

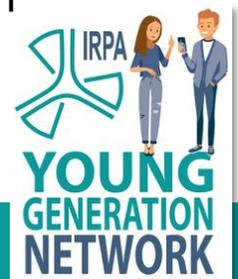


- Industries have been deemed 'essential' and have pursued operation
  - 'Non-priority activities' have been postponed (e.g. calibration, QA, ...)
- **Less RP staff** and **numerous adaptations** on-site
- Reduced RP staff have led to over-work and difficulties to gain information from the field
  - *"I cannot adequately do this without seeing the process in person"*
  - Concern about a general decline of RP results and indicators have been expressed
- Clarification were needed in the **coordination of radiological & sanitary risks** e.g.
  - Wearing ventilated helmet vs. mask
  - Disinfection of exit monitors sensors



## Medical (= hospital)

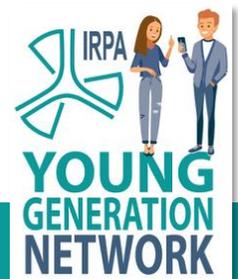
- In front line during the pandemic and all '**non-priority activities**' have been postponed e.g.
  - Non-essential operations using radiation, calibration, QA, etc.
  - Monthly control of dosimeters (or frequency √)
  - Reduced presence of RP staff
- Clarification were needed in the **coordination of radiological & sanitary risks**,
  - E.g. disinfection of TLD, administration of radiopharmaceuticals, radiology imaging
  - ⇒ Interdisciplinary works and (personalized) communication have proved to be the most efficient
  - ⇒ The **young generation** has often been put in front line for communication (ex. hotline)



**Research** (associated with the nuclear industry and medical sector: monitoring, dosimetric services, etc. )

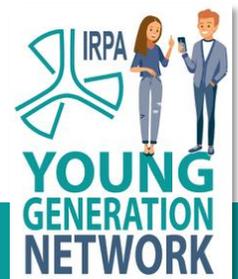


- The programme of activities has been redeployed
- (1) For '**paper-based RP work**'
  - Teleworking has become the new standard
  - The basis of RP job has not changed
  - But numerous practical difficulties have been encountered
- A singularity of the **young generation**: the presence of (very) young children has raised peculiar difficulties, notably in the personal vs. professional balance
  - *"I cannot do telework to take care of my baby", "it is HARD to juggle both"*
  - *"Tough", "stressful"* situation and concern about the psychological impacts have been expressed



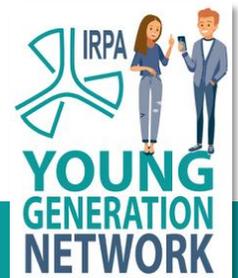
**Research** (associated with the nuclear industry and medical sector: monitoring, dosimetric services, etc. )

- (2) '**Practical-based RP works**' (= cannot be performed remotely)
  - Restricted to the essential
  - Most have been considered as 'non-priority' and postponed/cancelled
- The **young generation** is particularly represented in these jobs e.g.
  - Laboratory experiments and calculation
  - Samples collection and measurements (environmental monitoring)
  - Fundamental research - often in connexion with an university/a PhD
  - *"I cannot access my laboratory to perform my research"*
- Some **young generation** participants have been placed on mandatory leaves by Senior Management



# Regulation

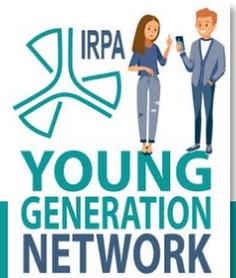
- Office work have been replaced by home work without "*influenced the work*"
- On-site inspections have been postponed
- Virtual inspections have been put in place in some cases
  - Via questionnaires for X-ray equipment
  - The position that virtual inspection cannot replace on-site inspections have been expressed



# Education and training



- The **young generation** is particularly represented in this sector
- Face-to-face courses have been cancelled or replaced by remoted teaching
- Early practical difficulties have been encountered with the new tools
- **Teachers** have reported that the switch was a **big challenge** and has required huge work for adaptation
  - And *"Are the message still passed?"*
- **Students** have reported concerns about the diminution of interaction
  - *"I cannot have discussion with my senior"*
- When others have seen the bright side
  - *"Students who are shy could actively speak trough the typing"*
  - *"This is a very good opportunity to introduce the remote teaching"*



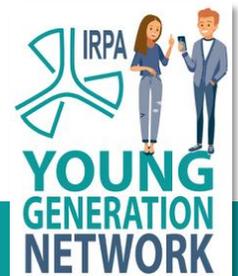
# Synthesis

- All RP sectors have been affected
  - ± important depending on the sectors and the type of activity
  - ∇ Meetings, events, business trip etc. have been postponed/cancelled
  - ∇ Tele-working/conference have been implemented
- Paper-based work have faced **organisational impacts 'only'**
  - However the consequences on the consistency of RP cannot be disregarded
- A **reduced RP presence** in hospitals and nuclear-cycle related industry
  - Decline of RP indicators? Ensuring a high level of RP might not be possible on long term
- Many challenges in the **coordination of RP & sanitary risks**
- Research and RP procedures etc. **not the priority**
- **Unprecedented switch** in education and training in RP



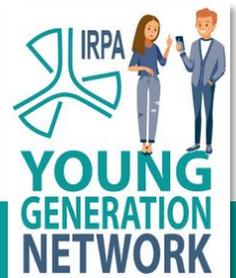
# Synthesis

- Specific items associated with the **young generation** have been identified, e.g.
  - Specific activities that require the presence at research installation, laboratories, hospitals (e.g. for PhD, post-graduate, ...) cannot be pursued
  - Education at home and the limited teacher-students connexion
  - The presence of (very) young children at home during confinement and the increased difficulties in the management of personal/professional balance
  - The understanding of Senior's decisions



