The impact of COVID-19 on biotech/pharma service providers.

A survey of 273 commercially focused individuals in the outsourced drug development ecosystem during the Covid-19 Pandemic.

Methodology

On March 24, 25, and 26th 2020 the Zymewire team emailed three batches of email invites to a total of 1800 individuals from a variety of companies involved in outsourced drug development services.

Participants in the survey were shown 12 questions, with one question hidden depending on the type of company they were from.

All open text questions were optional and participants were notified that their answers might be shared anonymously.

All multiple choice questions had an escape answer of N/A or "none"

At 6pm ET on March 26th the survey was closed to new participants.

Results Summary: Participant Demographics

273 complete responses were received before the cut off. All complete responses were included in the analysis.

60 partial responses were also received. These were omitted from analysis.

Respondent Demographics		Role in Company								
		BDDirector / BD Manager	CCO/VP /Directo r of Sales	CEO	Inside Sales	Marketing VP, Director or Manager	Operations	Other Role	Sales Ops	Total
Type of Company	Ancillary services for clinical trials	13	6	1		2		1	1	24
	Clinical CRO	47	22	3	17	3	5	4	5	106
	Clinical study site	11	5	5			2	2	1	26
	Contract Manufacturing Organization (incl. CDMO)	18	8		4	3		2	4	39
	EDC or Clinical software	10	9	2	2				1	24
	Other	10	4	2		3		4	2	25
	Packaging Provider	2	3							5
	Preclinical / non-clinical CRO	16	2	1	4					23
	[Skipped question]	1								1
	Total	128	59	14	27	11	7	13	14	273

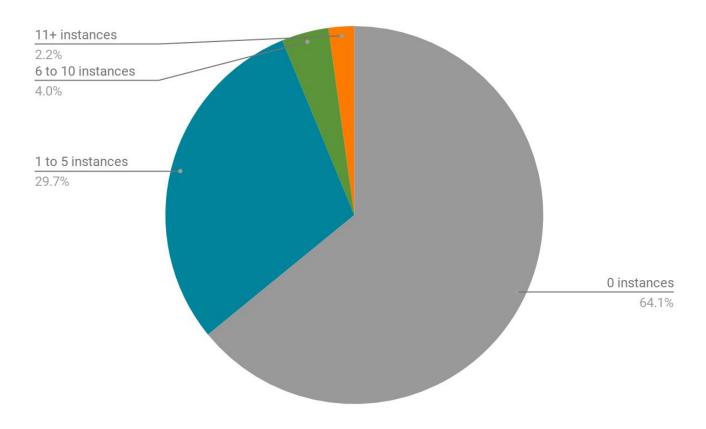
Results Summary: Participant Location

Australia	2
Belgium	1
Canada	11
China	1
Denmark	1
France	2
Germany	5
India	1
Ireland	2
Israel	1
Italy	1
Netherlands	4
Portugal	2
Russian Federation	2
Serbia	2
Spain	1
Taiwan	1
United Kingdom	16
United States	216

^{*} location was approximated by Internet Service Provider only through survey software and does not account for use of Corporate VPNs domiciled in other countries.

Are survey participants seeing biotech companies struggling to raise funding?

Participants were asked How many first-hand stories have you heard from your biotech client base about difficulties raising money since the Covid-19 crisis began? The numerical answers from the participants were then grouped into buckets: 0, 1-to-5, 6-to-10 or 11+ instances. The breakdown of participant responses is shown below.



Most survey respondents have not been hearing of financing struggles from biotech firms.

"A client decided to go with their incumbent CDMO instead of doing a tech transfer due to funding concerns and the time of transfer. Their current CDMO cannot support them long term based on scale but they are willing to take the risk."

"I've noticed a few more companies talking about their need to raise funding before they do any new activities. I'm sure they've always been doing this in the background in the past, but now they are actually talking about it openly. I've had a few even ask me for referrals to VC and/or investment companies on their behalf."

