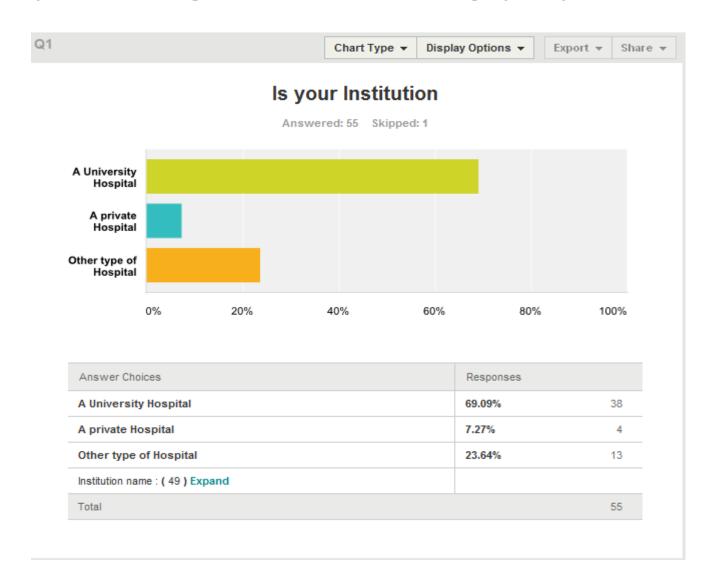
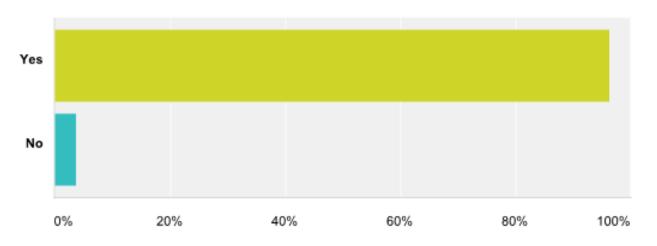
Survey analysis on X-Ray exposure for implanting and ablating physicians



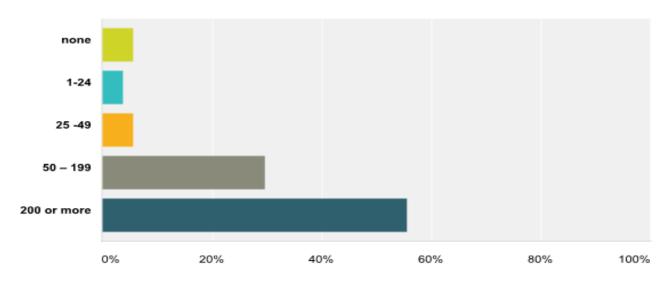
Would you be comfortable if we acknowledge your centre in the Europace Journal and on the Website?

Answered: 55 Skipped: 1



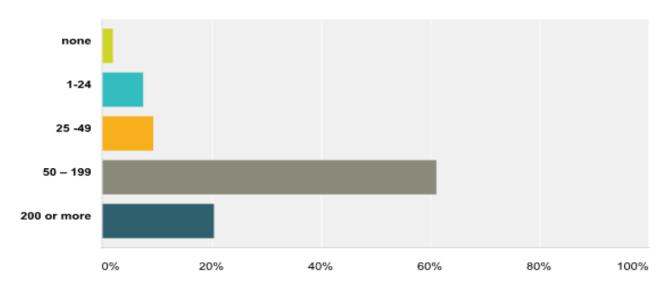
Answer Choices	Responses
Yes	96.36% 53
No	3.64% 2
Total	55

Total number of catheter ablations (all types of arrhythmia) at your institution last calender year:



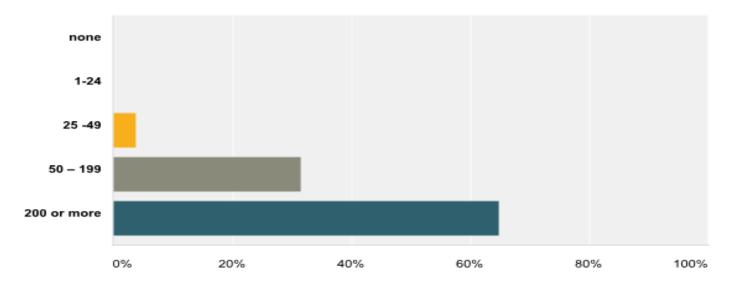
Answer Choices	Responses	
none	5.56%	3
1-24	3.70%	2
25 -49	5.56%	3
50 – 199	29.63%	16
200 or more	55.56%	30
Comments (2) Expand		
Total		54