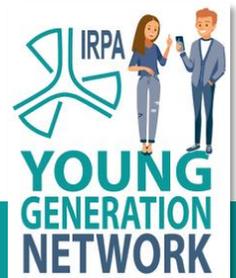
# Participants have drafted comparisons between Covid and RP

- The knowledge in RP have been reported as very useful in the situation
  - Preventing from radiation and from virus has been considered as 'comparable'
- Hospitals in Japan used their experience from Fukushima accident
  - E.g. for the triage or the management of PPE
- Communication in emergency are comparable
  - Fake news have spread rapidly
  - The question of the message from experts vs. social media
  - Harmonization of the messages from experts
- Concerns about the initiative of using radiation for disinfection purposes have been expressed



# Some lessons-learned

- Working with digital tools have proven to be possible
  - Is the young generation more “flexible” technologically-wise (?)
- **Access to document/data** was an issue and it is recommended to consider access via VPN
- **In all sectors, transdisciplinary working group, internal training and personalized communication** have appeared the most advisable for the elaboration and the dissemination of new procedures
- It is recommended to consider **multiple alternatives for ‘non-routine situations’**, including ultimate RP contingency plan (nuclear industry)
- Where the organization is prepared, the transition have been reported as “smooth”

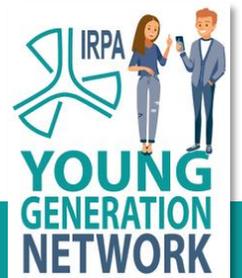


# Perspectives

- **Networks are more important than ever in a context of pandemic**
- The IRPA YGN took the initiative to share and communicate about the impacts of the Covid-19 on radiation protection
- Result : The young perspective on ('all') RP areas in this unprecedented situation
- Communication of the ppt (and translation if needed) by national Young Generation Networks
- Feedback and agreement on the challenges (still) at stake
- A synthesis on text format will be finalized in 2020

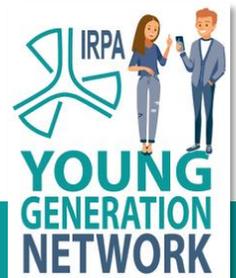
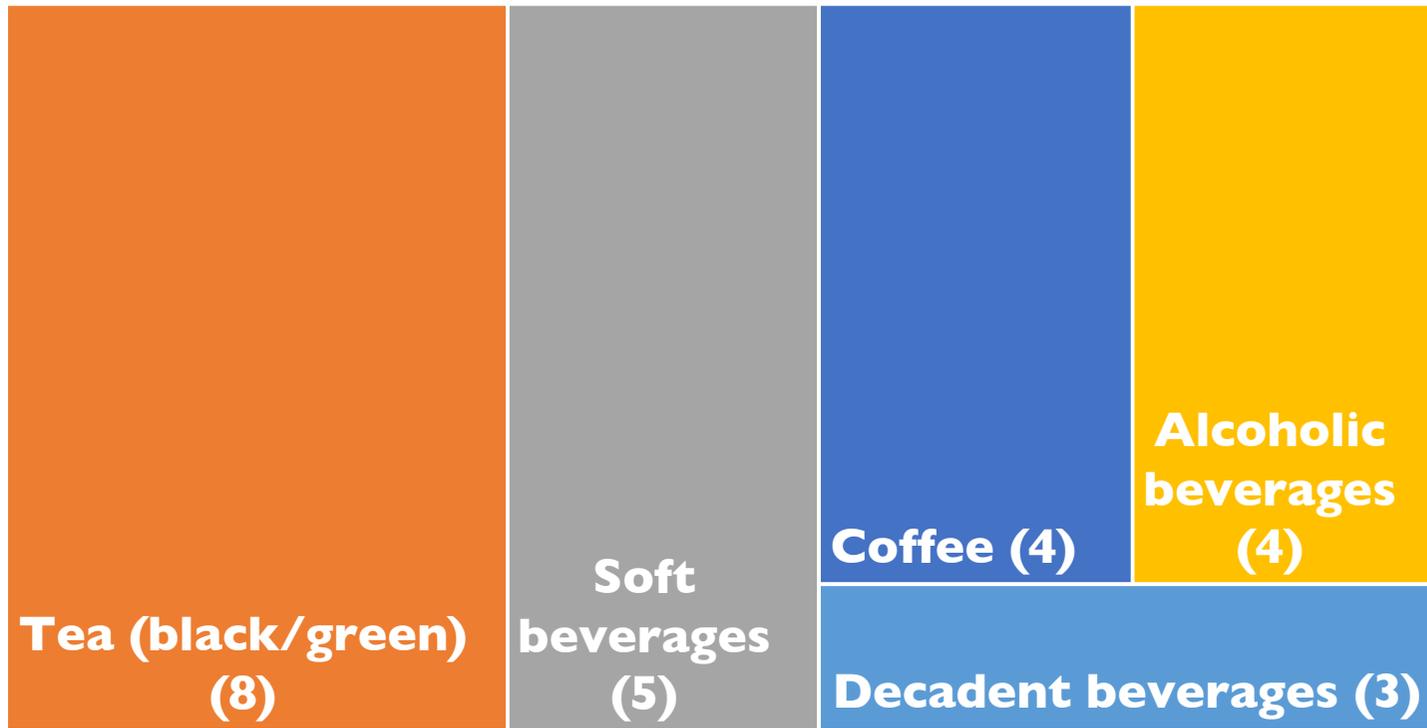


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# Bonus question

*What is your preferred drink during confinement?*





**One website internet**  
<http://www.irpa.net/YPN/index.asp>

**One mini-blog (password)**  
<https://irpaygn.posthaven.com>