"Client is uncertain of when or how to commence their projects. Some companies are also affected by delays in their funding rounds."

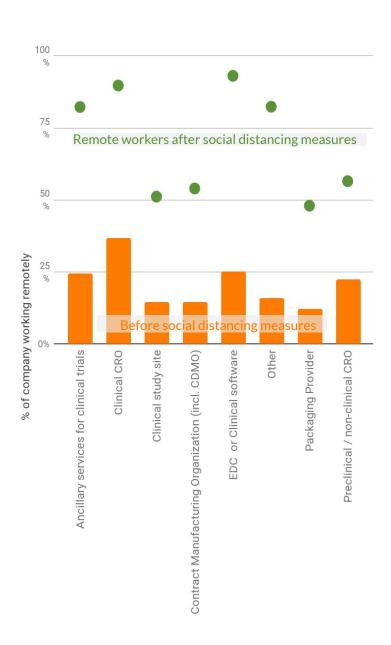
Observations and outlook grouped by Type of Company

Ancillary services for clinical trials
Clinical CRO
Clinical study site
Contract Manufacturing
Organization (incl. CDMO)
EDC or Clinical software
Other
Packaging Provider
Preclinical / non-clinical CRO

Which types of companies still have people physically on site?

Participants were asked What % of your company was already working from home offices at the end of 2019 under pre-Covid19 conditions?. Responses were then grouped by the type of company. (solid orange bar on graph)

An additional question of What % of your company is working from home this week? was asked to determine how many people were remote the week of March 23rd. (green circle).



n=273. Respondent count: Ancillary services (25), Clinical CRO (106), Clinical Study site (26), Contract Manufacturing Organization incl. CDMO (39), EDC or Clinical software (24), Other (25), Packaging Provider (5), Preclinical / non-clinical CRO (23)

Clinical Sites, Contract
Manufacturing
Organizations, Packaging
Providers and Preclinical
CROs still have a high
percentage of people
working on site.

"Hiring for key positions in our Product Development team has been halted because candidates aren't able see the area for relocation potential."

"As a CDMO, we provide crucial services to supply both commercial and clinical drug product. There are a limited number of machine operators. They must go through rigorous training and qualification. If any one who operates on a commercial line tests positive, this could impact batch production timing for any of our clients since that operator and anybody in our company they've been in contact with will have to undergo a minimum 2 week quarantine, but we could pull operators from other cleanrooms to seal the gap. If this were to happen to an operator on our clinical line it would shut down production for the entire duration of quarantine."

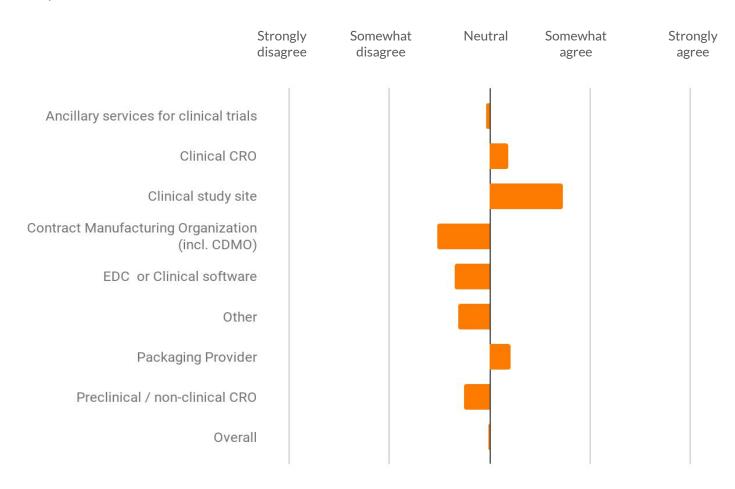
"conference1], [conference2] and potentially [conference3] will all be cancelled resulting in lost opportunities for all within the industry. We are doing virtual meetings for [conference1] but we generally meet with up to 40 companies between [conference1 and [conference3] and now will lose valuable time with clients."