Number of ICD implantations (including CRT -Ds) at your institution last calendar year :



Answer Choices	Responses	
none	1.85%	1
1-24	7.41%	4
25 -49	9.26%	5
50 – 199	61.11%	33
200 or more	20.37%	11
Comments (2) Expand		
Total		54

Number of pacemaker implantations (including CRT-Ps) at your institution last calendar year :



Answer Choices	Responses	
none	0%	0
1-24	0%	0
25 -49	3.70%	2
50 – 199	31.48%	17
200 or more	64.81%	35
Comments (2) Expand		
Total		54

What kind of X-ray imaging device do you use for electrophysiologic procedures (manufacturer, model) – please mark several if applicable

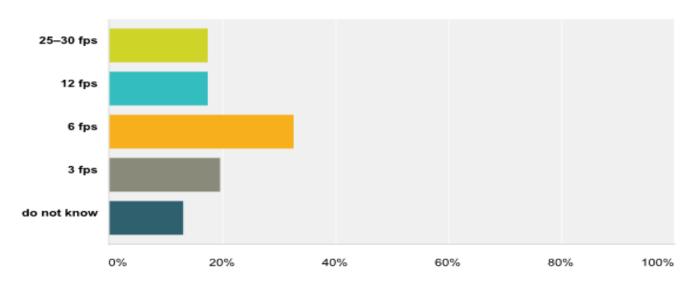
Answered: 46 Skipped: 10

	Responses	
Expand	89.13%	41
Expand	52.17%	24
Expand	86.96%	40
Expand	52.17%	24
Expand	89.13%	41
Expand	91.30%	42
	Expand Expand Expand Expand	Expand 89.13% Expand 52.17% Expand 86.96% Expand 52.17% Expand 89.13%

Total Respondents: 46

What frame rate of pulsed fluoroscopy do you choose for ablation / electrophysiologic procedures?

Answered: 46 Skipped: 10

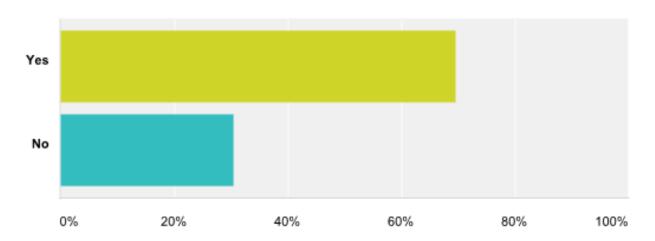


Answer Choices	Responses	
25–30 fps	17.39%	8
12 fps	17.39%	8
6 fps	32.61%	15
3 fps	19.57%	9
do not know	13.04%	6
frame rate fixed – cannot be changed, and is: (4) Expand		
Total		46

Q11 Display Options ▼ Export + Share ▼ Chart Type ▼ In your EP lab, are staff radiation doses measured individually for the personnel? Answered: 46 Skipped: 10 97.83% (45) Yes No 0% 20% 40% 60% 80% 100%

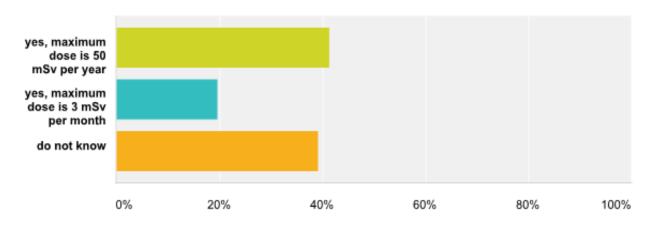
Answer Choices	Responses	
Yes	97.83%	45
No	2.17%	1
Total		46

In your hospital, are yearly health check-ups mandatory for people working with X-ray in the cardiology department?