"Given the shift in our global landscape, I have noticed a significant drop in productivity on my team. That has, in turn, led to fewer opportunities from clients coming in the door, coupled with the fact that they're all a bit slower now too."

"Since we supply pharma companies, we are seeing large demand for our products at this time. Our supply remains uninterrupted and we are operating business as usual with all precautions in place to protect our production workers."

How does concern about downsizing differ by company type?

Participants were asked how much they agree with the statement "I am concerned about downsizing at my company" Results were then grouped by the type of company the respondent works at.



n=271 Respondent count: Ancillary services (25), Clinical CRO (106), Clinical Study site (26), Contract Manufacturing Organization incl. CDMO (38), EDC or Clinical software (23), Other (25), Packaging Provider (5), Preclinical / non-clinical CRO (23)

Clinical sites are the most concerned with downsizing.

Contract Manufacturers are the least concerned about downsizing.

"Interesting to see how, post-crisis, enrollment speed reacts to the unemployment rate. An unemployment rate in 2020 that is 5x 2019 could end up speeding up enrollment in many indications. Quality of participant may be a larger concern."

"We had a lab employee quit rather than come to work in the lab"

"I know of staff who have been furloughed, had salary cut by 25%, lab tests aren't being conducted, clients unsure about the future and so not starting studies"

What departments do people think will be downsized?

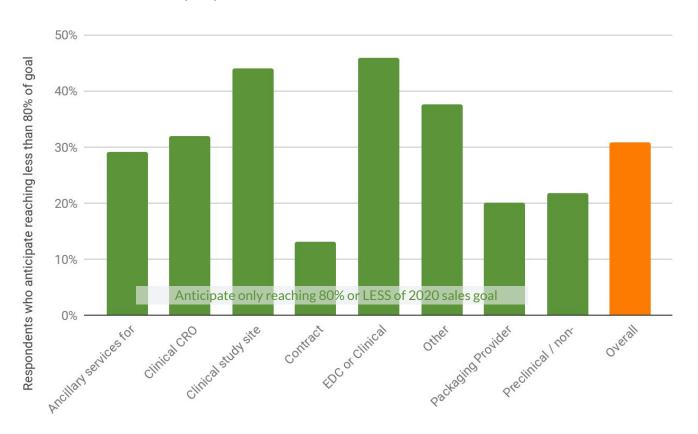
Participants were provided with an open text box to respond to the question: If you are concerned with downsizing, what department(s) do you foresee being downsized? Submissions were then tagged according to the general categories mentioned in the text answer and then responses were grouped by the type of company the respondent works at.

	None/No Downsizing	Administrativ e and non-billable	Commercial	Project Management	Operational	Contractors	Uncertain	Total Mentions
Ancillary services for clinical trials Total	53.53%	3.57%	17.84%	14.28%	3.64%	3.57%	3.57%	28
Clinical CRO Total	44.09%	10.24%	17.32%	7.09%	15.75%	2.36%	3.15%	127
Clinical study site Total	32.26%	16.13%	9.68%	9.68%	22.58%	6.45%	3.23%	31
Contract Manufacturing Organization (incl. CDMO) Total	72.09%	6.98%	9.30%	0.00%	9.30%	0.00%	2.33%	43
EDC or Clinical software Total	48.28%	10.34%	27.59%	3.45%	10.34%	0.00%	0.00%	29
Other Total	51.52%	6.06%	12.12%	9.09%	12.12%	6.06%	3.03%	33
Packaging Provider Total	60.00%	0.00%	0.00%	20.00%	20.00%	0.00%	0.00%	5
Preclinical / non-clinical CRO Total	70.83%	0.00%	12.50%	0.00%	16.67%	0.00%	0.00%	24

n=273. Respondent count: Ancillary services (25), Clinical CRO (106), Clinical Study site (26), Contract Manufacturing Organization incl. CDMO (39), EDC or Clinical software (24), Other (25), Packaging Provider (5), Preclinical / non-clinical CRO (23)

Which types of companies are most concerned about the pandemic's impact on sales?

Participants were asked to what degree COVID19 would hinder reaching their 2020 sales targets. Responses were grouped into those who forecast surpassing 80% and those who forecast falling short of 80% of their original 2020 forecast. The percentage in each group that believe their company will be below 80% are shown below



n=263. Respondent count: Ancillary services (24), Clinical CRO (100), Clinical Study site (25), Contract Manufacturing Organization incl. CDMO (38), EDC or Clinical software (24), Other (24), Packaging Provider (5), Preclinical / non-clinical CRO (23)

Clinical Sites and EDC/Software were least optimistic about hitting 2020 sales targets.

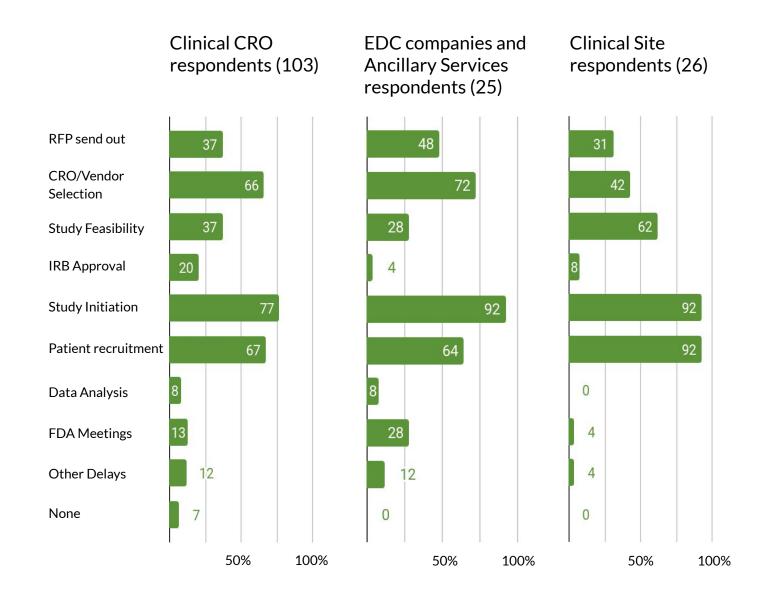
"We provide automated detection and response for clinical trials....In the long term of 12 - 24 months this could be a great time for us"

"A prospect decided not to open new projects since the situation is solved, because now they need to focus efforts on mitigation."

"We are hopeful that we can support the development of vaccine programs, if those programs were not available, things would be much worse. Most of our clients have delayed enrollment of our current trials. Some have chosen to remain running but it os very few."

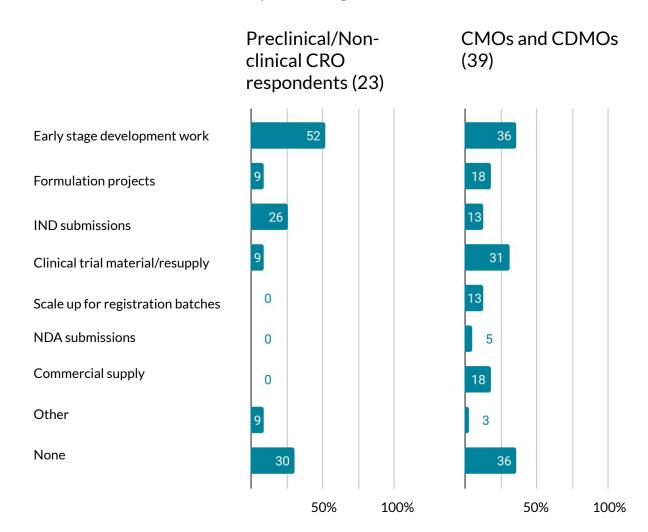
What delays are clinical companies seeing from their vantage points?

Participants were shown a list of clinical project milestones and asked to indicate which ones they are seeing firsthand in their businesses.