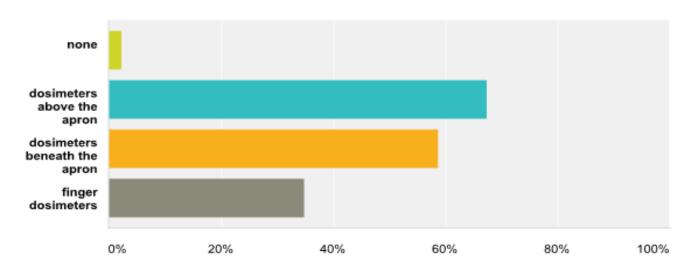
Answer Choices	Responses	
Yes	69.57%	32
No	30.43%	14
Total		46

Is there any monthly/yearly radiation exposure limit for implanting/ablation physicians?



Answer Choices	Responses	
yes, maximum dose is 50 mSv per year	41.30%	19
yes, maximum dose is 3 mSv per month	19.57%	9
do not know	39.13%	18
Other (please specify) (5) Expand		
Total		46

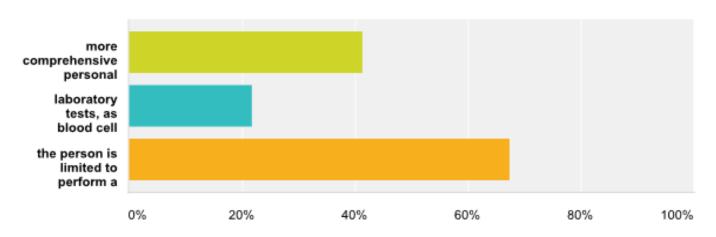
For operating/ablating physicians, what dosimeters are used for routine monitoring (multiple choice possible)?



Answer Choices	Responses	
none	2.17%	1
dosimeters above the apron	67.39%	31
dosimeters beneath the apron	58.70%	27
finger dosimeters	34.78%	16
Total Respondents: 46		

If the personnel exceeds monthly limit of radiation, what measures are taken (multiple answers possible)?

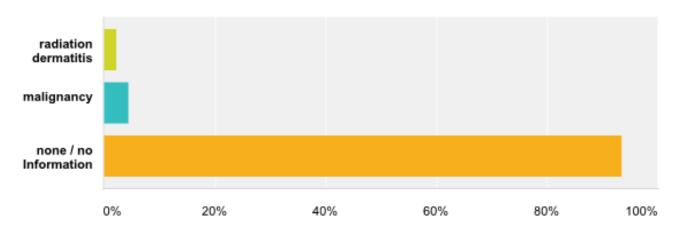
Answered: 46 Skipped: 10



Answer Choices	Responses	s
more comprehensive personal measurements are performed	41.30%	19
laboratory tests, as blood cell count, need to be performed	21.74%	10
the person is limited to perform a certain number of procedures	67.39%	31
Total Respondents: 46		

Did someone of your electrophysiology colleagues have suffered illness probably attributable to occupational radiation?

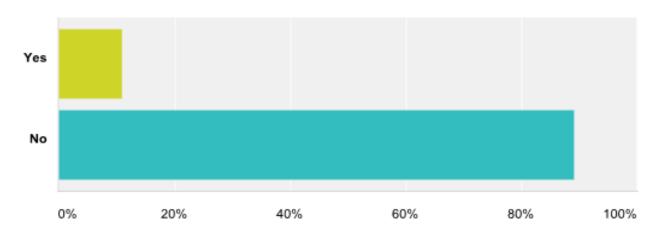
Answered: 46 Skipped: 10



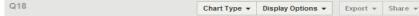
Answer Choices	Responses
radiation dermatitis	2.17 % 1
malignancy	4.35 % 2
none / no Information	93.48 % 43
Total Respondents: 46	

Did some of your patients suffer from the radiation dermatitis after electrophysiology procedure ?