What delays are manufacturing and non-clinical companies seeing from their vantage points?

Participants were shown a list of regulatory and manufacturing project milestones and asked to indicate which ones they are seeing firsthand in their businesses.



Study initiation and recruitment are the most frequently observed delays.

Clinical companies are seeing more delays than manufacturers

"We just sense clients are prioritizing current business portfolio. New products or development are not their highest priority."

"I see that because of Covid 19 many companies are delaying study start-up and not screening any subjects due to safety concerns with patients and staff."

"Site monitoring is being impacted due to clinics/hospitals not allowing clinical monitors to the site"

"I am in Phase 1 research and our phase 1 units are no longer starting new studies and no longer enrolling existing studies for 8 weeks."

"My customers are mainly working from home and have issues in sending us compounds for testing. The generation of the paperwork goes mostly without issues but physical sending of compounds is hindered"

"As a clinical research site (in [heavily hit area]) it's been interesting to see how all the various Sponsors have been responding. Guidance from all sponsors has been very slow to come in forcing us to make decisions. Luckily about half of the IRBs are saying "do what you need to do and keep us up to date" the other half are saying "tell us first" Remote monitoring is going to be crazy! Tell your monitors to be patient, and stop asking for a response by EOB the next day."

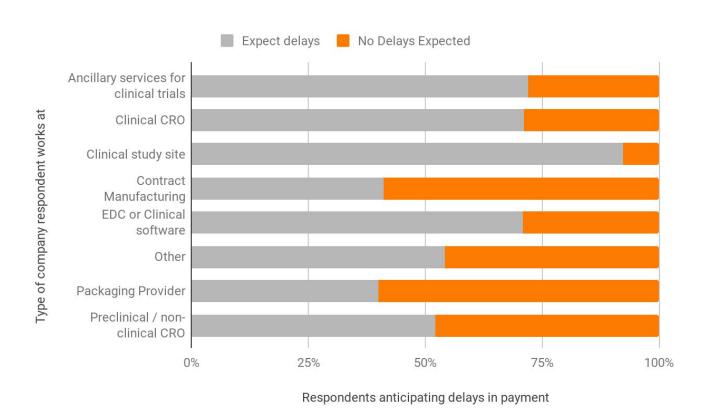
"Recruitment on hold, Studies cancelled or on hold 6-12 months."

"It affects us on multiples levels with clinical data, staffing Reg and PV end to end pending some clinical delays"

"Non medically essential clinical trial visits are being cancelled, or pushed to later dates - this will affect the overall analysis. Staff at sites are being re-assigned to essential departments, so they are not available for day to day production of activities for the study. If departments or committees were not already set up to conduct meetings and reviews from a remote capacity, there are delays getting this set up. Companies need help with current activities, but can't identify where or how they need help. Many sponsor staff are focused on developing contingency plans."

Which companies expect Covid19-related delays in payments?

Participants were asked about a general set of possible delays to drug development, then asked Will Covid-19 related delays result in delays in payment to your company?



n=268 Respondent count: Ancillary services (25), Clinical CRO (102), Clinical Study site (26), Contract Manufacturing Organization incl. CDMO (39), EDC or Clinical software (24), Other (24), Packaging Provider (5), Preclinical / non-clinical CRO (23)

Clinical Study Sites are the most likely to be concerned about late payments and revenue issues.

For respondents who expected study initiation delays, 80% (118/148) also expect a delay with payments.

For respondents who expected study recruitment delays, 80% (102/128) also expected a delay with payments.

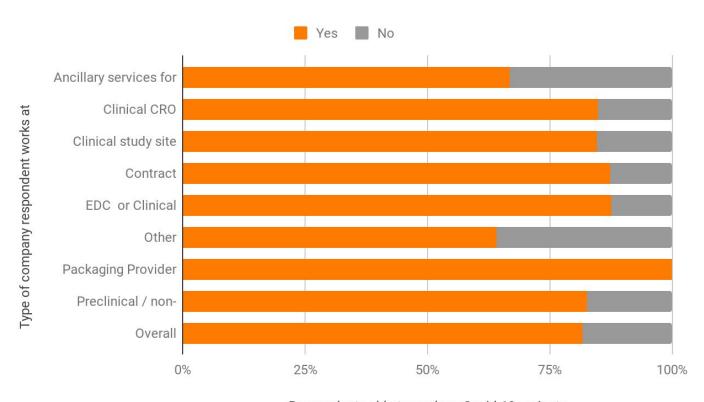
For everyone who expected early stage development delays, 57% also expected a delay with payments.

"I have noticed that the Covid19 is directly impacting our products line of business. I have seen heard of several orders being canceled."

"Companies are placing projects on hold due to fear of not having funding and having to make job cuts."

Which companies were most likely to see opportunity to help on Covid19 projects?

Participants were asked Is your company in a position to help bring Covid-19 treatments and vaccines to market faster?



All types of companies see some sort of opportunity to help bring Covid-19 treatments to market

"We are seeing a dramatic increase in requests for home health services for drug delivery and sample collection, as well as a move to centralized from local testing."

"Enrollment is being stopped on most trials. Companies are now, more than ever, willing to test out direct-to-patient methodologies and virtual trials for ongoing trials whose patients continue to need drug. We expect that companies will be more receptive to virtual/digital approaches in the future."

"Lots of companies providing novel approaches and repurposing other therapies to try for symptoms or pre-existing conditions impacted by COVID-19"

"There will be a lasting, exponential increase in direct to patient clinical services"

"My company performs home visits. we are inundated with interest."

"Patient recruitment being paused or delayed. Extreme focus on moving existing studies to a virtual or remote environment where possible. COVID-19 will accelerate the industry into virtual clinical trials."

"Major pharma companies are meeting with the Administration to help develop treatments and prevention vaccine like never before to solve this and get back to normal business. Competitors are now comrades. Observations and outlook grouped by Job Function of Respondent

Business Dev. Dir. / BD Manager CCO/VP/Director of Sales CEO

Inside Sales

Marketing VP, Director or

Manager

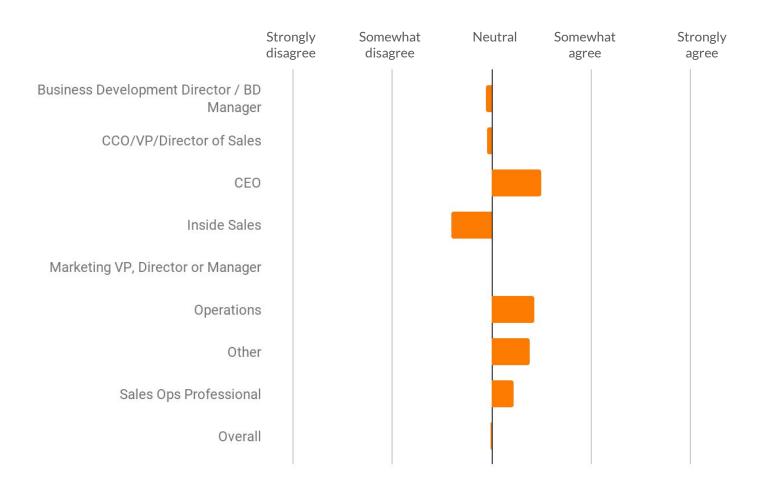
Operations

Other

Sales Ops Professional

How does concern about downsizing differ among job functions? (R4.1)

Participants were asked how much they agree with the statement "I am concerned about downsizing at my company"



n=271. Respondent count: Business Development Director / BD Manager (128), CCO/VP/Director of Sales(57), CEO (14), Inside Sales (27), Marketing VP, Director or Manager (11), Operations (7), Other (13), Sales Ops Professional (14), Overall (271)

CEO respondents had the highest concern about downsizing.