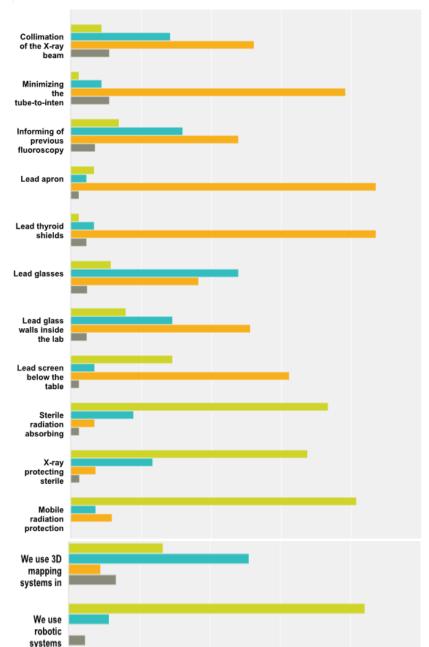
Answered: 46 Skipped: 10



Answer Choices	Responses
Yes	10.87% 5
No	89.13 % 41
Total	46

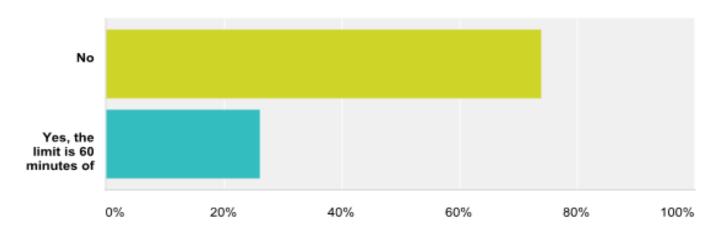


What kind of safety measures do you use to minimize radiation of the operating/ablating physician?



	Never	Sometimes	Always	Often	Total
Collimation of the X-ray beam (narrowing the diaphragm)	8.70% 4	28.26% 13	52.17% 24	10.87% 5	46
Minimizing the tube-to- intensifier distance	2.17% 1	8.70% 4	78.26% 36	10.87% 5	46
Informing of previous fluoroscopy times	13.64% 6	31.82% 14	47.73% 21	6.82% 3	44
Lead apron	6.52% 3	4.35% 2	86.96% 40	2.17% 1	46
Lead thyroid shields	2.17 % 1	6.52% 3	86.96% 40	4.35% 2	46
Lead glasses	11.36% 5	47.73% 21	36.36% 16	4.55% 2	44
Lead glass walls inside the lab	15.56% 7	28.89% 13	51.11% 23	4.44% 2	45
Lead screen below the table	28.89% 13	6.67% 3	62.22% 28	2.22 % 1	45
Sterile radiation absorbing pads placed near (around) the device pocket incision	73.33% 33	17.78% 8	6.67% 3	2.22% 1	45
X-ray protecting sterile gloves	67.44% 29	23.26% 10	6.98% 3	2.33% 1	43
Mobile radiation protection cabine (e.g. CathPax)?	81.40% 35	6.98% 3	11.63% 5	0% 0	43
We use 3D mapping systems in routine cases also to minimize radiation	26.67% 12	51.11% 23	8.89% 4	13.33% 6	45
We use robotic systems (Stereotaxis, Hansen) in order to minimize radiation	84.09% 37	11.36% 5	0% 0	4.55% 2	44

Do you use the upper limit of the procedure duration and lead placement attempts when implanting CRT devices?



Answer Choices	Responses	
No	73.91%	34
Yes, the limit is 60 minutes of fluoroscopy or 4 hours of total procedure duration	26.09%	12
Other (comments) (2) Expand		
Total		46

Do you use upper limit of fluoroscopy duration for catheter ablation procedure?

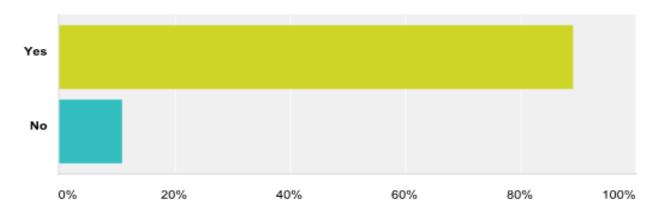
Answered: 46 Skipped: 10

	Responses	
Expand	82.61%	38
Expand	15.22%	7
Expand	2.17%	1
	0%	0
	Expand	Expand 82.61% Expand 15.22% Expand 2.17%

Total Respondents: 46

Would you like to have your contact data published by EHRA (website, etc)? (Email addresses not incl.) Are you interested to receive invitations to participate in EHRA endorsed research studies?

Answered: 46 Skipped: 10



Answer Choices	Responses	
Yes	89.13%	41
No	10.87%	5
Other (please specify) (0)		
Total		46