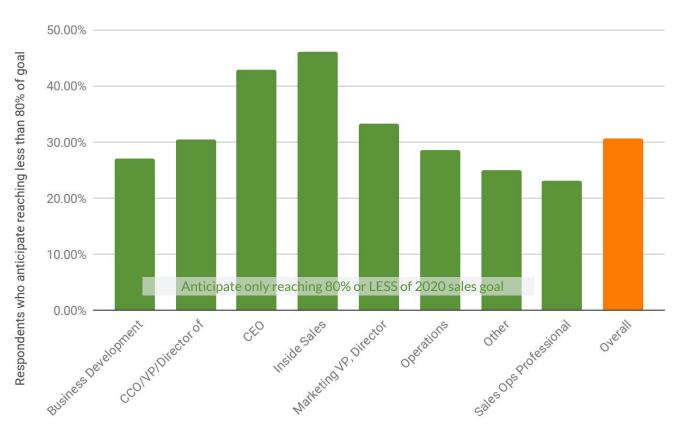
Inside Sales had the lowest concern about downsizing.

"I fear many clinical sites across the USA will start pulling back on enrollment timelines, due to staff being quarantined at home"

"The Account Directors are functioning under the business as usual philosophy so at the end of this there will be projects ready to ramp up. This will help to stimulate the industry as a whole as we all strive to regain a new normal."

Who is most concerned about the pandemic's impact on sales? (R4.2)

Participants were asked to what degree COVID19 would hinder reaching their 2020 sales targets. Responses were grouped into those who forecast surpassing 80% and those who forecast falling short of 80% of their original 2020 forecast. The percentage in each group that believe their company will be below 80% are shown below



CEOs and Inside Sales are the least confident on being able to meet 2020 sales targets.

"I'm an inside sales Account Executive and have noticed companies shutting down business operations instead of working from home. Deals I was counting on closing will be postponed until further notice."

"As a BD rep, many companies are not willing to investigate anything new at the moment or have put discussions on hold. Larger Phase III studies seem to be progressing but smaller Phase I-II studies may be postponed."

"I'm a recruiter focused on partnering with small to mid sized organizations and due to the current state of affairs a lot of companies are putting their recruitment efforts on hold until everything is to blow over."

Who is feeling the impact of Covid19 on communication with customers and prospects? (R5)

Participants were asked how much they agree with the statement "My clients at biotech and pharma companies are responding to my emails and phone calls as normal"



Figure R4.1. Responses grouped by the job function of the respondent. n=271. Respondent count: Business Development Director / BD Manager (128), CCO/VP/Director of Sales (57), CEO (14), Inside Sales (27), Marketing VP, Director or Manager (11), Operations (7), Other (13), Sales Ops Professional (14), Overall (271)

Respondents feel that clients and prospects are still reachable.

Inside Sales was the least positive about biotech/pharma reachability, but this might always be the case given the job responsibilities.

"I have found some contacts are even easier to get a hold of because since they are working remote, they have less meetings than they would onsite."

"Despite the challenges there has been a sense of connection with my clients - despite being on opposite sides of the country we are facing the same problem, same isolation, etc. and phone conversations are more welcome."

"I am in business development for a pharmaceutical manufacturing company. In my role, I have experienced the workload and interest has increased as a result of COVID-19 in the following ways: Existing/new molecules under evaluation for COVID-19. Increased CDA's, RFP's, conversations. Increased workload resulting from more people sitting at their desks for 8-10 hours/day rather than traveling for business or commuting into the office. People wanting to sign deals before budgets freeze. People wanting to demonstrate productivity to not get laid off. People wanting to work to keep their mind off of the global situation. "

"Connecting with CRO partners in Asia-Pac has been significantly delayed or we've not been able to make contact at all."

Thank you for participating!

Based on this survey we felt Zymewire was in a unique position to to help mobilize our client base in the fight against Covid19. We launched a site to help tell the world how great you all are.

Check out <u>CovidCollaborators.org</u> for more details and to have your company added.

The Zymewire Team